

SYDENHAM TO BANKSTOWN

SUBMISSIONS AND PREFERRED INFRASTRUCTURE REPORT

> Appendix J – Aboriginal cultural heritage
assessment report

Sydney Metro City & Southwest Sydenham to Bankstown Upgrade

Aboriginal Cultural Heritage
Assessment Report

Inner West and Canterbury-
Bankstown Local Government Areas

Report to Transport for New South
Wales

June 2018



Artefact Heritage
ABN 73 144 973 526
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009
Australia

+61 2 9518 8411
office@artefact.net.au

Sydney Metro City & Southwest Sydenham to Bankstown Upgrade
Aboriginal Cultural Heritage Assessment

Revision	Date issued	Reviewed by	Approved by	Date approved	Review type	Revision type
1	13 October 2017	Sandra Wallace	Josh Symons	13 October 2017	First draft	First draft
2	24 October 2017	Sydney Metro	Sandra Wallace	25 October 2017	SM review	Second draft
3	11 December 2017	Sandra Wallace	Sandra Wallace	15 December 2017	RAP consultation results added	Final draft
4	13 February 2018	Sandra Wallace	Sandra Wallace	13 February 2018	Final	Final
5	17 May 2018	Sandra Wallace	Sandra Wallace	18 May 2018	Changes to reflect preferred project	Final
6	5 June 2018	Alyce Haast	Sandra Wallace	5 June 2018	Final	Final

Last saved:	5 June 2018
Author:	Josh Symons
Project manager:	Sandra Wallace
Name of organisation:	Artefact Heritage Services Pty Ltd
Name of project:	Sydney Metro & Southwest Sydenham to Bankstown Upgrade ACHAR
Name of document:	Sydney Metro & Southwest Sydenham to Bankstown Upgrade ACHAR
Document version:	Final

© Artefact Heritage Services

This document is and shall remain the property of Artefact Heritage Services. This document may only be used for the purposes for which it was commissioned and in accordance with the Terms of the Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Disclaimer: Artefact Heritage Services has completed this document in accordance with the relevant federal, state and local legislation and current industry best practice. The company accepts no liability for any damages or loss incurred as a result of reliance placed upon the document content or for any purpose other than that for which it was intended.

EXECUTIVE SUMMARY

Note on this report

Since the preparation of this report, the project has been revised (the preferred project). Although some subsurface impacts may be reduced, the assessment of archaeological potential and relevant management outlined in this ACHAR would remain the same.

Project overview

The New South Wales (NSW) Government is implementing *Sydney's Rail Future* (Transport for NSW, 2012a), a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of rail customers into the future.

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future, providing 66 kilometres of metro rail line and 31 metro stations. The NSW Government is currently delivering the first two stages of Sydney Metro, shown in Figure 1, which consist of Sydney Metro Northwest (between Rouse Hill and Chatswood) and Sydney Metro City & Southwest (between Chatswood and Bankstown).

Sydney Metro Northwest is currently under construction. Sydney Metro Northwest services will start in the first half of 2019, with a metro train running every four minutes in the peak period. Services will operate between a new station at Cudgegong Road (beyond Rouse Hill) and Chatswood Station. Sydney Metro City & Southwest will extend the Sydney Metro system beyond Chatswood to Bankstown, delivering about 30 kilometres of additional metro rail, a new crossing beneath Sydney Harbour, new railway stations in the lower North Shore and Sydney central business district (CBD), new platforms at Central and upgrade of Sydenham Station and the upgrade of existing stations from Marrickville to Bankstown.

Sydney Metro City & Southwest comprises two core components (shown in Figure 1):

- the Chatswood to Sydenham project
- the Sydenham to Bankstown upgrade ('the project' and the subject of this document).

The project for which approval is sought

Transport for NSW is seeking approval to construct and operate the Sydenham to Bankstown upgrade component of Sydney Metro City & Southwest (the project).

The project involves upgrading 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13 kilometre long section of the Sydney Trains T3 Bankstown Line, which extends to the west of Bankstown Station, to improve accessibility for customers and meet the standards required for metro operations. The project would enable Sydney Metro to operate beyond Sydenham, to Bankstown.

A key element of the project is upgrading stations along the corridor from Marrickville to Bankstown, to allow better access for more people, by providing level platforms, and lifts at all stations. These upgrades aim to provide a better, more convenient, and safer experience for public transport customers.

The project is subject to assessment and approval by the NSW Minister for Planning under Division 5.2 (formerly Part 5.1) of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act).

Approach to Aboriginal heritage assessment

Artefact Heritage was engaged to prepare an Aboriginal heritage assessment for inclusion in the Environmental Impact Statement for the project. This assessment identified two areas of potential archaeological deposit (PAD). Further archaeological investigation has been recommended where there will be impact from the proposed works.

This Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared within the context of the NSW Office of Environment and Heritage (OEH) *'Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation'*¹, the OEH *'Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW'*² and the OEH *'Aboriginal cultural heritage consultation requirements for proponents 2010'*³.

The objectives of this ACHAR are to:

- assess the Aboriginal cultural heritage values of the study area, including archaeological and community cultural values, and the significance of identified values
- identify Aboriginal cultural heritage values that may be impacted by the project, including consideration of cumulative impacts, and measures to avoid significant impacts
- ensure appropriate Aboriginal community consultation in the assessment process
- identify any recommended further investigations, mitigation and management measures.

¹ Department of Environment and Conservation 2005

² OEH 2011

³ Department of Environment, Climate Change and Water 2010

CONTENTS

EXECUTIVE SUMMARY.....	ii
Note on this report	ii
Project overview.....	ii
The project for which approval is sought	ii
Abbreviations	vi
1.0 Introduction.....	1
1.1 Project background.....	1
1.1.1 The project for which approval is sought.....	1
1.2 The project.....	2
1.2.1 Location	2
1.3 Purpose and Scope of this Report	3
1.3.1 Report structure	4
1.4 Project framework.....	6
1.5 Authors and contributors	6
2.0 Legislative context	7
2.1 State legislation	7
2.1.1 <i>National Parks and Wildlife Act 1974</i>	7
2.1.2 <i>Environmental Planning & Assessment Act 1979</i>	7
2.1.3 <i>Aboriginal Land Rights Act 1983</i>	7
2.2 Commonwealth legislation.....	8
2.2.1 <i>Environment Protection and Biodiversity Conservation Act 1999</i>	8
2.2.2 <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>	9
2.2.3 <i>Native Title Act 1994</i>	9
3.0 Consultation.....	10
4.0 Summary and Analysis of Background Information	13
4.1 Geology and soils	13
4.2 Land use, hydrology and geotechnical.....	13
4.2.1 Land use	13
4.2.2 Hydrology.....	13
4.2.3 Geotechnical information	14
4.3 Ethnographic context.....	14
4.3.1 Aboriginal history and contact period	14
4.4 Archaeological context	15
4.4.1 Registered Aboriginal sites.....	15
4.4.2 Previous archaeological investigations	18
4.4.3 Archaeological implications	20

4.4.4	Predictive model	20
4.5	Aboriginal archaeological survey.....	21
4.5.1	Timing and personnel	21
4.5.2	Survey strategy and methodology	21
4.6	Results.....	21
4.6.1	Station precincts and rail corridor	21
4.6.2	Belmore Station survey unit.....	22
4.6.3	Punchbowl Station survey unit	22
5.0	Significance Assessment.....	31
5.1	Aboriginal material culture	31
5.2	Significance assessment criteria	31
5.3	Social significance	32
5.3.1	Cultural landscape	32
5.3.2	Aboriginal cultural heritage values.....	33
5.4	Historic significance	33
5.5	Indicative archaeological (scientific) significance	33
5.5.1	Station and rail corridor survey units	33
5.5.2	S2B PAD01 and S2B PAD02	33
5.6	Statement of significance	34
6.0	Avoiding and Minimising Harm	35
6.1	Summary of impacts.....	35
6.1.1	Marrickville Station survey unit	35
6.1.2	Dulwich Hill Station survey unit	35
6.1.3	Hurlstone Park Station survey unit	35
6.1.4	Canterbury Station survey unit	36
6.1.5	Campsie Station survey unit.....	36
6.1.6	Belmore Station survey unit.....	36
6.1.7	Lakemba Station survey unit	37
6.1.8	Wiley Park Station survey unit.....	38
6.1.9	Punchbowl Station survey unit	38
6.1.10	Bankstown Station survey unit	40
6.1.11	Remaining areas of the rail corridor	40
6.2	Summary of impacts.....	40
6.3	Consideration of alternatives and justification of impacts	41
6.4	Ecologically Sustainable Development principles	41
6.4.1	The integration principle	41
6.4.2	The precautionary principle	41
6.4.3	The principle of intergenerational equity	42

6.4.4	Conservation of biodiversity	42
6.4.5	Improved valuation, pricing and incentive mechanisms	42
7.0	Excavation Methodology	43
7.1	Excavation justification	43
7.1.1	Research questions	43
7.2	Archaeological Method Statements	44
7.3	Participation in archaeological investigations	44
7.4	Geomorphology	44
7.5	Excavation methodology	44
7.5.1	Stage one	44
7.5.2	Stage two	45
7.6	Specific methodological considerations	45
7.6.1	Historical archaeology contexts	45
7.6.2	Artefacts retrieved from fill	45
7.6.3	Protection of the archaeological resource during excavation	46
7.6.4	Sieving	46
7.6.5	Identification of rare site types	46
7.7	Unexpected finds	46
7.8	Site clearance	46
7.9	Geomorphological investigations	46
7.10	Reporting and analysis	46
7.11	Temporary and long-term care and management of retrieved Aboriginal objects	47
7.12	Interpretation and educational outcomes	47
8.0	Management Measures	48
8.1	Management framework	48
8.2	Construction Heritage Management Plan	48
8.3	Discovery of human remains	48
9.0	References	49
10.0	Appendices	51
10.1	Appendix 1 – Technical paper 4	52
10.2	Appendix 2 – Stakeholder consultation	53

FIGURES

Figure 1: The Sydney Metro network	2
Figure 2: Overview of the project	3
Figure 3: The study area	5
Figure 4: From Mud Bank Botany Bay – Mouth of Cooks River 1830 - three Aboriginal people can be seen seated in the foreground next to wooden spears, one of which appears to have a barbed head.15	
Figure 5: Distribution of AHIMS registered sites	17
Figure 6: Location of S2B PAD01 and S2B PAD02 along the project area	28
Figure 7: Belmore Station survey unit and S2B PAD01	29
Figure 8: Punchbowl Station survey unit and S2B PAD02.....	30
Figure 9: Belmore Station survey unit and S2B PAD01	37
Figure 10: Punchbowl Station survey unit and S2B PAD02.....	39
Figure 11: Indicative layout of Punchbowl Station with reference to S2B PAD02	39

TABLES

Table 1: RAP comments on ACHAR methodology letter	11
Table 2: RAP comments during AFG	11
Table 3: RAP comments on the draft ACHAR.....	12
Table 4: Frequency and percentage of site features in extensive AHIMS search	16
Table 5: Summary of previous archaeological investigations	18
Table 6: Summary details of archaeological survey by unit	23
Table 7: Heritage significance criteria	32
Table 8: Summary of impacts to S2B PAD01 and S2B PAD02	34
Table 9: Indicative impact assessment for S2B PAD01 and S2B PAD02	40
Table 10: Mitigation measures AH2 and AH3	43

ABBREVIATIONS

AAS	Aboriginal Archaeology Service
AGD	Australian Geodetic Datum
AHC	Australian Heritage Council
AHIP	Aboriginal Heritage Impact Permit
AHIMS	Aboriginal Heritage Information System
ALR Act	<i>Aboriginal Land Rights Act 1983</i>
Artefact Heritage	Artefact Heritage Services Pty Ltd
ACHAR	Aboriginal Cultural Heritage Assessment Report
BP	Before Present (that is 1950)
Consultation Requirements	Aboriginal cultural heritage consultation requirements for proponents 2010
CHL	Commonwealth Heritage List
the Code of Practice	Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010
DACHA	Darug Aboriginal Cultural Heritage Assessments
DCP	Development Control Plan
DECCW	Department of Environment, Climate Change and Water (now OEH)
DLO	Darug Land Observations Pty Ltd
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Diversity Conservation Act 1999</i>
EIS	Environmental Impact Statement
ESD	Ecological Sustainable Development
GDA	Geodetic datum
GPS	Global Positioning System
GTTS	Gundungurra Tribal Technical Services
the Guide	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW
ha	hectares
KYWG	Kamilaroi-Yankuntjatjara Working Group
LALC	Local Aboriginal Land Council

LEP	Local Environmental Plan
LGA	Local Government Area
MBMAC	Murri Bidgee Mullangari Aboriginal Corporation
NHL	National Heritage List
NPW Act	<i>National Parks and Wildlife Act 1974</i>
OEH	Office of Environment and Heritage
PAD	potential archaeological deposit
the project	Sydenham to Bankstown upgrade component of Sydney Metro City & Southwest
the proponent	Transport for NSW
RAP	Registered Aboriginal Party
RNE	Register of the National Estate
SEARs	Secretary's Environmental Assessment Requirements

1.0 INTRODUCTION

Note on this report

Since the preparation of this report, the exhibited project has been revised (the preferred project). Although some subsurface impacts may be reduced, the assessment of archaeological potential and relevant management outlined in this ACHAR would remain the same.

1.1 Project background

The New South Wales (NSW) Government is implementing *Sydney's Rail Future* (Transport for NSW, 2012a), a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of rail customers into the future.

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future, providing 66 kilometres of metro rail line and 31 metro stations. The NSW Government is currently delivering the first two stages of Sydney Metro, shown in Figure 1, which consist of Sydney Metro Northwest (between Rouse Hill and Chatswood) and Sydney Metro City & Southwest (between Chatswood and Bankstown).

Sydney Metro Northwest is currently under construction. Sydney Metro Northwest services will start in the first half of 2019, with a metro train running every four minutes in the peak period. Services will operate between a new station at Cudgegong Road (beyond Rouse Hill) and Chatswood Station. Sydney Metro City & Southwest will extend the Sydney Metro system beyond Chatswood to Bankstown, delivering about 30 kilometres of additional metro rail, a new crossing beneath Sydney Harbour, new railway stations in the lower North Shore and Sydney central business district (CBD), new platforms at Central and upgrade of Sydenham Station and the upgrade of existing stations from Marrickville to Bankstown.

Sydney Metro City & Southwest comprises two core components (shown in Figure 1):

- the Chatswood to Sydenham project
- the Sydenham to Bankstown upgrade ('the project' and the subject of this document).

1.1.1 The project for which approval is sought

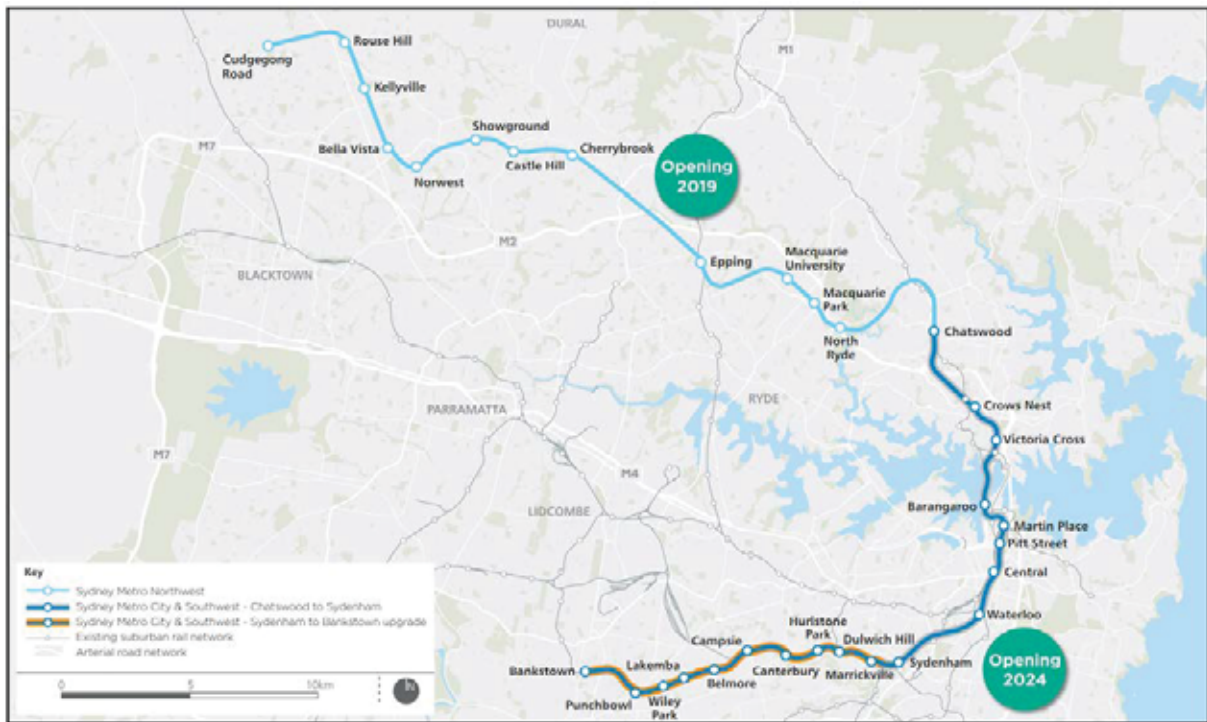
Transport for NSW is seeking approval to construct and operate the Sydenham to Bankstown upgrade component of Sydney Metro City & Southwest (the project).

The project involves upgrading 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13 kilometre long section of the Sydney Trains T3 Bankstown Line, which extends to the west of Bankstown Station, to improve accessibility for customers and meet the standards required for metro operations. The project would enable Sydney Metro to operate beyond Sydenham, to Bankstown.

A key element of the project is upgrading stations along the corridor from Marrickville to Bankstown, to allow better access for more people, by providing level platforms, and lifts at all stations. These upgrades aim to provide a better, more convenient, and safer experience for public transport customers.

The project is subject to assessment and approval by the NSW Minister for Planning under Division 5.2 (formerly Part 5.1) of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act).

Figure 1: The Sydney Metro network



1.2 The project

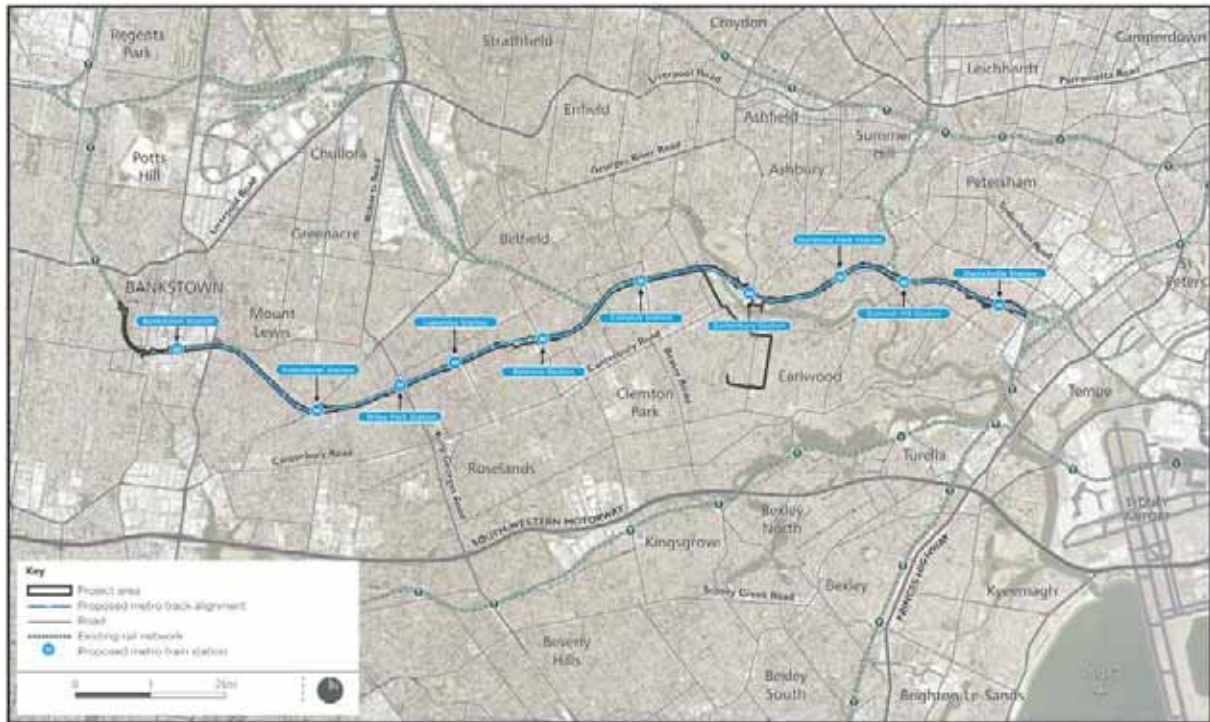
1.2.1 Location

The location of the project is shown in Figure 2.

The key elements of the project are located mainly within the existing rail corridor, from about 800 metres west of Sydenham Station in Marrickville, to about one kilometre west of Bankstown Station in Bankstown. The project is located in the Inner West and Canterbury-Bankstown local government areas.

The term 'project area' is used throughout this document to refer to the area where the physical works for the project would be undertaken. This area encompasses the existing rail corridor (as described above), the 10 existing stations within the corridor, and areas surrounding the rail corridor as shown in Figure 1.

Figure 2: Overview of the project



1.3 Purpose and Scope of this Report

An Environmental Impact Statement has been prepared for the project and to support that Environmental Impact Statement an Aboriginal Heritage Impact Assessment (Technical Paper 4) was prepared (Artefact Heritage 2017). Technical Paper 4 provides a comprehensive description of the environmental, Aboriginal historical and archaeological context of the project in conjunction with the Aboriginal archaeological survey methodology and results. It is not the intention of this report to replicate every detail of information presented in Technical Paper 4 but to summarise it.

As part of Technical Paper 4 an archaeological survey was prepared for the project area which identified two areas of potential archaeological deposit (PAD). Only one of these, S2B PAD02, would be impacted by the project. Artefact Heritage (2017) recommended sample testing of the portion of S2B PAD02 that would be impacted to allow the nature and significance of this PAD to be more accurately assessed. This ACHAR has been prepared to document the following through consultation with the registered Aboriginal parties (RAPs):

- the Aboriginal cultural heritage values of the project area and identification of any specific areas of cultural significance
- details of Aboriginal stakeholder consultation
- a methodology for archaeological management including test excavation and salvage where required

This ACHAR has been undertaken in accordance with the following guidelines:

- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010⁴

⁴ Department of Environment Climate Change & Water [DECCW] 2010a

- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW⁵
- Aboriginal cultural heritage consultation requirements for proponents 2010⁶
- The Burra Charter 2013⁷.

1.3.1 Report structure

The structure of this ACHAR is as follows:

- Section 1: Project overview and background and report purpose and structure
- Section 2: State and Commonwealth legal framework
- Section 3: Describes the Aboriginal consultation process
- Section 4: Discussion of the environmental context of the study area, the Aboriginal and historical context of the study area, the archaeological context of the study area including a discussion of previous archaeological work in the area, and a description and analysis of archaeological potential
- Section 5: Development of a significance assessment for the project
- Section 6: Impact assessment
- Section 7: Excavation methodology
- Section 8: Management measures.

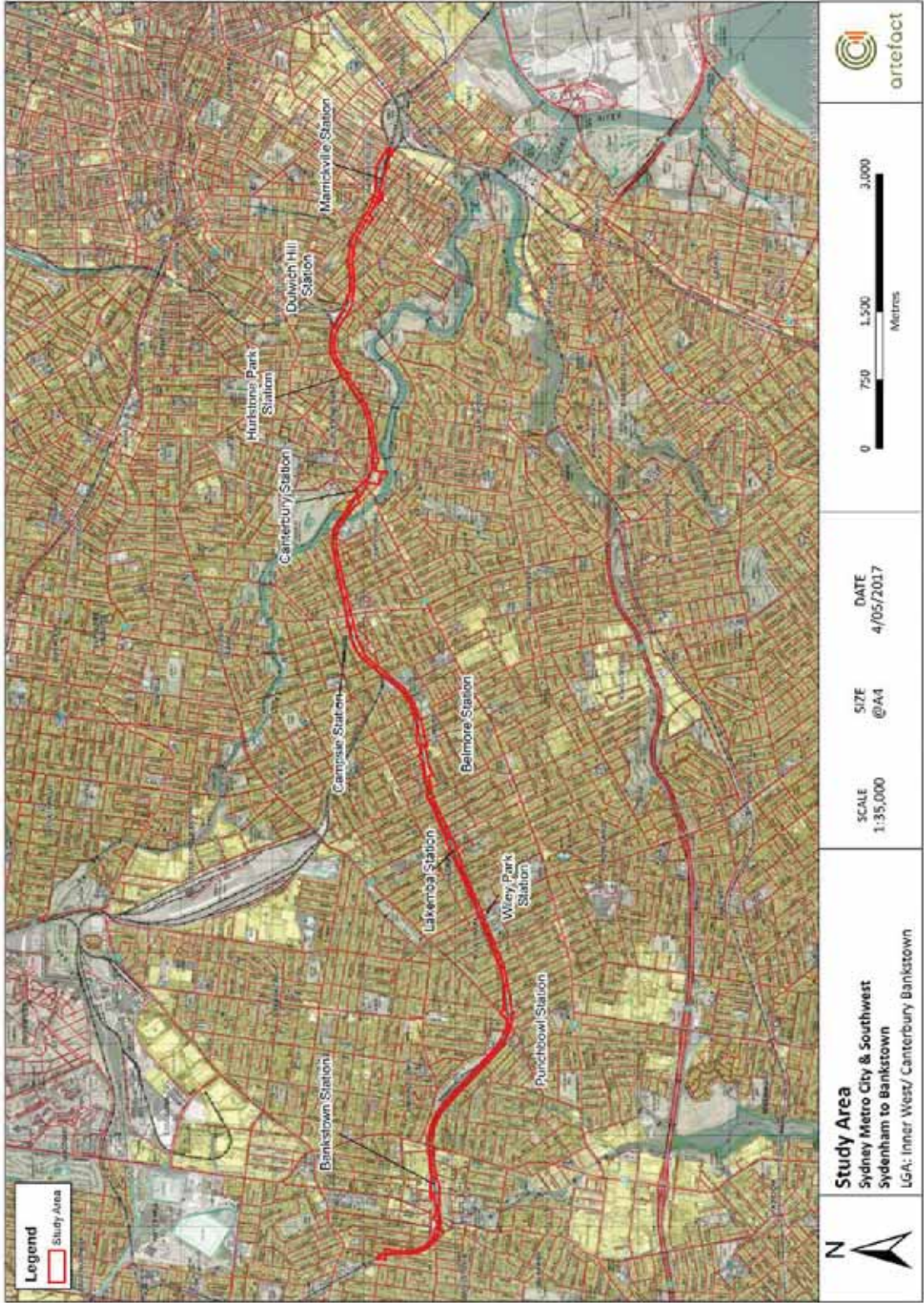
A map showing the study area is included as Figure 3.

⁵ Office of Environment & Heritage 2011

⁶ DECCW 2010b

⁷ Australia ICOMOS 2013.

Figure 3: The study area



1.4 Project framework

The project is subject to assessment and approval by the NSW Minister for Planning under Division 5.2 (formerly Part 5.1) of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).. Secretary's Environmental Assessment Requirements (SEARs) were issued on 23 March 2017 (Reference CSSI 17_8256). This report is intended to be included in the project approval submission to DP&E.

1.5 Authors and contributors

This ACHAR was prepared by Josh Symons (Principal, Artefact Heritage). This ACHAR is predominantly based on information supplied in Technical Paper 4 (Appendix 1) with updated Aboriginal consultation (Appendix 2). A review was undertaken by Dr Sandra Wallace (Managing Director, Artefact Heritage).

Archaeological survey for Technical Paper 4 was conducted in June 2017 by Jay Daley, Culture and Heritage Officer at Metropolitan Local Aboriginal Land Council (Metropolitan LALC), Brady Maybury and Carrell Fabar, Cultural and Heritage Officers at Gandangarra Local Aboriginal Land Council (Gandangara LALC), and Josh Symons and Claire Rayner (Artefact).

Site inspection in March 2017 was conducted by Brad Maybury from Gandangara LALC, Nathan Moran from Metropolitan LALC, and Duncan Jones (Artefact).

2.0 LEGISLATIVE CONTEXT

2.1 State legislation

2.1.1 *National Parks and Wildlife Act 1974*

The *National Parks and Wildlife Act 1974* (NPW Act) provides statutory protection to all Aboriginal places and objects. An Aboriginal Place is declared by the Minister, under Section 84 of the NPW Act in recognition of its special significance with respect to Aboriginal culture. Under Section 86 of the NPW Act Aboriginal objects and Aboriginal places are protected. An Aboriginal object is defined as:

any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

The protection provided to Aboriginal objects applies irrespective of the level of their significance or issues of land tenure. However, areas are only gazetted as Aboriginal places if the Minister is satisfied that sufficient evidence exists to demonstrate that the location was and/or is of special significance to Aboriginal culture.

There are no gazetted Aboriginal places in the study area. All Aboriginal objects, whether recorded or not are protected under the NPW Act.

The project is subject to assessment under Part 5.1 of the *Environmental Planning & Assessment Act 1979* and therefore permits issued under the NPW Act are not required, however similar processes would be followed where required.

2.1.2 *Environmental Planning & Assessment Act 1979*

The *Environmental Planning & Assessment Act 1979* (EP&A Act) provides planning controls and requirements for environmental assessment in the development approval process. The EP&A Act consists of three main parts of direct relevance to Aboriginal cultural heritage; Part 3 which governs the preparation of planning instruments, Part 4 which relates to development assessment processes for local government (consent) authorities, and Part 5 which relates to activity approvals by governing (determining) authorities. The project is subject to assessment and approval by the NSW Minister for Planning under Division 5.2 (formerly Part 5.1) of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act), which establishes an assessment and approval regime for Critical State Significant Infrastructure (CSSI). An Environmental Impact Statement has been prepared to assess the impacts of the project, in accordance with SEARs.

2.1.3 *Aboriginal Land Rights Act 1983*

The *Aboriginal Land Rights Act 1983* is administered by the NSW Department of Human Services - Aboriginal Affairs. This Act established Aboriginal Land Councils (at State and Local levels). These bodies have a statutory obligation under the Act to:

- take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and

- promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

The study area is located within the Metropolitan LALC and Gandangara LALC boundaries.

2.2 Commonwealth legislation

2.2.1 *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment and Heritage Legislation Amendment Act (No.1) 2003* amends the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to include 'national heritage' as a matter of National Environmental Significance and protects listed places to the fullest extent under the Constitution. It also establishes the National Heritage List (NHL) and the Commonwealth Heritage List (CHL).

The *Australian Heritage Council Act 2003* (AHC Act) establishes a new heritage advisory body - the Australian Heritage Council (AHC), to the Minister for the Environment and Heritage and retains the Register of the National Estate (RNE).

The *Australian Heritage Council (Consequential and Transitional Provisions) Act 2003* repeals the *Australian Heritage Commission Act 1975*, amends various Acts as a consequence of this repeal and allows the transition to the current heritage system.

Together the above three Acts provide protection for Australia's natural, Indigenous and non-Indigenous heritage. The new features include:

- a new NHL of places of national heritage significance
- a new CHL of heritage places owned or managed by the Commonwealth
- the creation of the AHC, an independent expert body to advise the Minister on the listing and protection of heritage places
- continued management of the Register of the National Estate (RNE).

National Heritage List

The NHL is a list of places with outstanding heritage value to our nation, including places overseas. So important are the heritage values of these places that they are protected under the EPBC Act. This means that a person cannot take an action that has, will have, or is likely to have, a significant impact on the national heritage values of a national heritage place without the approval of the Australian Government Minister for the Environment and Heritage. It is a criminal offence not to comply with this law and there are significant penalties.

Commonwealth Heritage List

The CHL is a list of places managed or owned by the Australian Government and not of relevance to this project.

Register of the National Estate

The RNE is an evolving record of Australia's natural, cultural and Aboriginal heritage places that are worth keeping for the future. The AHC compiles and maintains the RNE under the *Australian Heritage Council Act 2003*. Places on the RNE that are in Commonwealth areas, or subject to actions by the Australian Government, are protected under the EPBC Act by the same provisions that protect Commonwealth heritage places (see above).

Following amendments to the *Australian Heritage Council Act 2003*, the RNE was frozen on 19 February 2007, meaning no new places can be added, or removed. From 2012, all references to the RNE were removed from the EPBC Act and the AHC Act. The RNE is now maintained on a non-statutory basis as a publicly available archive.

2.2.2 *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*

Most State Aboriginal heritage databases provide protection for those sites with physical evidence. The Commonwealth Act, *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* deals with Aboriginal cultural property in a wider sense. Such cultural property includes any places, objects and folklore that 'are of particular significance to Aboriginals in accordance with Aboriginal tradition'. In most cases, archaeological sites and objects registered under the State Act will also be Aboriginal places subject to the provisions of the Commonwealth Act.

There is no cut-off date and the Commonwealth Act may apply to contemporary Aboriginal cultural property as well as ancient sites. The Commonwealth Act takes precedence over State cultural heritage legislation where there is conflict. The responsible Minister may make a declaration under Section 10 of the Commonwealth Act in situations where state or territory laws do not provide adequate protection of heritage places.

2.2.3 *Native Title Act 1994*

The *Native Title Act 1994* was introduced to work in conjunction with the Commonwealth Native Title Act. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act.

No Native Title Claims within the study area are shown in the National Native Title Tribunal (NNTT) *Native Title Vision* mapping service.⁸

⁸ Accessed on 8 July 2016 http://www.ntv.nntt.gov.au/IntraMaps80/default.htm?project=NTV_NSW

3.0 CONSULTATION

Aboriginal community consultation has been guided by the Office of Environment and Heritage (OEH) Aboriginal cultural heritage consultation requirements for proponents⁹ as best practice. A registered stakeholder list has been drawn up for the Sydney Metro City and Southwest Chatswood to Sydenham and Sydenham to Bankstown projects. Although one registered stakeholder list has been used for the whole Sydney Metro City and Southwest project, separate ACHARs have been provided for both the Chatswood to Sydenham and Sydenham to Bankstown projects.

A summary of consultation to date related to the project is provided below. Note that consultation was sent to Councils below prior to amalgamations.

In accordance with Step 4.1.2 of the OEH consultation requirements, a letter was sent to the following organisations requesting the details of Aboriginal people who may hold cultural knowledge relevant to determining the Aboriginal significance of Aboriginal objects and/or places within and adjacent to the project area which includes both the Sydney Metro City and Southwest Chatswood to Sydenham and Sydenham to Bankstown projects:

- Regional Operations Group, Metropolitan Region, OEH
- Metropolitan Local Aboriginal Land Council (Metropolitan LALC)
- Gandangara Local Aboriginal Land Council (Gandangara LALC)
- The Registrar, *Aboriginal Land Rights Act 1983*
- National Native Title Tribunal
- NTSCORP
- City of Canterbury Council
- City of Sydney Council
- North Sydney Council
- Greater Sydney Catchment Management Authority

In accordance with Step 4.1.3 of the consultation requirements, an advertisement was placed in the Sydney Morning Herald and Koori Mail on 4 May 2016. The advertisement invited all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal objects and places in the project area to register their interest by 18 May 2016.

Letters were sent to all Aboriginal persons or organisations identified through responses from agencies contacted as part of Step 4.1.2. The letters provided details about the location and nature of the project, as well as an invitation to register as an Aboriginal stakeholder for the project by 9 June 2016.

Following the completion of Steps 4.1.2 and 4.1.3, fifteen Aboriginal stakeholders registered as persons or organisations that may hold cultural knowledge relevant to determining the Aboriginal cultural values of the project area. The registered Aboriginal parties (RAPs) are listed below.

- Darug Land Observations Pty Ltd (DLO) – Gordon Workman
- Darug Land Observations Pty Ltd (DLO) – Jamie Workman
- Murri Bidgee Mullangari Aboriginal Corporation (MBMAC)
- Tocomwall
- Darug Aboriginal Cultural Heritage Assessments (DACHA)

⁹ Department of Environment, Climate Change and Water 2010b

- Kamilaroi-Yankuntjatjara Working Group (KYWG)
- Woronora Plateau Gundangarra Elders Council
- Aboriginal Archaeology Service Inc (AAS)
- Gandangara Local Aboriginal Land Council
- Metropolitan Local Aboriginal Land Council
- Gundungurra Tribal Technical Services (GTTS)

In accordance with Step 4.1.6 of the consultation requirements, a list of registered Aboriginal stakeholders and a copy of the published Step 4.1.3 advertisement were forwarded to both OEH, and the Metropolitan LALC.

Representatives from the Metropolitan LALC and Gandangara LALC attended the site survey in 2016 and assisted in identifying areas of PAD. Additional site inspections were conducted on 8 and 9 March 2017. A representative from Gandangara LALC was present for site inspections on 8 March 2017 and a representative from Metropolitan LALC was present for site inspections on 9 March 2017.

An ACHAR methodology letter was sent to all RAPs on 11 September 2017.

Comments by RAPs on the ACHAR methodology letter are provided in Table 2 below.

Table 1: RAP comments on ACHAR methodology letter

Name	Organisation	Comments
Jamie Workman	DLO	Supports the ACHAR methodology. Requested involvement in any excavation or archaeological monitoring.
Phil Khan	KYWG	All areas are highly significant for Aboriginal people as they were used for camping and hunting grounds. Recommended test excavation in areas of little disturbance.

Registered Aboriginal stakeholders were invited to participate in an Aboriginal Focus Group (AFG) meeting during the preparation of the ACHAR. This AFG was held on the 11 October 2017. Comments were sought on any areas of cultural significance and also on the excavation methodology.

Comments by RAPs on the project at the AFG are provided in Table 2 below.

Table 2: RAP comments during AFG

Name	Organisation	Comments
Anthony Johnson	MBMAC	Reburial of artefacts is the best option for long-term care and management of retrieved artefacts as it is most respectful to Traditional Owners
Tony Williams	AAS	Would like to see educational outcomes from the excavation and investigation process. This could include providing videos of the excavation process and findings to schools.
Phil Khan	KYWG	Would like to see a keeping place for retrieved artefacts, or an interpretative display for housing some, or all, of the retrieved assemblage.

The draft ACHAR was sent to RAPs on 1 November 2017. Follow up calls were made the following week to make sure all RAPs had received the ACHAR and to see if they had any questions prior to responding.

Comments by RAPs on the ACHAR are provided in Table 3 below.

Table 3: RAP comments on the draft ACHAR

Name	Organisation	Comments
Darleen Carroll	MBMAC	Endorsed the recommendations of the ACHAR
Jamie Workman	DLO	Supports the methodology. In relation to the long-term storage of recovered artefacts, if any, Darug Land Observations Pty Ltd strongly agrees that recovered artefacts should be re-buried on Country (the project area). Furthermore, Darug Land Observations Pty Ltd would be involved in archaeological test excavations and/or all other form of works to be carried out on the site.
Phil Khan	KYWG	Supports the ACHAR and excavation methodology.

The majority of comments were in support of the assessment and proposed mitigation measures.

Three comments were made on how any collected artefact assemblages should be managed. Two preferred reburial, while the other recommended a keeping place or use in an interpretive display. Consultation regarding management of Aboriginal objects retrieved would be ongoing and would be decided in the context of the nature of finds during the project and the outcomes of the Chatswood to Sydenham project. This has been referred to in section 7.11.

Tony Williams (AAS) commented that he would like to see educational outcomes as a result of any excavation undertaken. This would be considered as part of the interpretive programme for the project and has been discussed in Section 7.12

4.0 SUMMARY AND ANALYSIS OF BACKGROUND INFORMATION

The following information has been summarised from Technical Paper 4.

4.1 Geology and soils

The project area is located within the Sydney Basin, a large depositional geological feature that spans from Batemans Bay to the south, Newcastle to the north and Lithgow to the west. The underlying geology of the project area consists of Wianamatta Group shales overlying Hawkesbury sandstone. Ashfield Shale is the most extensive formation of the Wianamatta Group and is the dominant underlying geology of the study area west of Canterbury Station, with some minor instances of Bringelly Shale underlying the western portion of the project area.

Hawkesbury Sandstone is one of the most ubiquitous geological layers of the Sydney Basin. Hawkesbury Sandstone surrounds the incised Cooks River Valley and is the dominant geology underlying Dulwich Hill and Hurlstone Park stations. This geological formation was used extensively by both Aboriginal people and British colonists for a variety of shelter and subsistence requirements. Evidence of Aboriginal use of Hawkesbury Sandstone in the Sydney area includes occupation deposits in natural shelter formations created by weathering processes in exposed sandstone, grinding grooves where edge-ground stone axes were manufactured or maintained, and rock engravings or pigment motifs that were applied to exposed sandstone.

The occurrence of Bringelly Shale in the project area is restricted to the eastern portion of Wiley Park Station. Bringelly Shale overlies Ashfield Shale and is the topmost layer of the Wianamatta Group. The formation consists of shale carbonaceous claystone, laminate and fine to medium grained lithic sandstone. Bringelly Shale is generally associated with alluvial and estuarine coastal plain environments. The Blacktown soil landscape overlies Bringelly Shale within the project area.

Quaternary sediments occur in association with the Cooks River alignment and former shores of Botany Bay. These deep alluvial and estuarine sediments occur within the south-eastern corner of the Canterbury Station area, and the eastern portion of the Marrickville Station area.

4.2 Land use, hydrology and geotechnical

4.2.1 Land use

The majority of the project area consists of modified rail corridor cut into the natural landform. Prior to the construction of the railway, the study area was typified by the undulating landform of the Cumberland Plain. This is evident throughout the areas surrounding the rail corridor. The rail line generally runs along a low lying undulating ridge.

4.2.2 Hydrology

Various watercourses transect the project area. The Cooks River intersects the project area between Canterbury Station and Campsie Station. The former alignment of Sheas Creek (now Alexandra Canal) lies 2.1 kilometres south-east of Marrickville Station, Coxs Creek intersects the project area just west of Wiley Park Station and Salt Pan Creek is located approximately 600 metres south-west of Bankstown Station.

4.2.3 Geotechnical information

Geotechnical investigations show that the majority of the Marrickville to Bankstown rail corridor is topped with fill layers to varying depths, generally dependant on topography.

From around Marrickville Station to Punchbowl Station the profile is generally a fill layer over thin layers of residual soil, or straight onto Ashfield shale on Hawkesbury Sandstone bedrock within cuttings or areas that have been levelled. Pockets of truncated alluvial deposits are located near Canterbury Station.

Near Punchbowl Station, Bringelly shale rises with some associated residual soils evident in core samples. This profile continues with varying depth of residual soil to Bankstown Station.

4.3 Ethnographic context

The following information has been summarised from Technical Paper 4.

4.3.1 Aboriginal history and contact period

Prior to the appropriation of their land by colonialists, Aboriginal people lived in small family or clan groups that were associated with particular territories or places. It seems that territorial boundaries were fluid, although details are not known. The language group spoken across Sydney was known as Darug (Dharruk – alternate spelling). This term was used for the first time in 1900, as before the 1800s language groups or dialects were not discussed in the literature.¹⁰ The Darug coastal dialect is thought to have covered the area south from Port Jackson, north from Botany Bay, and west from Parramatta.¹¹

The name Gadigal and its alternative spellings (Cadigal, Cadi) was used in the earliest historical records of early settlement in Sydney to describe the Aboriginal band or clan that lived on the southern shore of Port Jackson, from South Head west to the Darling Harbour area. The project area is located within the area thought to have been inhabited by the Wangal clan. The Wangal clan's territory extended between the Parramatta River and the Cooks River from Darling Harbour to Rosehill¹².

The study area is located within an area rich with resources. The wetlands associated with the Cooks River and Gumbramorra Swamp would have been reliable fresh water and food sources. The Hawkesbury Sandstone around the Cooks River would have provided Aboriginal people with shelter and the surrounding environment would have provided ample materials for tools and other material culture.

Observations of Aboriginal people living on the Cooks River made early after the British arrival in Australia indicate the importance of these riverine and estuarine environments for Aboriginal people. Watkin Tench noted a camp consisting of twelve huts near the Cooks River in 1788¹³, whilst another account by James Backhouse details the construction of canoes using heat from fires in the 1830s¹⁴. Other accounts observed Aboriginal people in canoes and shell middens indicate the procurement of fish and shell fish for food¹⁵. The discovery of butchered dugong bones during the excavation of Alexandria Canal in the late 19th century highlights the ways in which Aboriginal people took

¹⁰ Matthews and Everitt 1900; Attenbrow 2010: 31.

¹¹ Attenbrow 2010: 34

¹² *ibid*

¹³ Muir 2013 <http://dictionaryofsydney.org/entry/aboriginal_people_of_the_cooks_river_valley> accessed 19 May 2016

¹⁴ Backhouse 1834

¹⁵ *ibid*

advantage of their environments particularly during periods of climate change around 6,000 years ago¹⁶.

Figure 4: From Mud Bank Botany Bay – Mouth of Cooks River 1830 - three Aboriginal people can be seen seated in the foreground next to wooden spears, one of which appears to have a barbed head.¹⁷



4.4 Archaeological context

4.4.1 Registered Aboriginal sites

The locations and details of Aboriginal sites are considered culturally sensitive information. Culturally sensitive information will be removed prior to this report being made public.

An extensive search of the Aboriginal Heritage Information System (AHIMS) database was conducted on 12 May 2017 for sites registered within the following parameters:

GDA 1994 MGA 56	[REDACTED]
Buffer	50 m
Number of sites	13
AHIMS Search ID	281006

The AHIMS search area encompasses the wider region around the project area, in order to give context. The distribution of recorded sites within the AHIMS search area is shown in Figure 5. The frequency of site feature types is summarised in Table 4: . K1 (AHIMS ID 45-6-2358) is listed as a

¹⁶ Etheridge, Edgeworth David & Grimshaw 1896: 158–185

¹⁷ Thompson, J Collection of the State Library of N.S.W [DL PXX 31, 2a]

deleted site. This site is the same as View Street (AHIMS ID 45-6-2198). Therefore, it has been excluded from the discussion and the total number of AHIMS sites in the extensive search area is six.

Table 4: Frequency and percentage of site features in extensive AHIMS search

Site Feature	Frequency	Percentage
Artefact	5	38
Shell and artefact	5	38
Shell, artefact and art (engraved or pigment)	1	8
Artefact, Potential Archaeological Deposit (PAD)	1	8
Potential Archaeological Deposit (PAD)	1	1

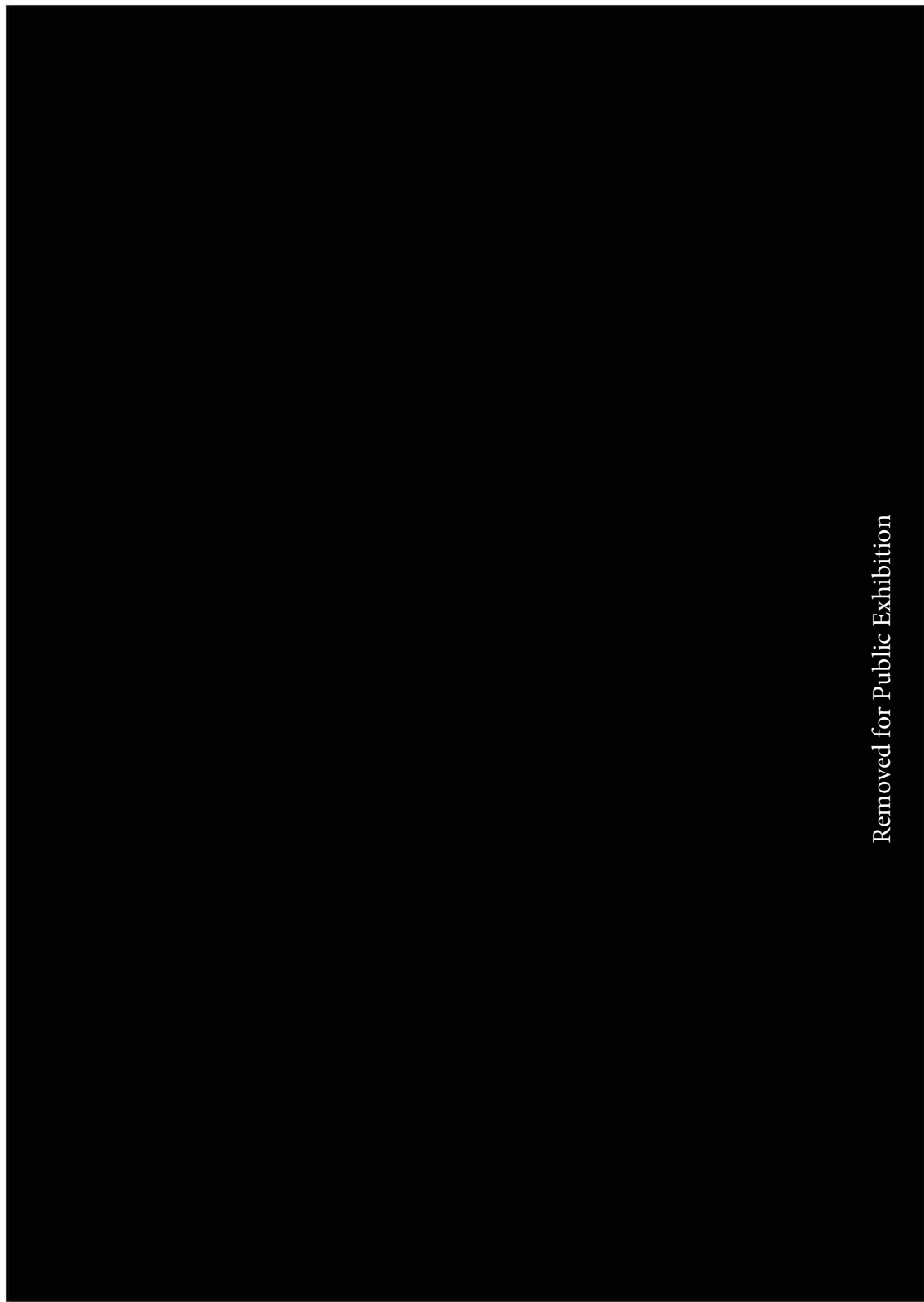
'Artefact' and 'shell and artefact' are the most frequent site types in the search area. Three of the sites containing shells are listed with the site type as midden. Two of the sites (AHIMS ID 45-6-0615 and 45-6-2568) are listed in association with rock shelters. The sites are clustered around the eastern end of the extensive search area, particularly in relation to the Cooks River and Wolli Creek. The frequency of sites with shell in proximity to the Cooks River correlates with the estuarine resources that would likely have been available in that environment (shell sites n=3, 50 per cent).

The recorded coordinates of Fraser Park PAD (AHIMS ID 45-6-2654), place the PAD approximately 650 metres north-east of the project area boundary. However, information contained in the associated test excavation report¹⁸ indicates that the area of PAD is the Fraser Park sporting complex, located approximately 130 metres east of the project area. The discrepancy in site location is likely due to coordinate projection errors on the AHIMS site register. No Aboriginal objects have been identified during site inspection at AHIMS ID 45-6-2654, or retrieved from AHIMS ID 45-6-2654 during excavation, therefore this listing is not an Aboriginal site as defined under Section 83 of the NPW Act.

It is likely that the discrepancy between the coordinates listed on AHIMS and the actual location of the PAD is due to a coordinate projection error. The recorded coordinates are in Australian Geodetic Datum (AGD), and therefore the discrepancy could be associated with the 200 metre error that can occur between AGD and Geocentric Datum of Australia (GDA) coordinates.

¹⁸ McIntyre-Tamwoy 2003

Figure 5: Distribution of AHIMS registered sites



4.4.2 Previous archaeological investigations

A number of archaeological investigations have been conducted in the vicinity of the study area. The results of those investigations and implications for the study area are discussed in detail in Technical Paper 4. A summary of each is presented in Table 5: .

Table 5: Summary of previous archaeological investigations

Year	Report title	Company	Description of study
2015	WestConnex New M5, Technical Working Paper: Aboriginal Heritage	AECOM	Aboriginal heritage assessment conducted as part of Environmental Impact Statement. Assessment area located to the south of the project area encompassing areas of similar geology and soils.
			Assessment based on location of previously recorded AHIMS sites and disturbance levels. Identified five new sites consisting of sandstone overhangs with associated PAD south of the Cooks River and outside the current project area.
			Predictive statements - potential for archaeological deposits to occur within areas of the GyMEA, Blacktown and Birrong soil landscapes across all landforms.
2005	Archaeological assessment of Aboriginal site (45-6-615) a rock shelter with art and midden at 32 Undercliffe Road, Undercliffe, NSW	Jo MacDonald Cultural Heritage Management	AHIMS ID 45-6-615 consists of rock shelter with art and shell midden at front of the shelter and is located approximately 1.5 kilometres south of the project area. The shelter itself is located in an outcrop of Hawkesbury sandstone which originally formed part of an outcrop along a ridge crest landform context
			The underlying geology is similar to that outside the project area at Sydenham, which consists of Quaternary sediments overlying Hawkesbury sandstone. Site assessed as demonstrating high archaeological significance at the local and regional level and considered to be rare within the Sydney basin context, especially in association with the shell midden.
2005	Intermodal Logistics Centre at Enfield, EIS, Assessment of Indigenous Heritage	Navin Officer Heritage Consultants	The Centre is located 1.4 kilometres north of Lakemba Station of the current project area. The assessment area was located within a similar environmental context to the Western portion of the current project area. This includes underlying shale and sandstone geology, and location within the Cooks River catchment area. A tributary of Cooks River, Coss Creek, ran to the east. The

Year	Report title	Company	Description of study
			<p>soils were described as Blacktown, Birrong and disturbed terrain. The elevation of parts of the assessment area would have provided vantage points over the surrounding areas.</p> <p>No Aboriginal objects or areas of archaeological potential identified by survey. Little to no topsoil had been preserved throughout the area which is typical where mechanical scraping has occurred within shallow soils such as the Blacktown soils. The assessment concluded that any Aboriginal sites that may have been located within the area had been destroyed by past land use activity.</p>
2003	MetroGrid Project Test Excavation of Buried Shell Bed at Fraser Park, Marrickville, NSW – Preliminary Report	McIntyre-Tamwoy	<p>Test excavations by machine conducted at Fraser Park, approximately 130 metres east of the current project area. Five test pits excavated along proposed underground service alignment. Excavation identified layers of introduced fill overlying natural swamp deposit and naturally deposited shell beds. It was noted that due to the nature of the silt associated with the shell bed the shell was deposited when that area was underwater. In conclusion prior to British settlement, the Fraser Park area had previously been underwater, and a low-lying swamp</p>
1984	St Peters Brick Pit, Sydney NSW Investigation of Shell Material	Attenbrow	<p>This report details a reassessment of AHIMS ID 45-6-1496, a shell midden identified within the St Peters Brick Pit. The reassessment was carried out by geologists, archaeologists and a malacologist. The site is located approximately 1.1 kilometres south-east of Sydenham Station.</p> <p>This reassessment considered the material to represent a former shoreline associated with Botany Bay rather than cultural consumption and discard. This hypothesis supported by the discovery of dugong bones during the excavations of the Alexandra Canal in the late 19th century. Another hypothesis proposed that the shell material had been introduced in association with brick production.</p> <p>It was recommended that the site card be updated and that AHIMS ID 45-6-1496 not be considered to be an Aboriginal site.</p>

4.4.3 Archaeological implications

The presence of intact Aboriginal archaeological deposits within the project area is largely dependent on the nature and extent of disturbance associated with historical construction activities. Subsurface disturbance such as the removal of top soil and other bulk earthworks would substantially lower the potential for intact archaeological deposits in those areas. This is especially relevant in areas of relatively shallow residual soils, which includes the majority of the project area.

In some instances, the various phases of construction may act to preserve intact soil profiles. For example, the introduced fill and rail ballast used in the construction of the railway at Wickham in Newcastle served to protect the underlying intact sand profile¹⁹. Excavations within the Sydney CBD have also identified sites in which the overlying construction phases have protected intact archaeological deposits²⁰. It is also likely that whilst intact soil profiles may occur, they may not contain evidence of Aboriginal occupation as was the case at AHIMS ID 45-6-1496, identified within the St Peters Brick Pit.

In summary, whilst the project area is likely to have been a site of Aboriginal occupation in the past, the likelihood of evidence of this occupation surviving to the present is influenced by a range of factors. These factors include the durability of the material evidence and subsequent impacts such as bulk earth works. The large-scale removal and modification of underlying Wianamatta Group geology and associated shallow residual soils during construction of the existing rail line, is likely to have significantly impacted or removed many former natural landform contexts and associated archaeological potential in the project area.

4.4.4 Predictive model

Archaeological data from the region has demonstrated the widespread and varying use of the area by Aboriginal people. The project area is located across a range of contexts, including areas within close proximity to marine and estuarine resources, fresh water and varying terrestrial subsistence resources.

Previous archaeological investigations of the greater Sydney area in general demonstrate the distribution of recorded Aboriginal sites as reflecting the use of the landscape by Aboriginal people, including movement between resources and activity areas. The distribution of recorded Aboriginal sites in built environments, such as the majority of the project area, is largely limited to areas that have been subject to archaeological excavation and/ or not impacted by development.

The distribution of overlapping and higher concentrations of stone artefacts in the Sydney area tended to be associated with high order watercourses and creek confluences, whilst lower density and more isolated activity areas in other parts of the landscape represented different and varying activities important to the understanding of overall landscape use.²¹

The predictive statements for the project area are as follows:

- The survivability of Aboriginal objects would be largely dependent on the extent and nature of subsequent phases of historical construction activities
- Subsurface artefact sites tend to consist of lower density isolated occurrences in areas away from major watercourses, including freshwater, marine and estuarine areas

¹⁹ Artefact Heritage 2016

²⁰ Baker 2004

²¹ White and McDonald 2010

- More frequent and higher concentrations of subsurface artefact sites are likely to occur in the vicinity of major watercourses
- Sandstone shelters suitable for archaeological deposit and outcrops suitable for engravings may be preserved in ridge crest and ridge slope landform contexts that correspond to the underlying Hawkesbury Sandstone geology
- Shell midden sites are more likely to be identified in close proximity to marine and estuarine areas. Note that due to land reclamation in the Botany Bay area former marine and estuarine areas may be set-back from contemporary shoreline areas.

Surviving portions of deeper soil profiles within the project area, including the Birrong soil landscape may provide stratified evidence of occupation.

4.5 Aboriginal archaeological survey

4.5.1 Timing and personnel

Archaeological survey for Technical Paper 4 was conducted in June 2017 by Jay Daley, Culture and Heritage Officer at Metropolitan LALC, Brady Maybury and Carrell Fabar, Cultural and Heritage Officer at Gandangara LALC, and Josh Symons and Claire Rayner (Artefact).

Site inspection in March 2017 was conducted by Brad Maybury from Gandangara LALC, Nathan Moran from Metropolitan LALC, and Duncan Jones (Artefact).

4.5.2 Survey strategy and methodology

The study area (project area) as defined in Section 1 has been divided into the following survey units:

- ten station (and associated construction compound) survey units
- four survey units for the remainder of the rail corridor.

A summary of the site inspection results is provided in Table 6: . A comprehensive description of site inspection, archaeological potential, archaeological significance and potential impacts as well as detailed mapping is provided in Technical Paper 4.

All survey units were covered on foot where it was safe to do so. Areas of surface visibility within the station areas were virtually non-existent, with the majority of each station area covered by buildings, roads and concrete footpaths. Discussions and observations during the survey focussed on archaeological potential and verifying background information on landform context.

Aerial photographs and topographic maps were carried by the survey team. A photographic record was kept of all sections of the study area. Photographs were taken to document the environment within the study area and are provided in Technical Paper 4.

4.6 Results

4.6.1 Station precincts and rail corridor

Only two areas of PAD were identified, one in the Belmore Station survey unit and one in the Punchbowl Station survey unit. These two areas of PAD are shown on Figure 6: and discussed in more detail in sections 4.6.2 and 4.6.3.

No Aboriginal sites were identified within the remainder of the station precinct or rail corridor survey units (Table 6:). This was predominantly due to the very high level of disturbance having removed the potential for Aboriginal archaeological objects and deposit particularly within the rail corridor where significant cutting below the original ground surface had occurred.

4.6.2 Belmore Station survey unit

Sydenham to Bankstown PAD01 (S2B PAD01)

A relatively intact area was identified during the site inspection located within a small Council park (Guide Park) located outside the rail corridor on Redman Parade within lot 11/DP802657 (Figure 7). The area is covered by dense grass and several trees. Visibility was low and exposures limited to the base of trees. The analysis of aerial photography indicates that the area has remained an open space since at least 1943 and no major ground disturbance has occurred. This area has been assessed as having Aboriginal archaeological potential and designated Sydenham to Bankstown PAD01 (S2B PAD01).

4.6.3 Punchbowl Station survey unit

Sydenham to Bankstown PAD02 (S2B PAD02)

An area of archaeological potential was identified during the site inspection within the small park located between Punchbowl Road and Urunga Parade (Figure 8). Analysis of aerial photography from 1943 and over the past 10 years indicates that there appears to have been little subsurface disturbance to S2B PAD02. Intact A horizons were observed in a cutting to the north of the Punchbowl Station survey unit. Therefore, there is low to moderate potential that intact archaeological deposits may be identified within this area. This area has been assessed as having Aboriginal archaeological potential and designated Sydenham to Bankstown PAD02 (S2B PAD02).

Table 6: Summary details of archaeological survey by unit

Survey unit	Site inspection results	Assessment of archaeological potential	Significance	Aboriginal sites
Marrickville Station	Low visibility generally inside and outside rail corridor due to sealed roads, pathways, structures and grass, rail station infrastructure and ballast. Extensive previous ground disturbance.	Nil to low	Low	None
Dulwich Hill Station	Rail corridor located within a cut. Visibility nil due to sealed roads, pathways and car parks, structures and vegetation. Located within a highly disturbed and modified landform. Any archaeological deposits would have been disturbed during the construction of the rail corridor which involved construction of a large cutting through underlying Hawkesbury Sandstone.	Nil to low	Low	None
Hurlstone Park Station	Rail corridor located within a cut through the Hawkesbury Sandstone. Outside rail corridor visibility was generally limited by sealed roads, pathways, carparks and structures. Inside rail corridor visibility impeded by structures, sealed surfaces, rail ballast and vegetation. Located within a highly disturbed and modified landform.	Nil to low	Low	None
Canterbury Station	Visibility generally low due to sealed roads, pathways, carparks and structures outside the rail corridor. Limited inside rail corridor due to existing structures, sealed surfaces, rail ballast and dense grass. Eastern portion cut into the existing crest landform. Western portion filled and raised above the surrounding landform.	Nil to low	Low	None
Campsie Station	Visibility low throughout due to the built up nature of the area. Visibility impeded by sealed surfaces, structures and vegetation. Some surface visibility within rail corridor. Introduced gravels evident across the ground surface. Located within a cut below street level.	Nil to low	Low	None

Survey unit	Site inspection results	Assessment of archaeological potential	Significance	Aboriginal sites
Belmore Station	<p>Located within a heavily urbanised and developed area. The existing station and rail is located within a cut below street level. This indicates that any archaeological deposits within this area would have been highly disturbed during construction. Therefore, the archaeological potential within the rail corridor and areas that have been highly disturbed is considered to be nil to low.</p> <p>A relatively intact area identified within a small Council park (Guide Park) located outside the rail corridor on Redman Parade within lot 11/DP802657. The area is covered by dense grass and several trees therefore, visibility low and exposures limited. Analysis of aerial photography indicates the area has remained an open space since at least 1943 and no major ground disturbance has occurred.</p>	<p>Nil to low (existing station and rail corridor)</p> <p>Low</p> <p>Low to moderate (Lot 11/DP802657 outside rail corridor)</p> <p>Low to moderate (S2B PAD01) (S2B PAD01)</p> <p>Sydenham to Bankstown PAD01</p>		
Lakemba Station	Visibility low and exposures rare. Visibility was impeded by sealed surfaces, structures and vegetation. Existing station platforms and rail corridor located within a cut.	Nil to low	Low	None
Wiley Park Station	Located within a heavily urbanised and developed area. Rail corridor has been artificially cut into the natural landform in the eastern portion and built up on an artificial embankment to the west.	Nil to low	Low	None

Survey unit	Site inspection results	Assessment of archaeological potential	Significance	Aboriginal sites
Punchbowl Station	<p>Visibility low impeded by sealed surfaces, structures and rail infrastructure as well as introduced fill and grass cover. Located within an urban area. Rail corridor artificially cut into the natural landform and at street level to the east and west of the existing station platforms.</p> <p>An area of archaeological potential identified within the small park located between Punchbowl Road and Urunga Parade. Analysis of aerial photography from 1943 indicates that there appears to have been little subsurface disturbance to the area. Intact A horizons were observed in a cutting to the north of the Punchbowl Station survey unit.</p>	<p>Nil to low (existing station and rail corridor)</p> <p>Low</p> <p>Low to moderate (S2B PAD02 outside rail corridor)</p> <p>Sydenham to Bankstown PAD02 (S2B PAD02)</p>		
Bankstown Station	<p>Visibility generally nil due to sealed surfaces and structures. Some green spaces are located outside of the rail corridor and exposures occurred near the roots of trees in these areas. These exposures were inspected.</p> <p>Located within a highly modified and disturbed area. Station and rail are located within a cut indicating that any archaeological deposits would have been highly disturbed during the construction of the rail corridor.</p>	<p>Nil to low</p> <p>Low</p> <p>None</p>		

Survey unit	Site inspection results	Assessment of archaeological potential	Significance	Aboriginal sites
	The rail corridor consists of an undulating landform including slope, crest and flat landform contexts. Large portions of the rail corridor are located through significantly modified landform contexts, including large cuts through the underlying shale and sandstone geology.			
Remaining rail corridor - general	Visibility was generally low throughout the corridor, impeded by vegetation, structures, fill, rail track and ballast. Soil exposures occurred within areas of erosion in vehicle access tracks and cuts. Impacts within the rail corridor are extensive, and include landform modification, subsurface infrastructure such as gas pipelines and galvanised steel troughs, electricity and telecommunications cables as well as rail infrastructure such as overhead wiring structures.	Nil to low	Low	None
	Located on level ground south of the rail corridor currently open space in the public park. Ground has been levelled flat and topsoil redeposited with introduced grasses and planted gardens.			
Remaining rail corridor – McNeilly Park Marrickville	Historical aerial photos from 1943 show the area to be open ground to the south of the rail corridor. These aerials show evidence of ground disturbance, including the construction of wartime air raid shelters directly to the south of the western portion. Depressions in the ground have been infilled and topography cut down to make a level surface. The exposed soil profile shows introduced top dressing for the garden use.	Nil to low	Low	None

Survey unit	Site inspection results	Assessment of archaeological potential	Significance	Aboriginal sites
Remaining rail corridor – Canterbury Bowling Club, Canterbury	The majority of this section of the survey unit consists of artificially cut or artificially filled ground. The steep hillside on the northern bank of the Cooks River has been terraced to create level surfaces, with multiple retaining walls to stabilise the slope. Numerous services and stormwater drainage channels cut through the study area, with major sewerage lines along the alignment of Close Street.	Nil to low	Low	None
Remaining rail corridor – Brancourt Avenue Park, Bankstown	The ground in this section has been heavily eroded and redressed with imported soils. Clay exposures reveal the original shallow depth of the original topsoil in the area. As such, the original topsoil has been almost entirely removed.	Nil to low	Low	None

Figure 6: Location of S2B PAD01 and S2B PAD02 along the project area

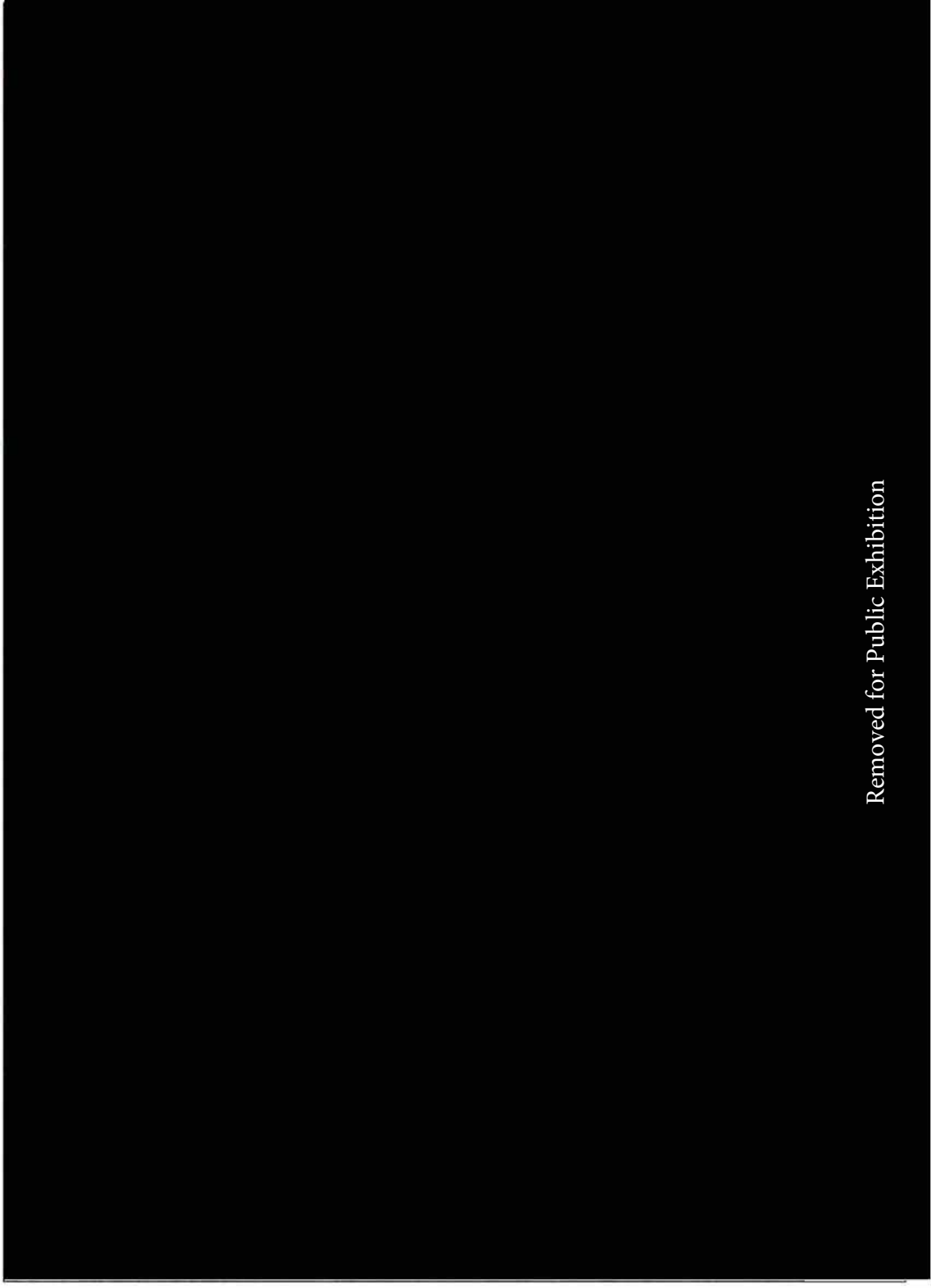


Figure 7: Belmore Station survey unit and S2B PAD01

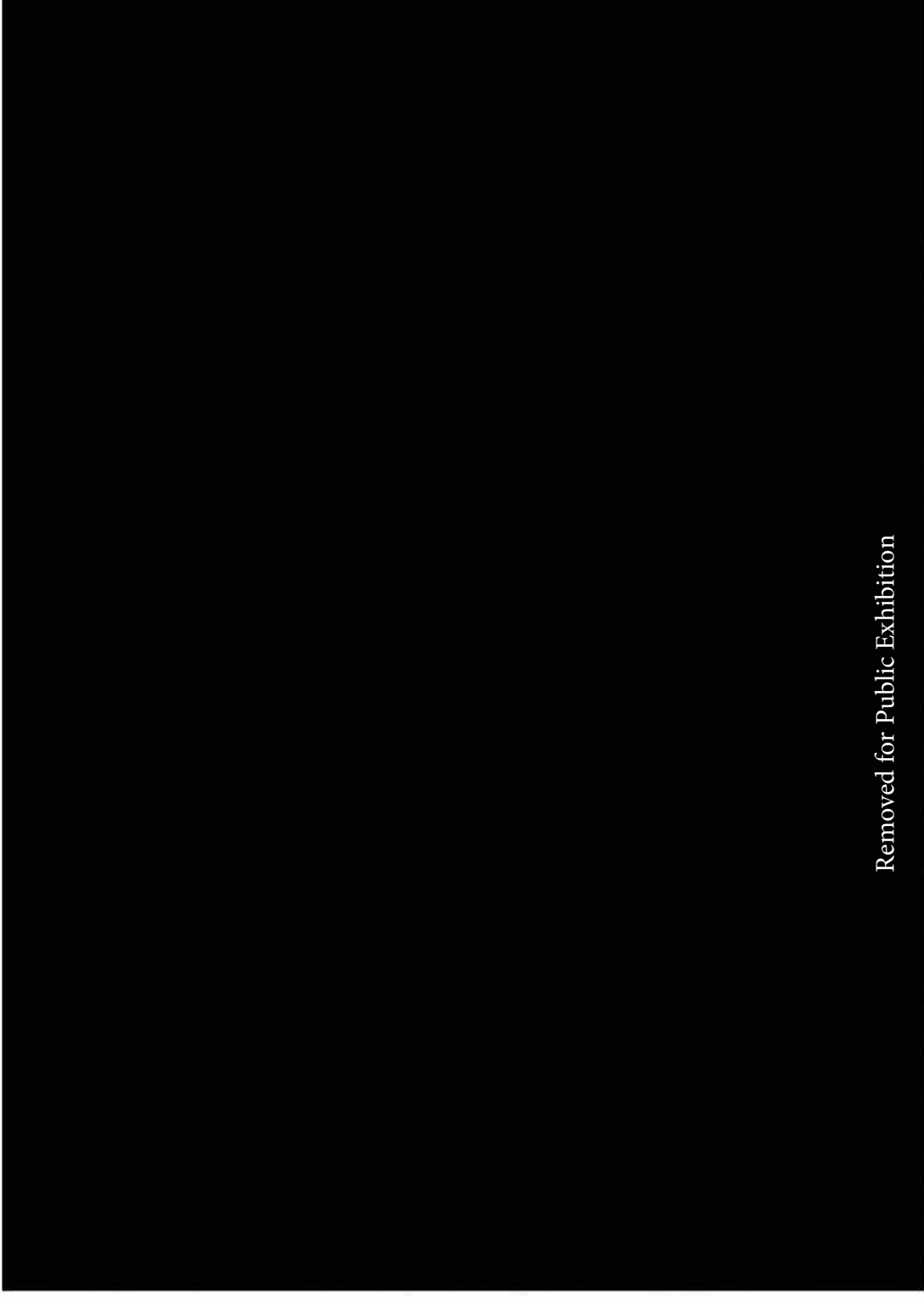
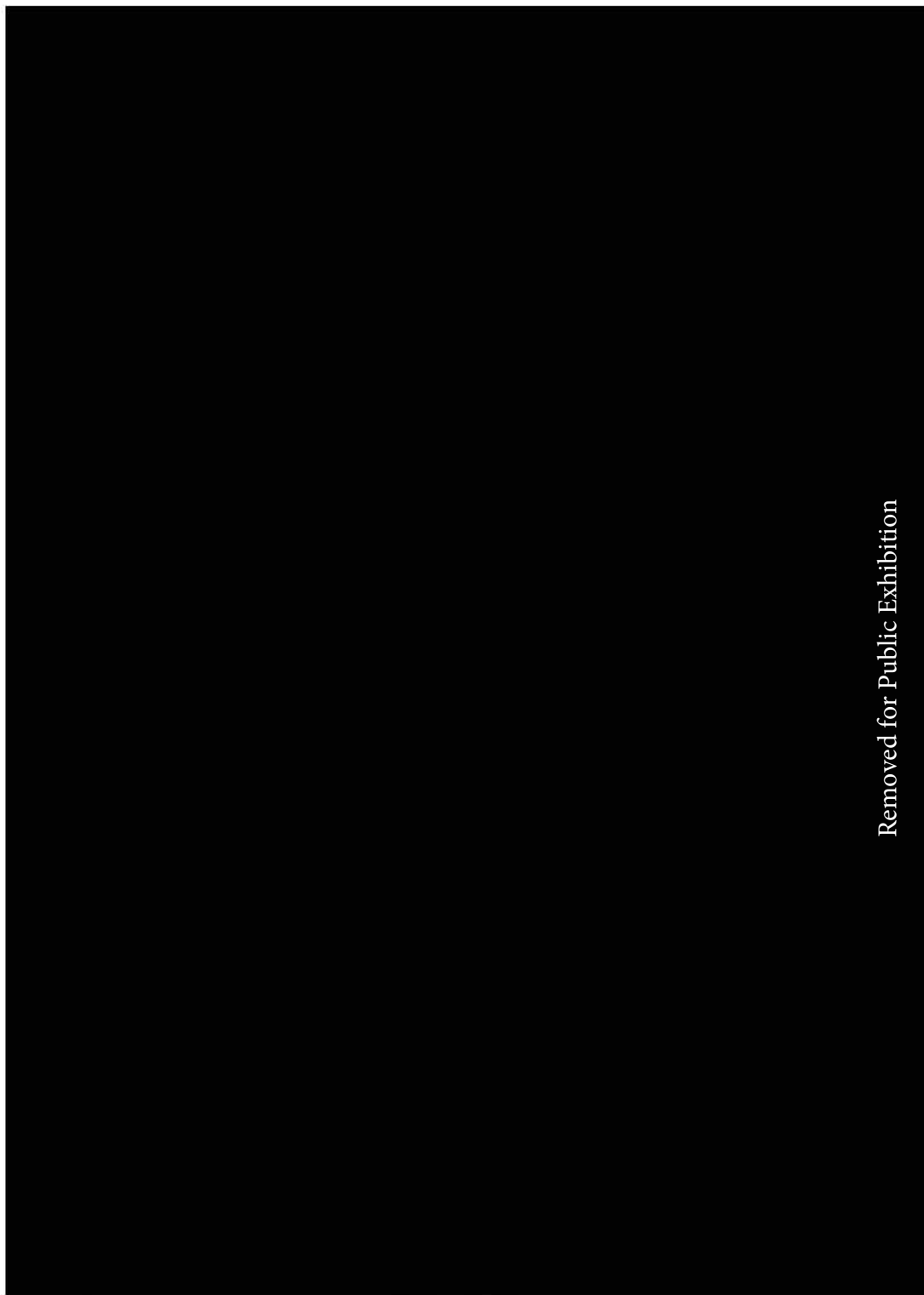


Figure 8: Punchbowl Station survey unit and S2B PAD02



5.0 Significance Assessment

5.1 Aboriginal material culture

There are no registered AHIMS sites located within the project sites. The Environmental Impact Statement assessment did not identify any previously unrecorded Aboriginal sites within the study area. Two areas of archaeological potential, S2B PAD01 and S2B PAD02 were identified at the Belmore Station survey unit and Punchbowl Station survey unit respectively.

5.2 Significance assessment criteria

An assessment of the cultural heritage significance of an item or place is required in order to form the basis of its management. OEH provides guidelines²², in accordance with the Burra Charter²³ for significance assessment with assessments being required to consider the following criteria:

- Social values – does the area have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons
- Historic values – is the area important to the cultural or natural history of the local area and/or region and/or state
- Scientific values - does the area have the potential to yield information that will contribute to an understanding of the cultural and natural history of the local area and/or region and/or state
- Aesthetic values – is the area important in demonstrating aesthetic characteristics in the local and/or region and/or state.

Scientific values should be considered in light of the following criteria:

- Research potential - does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?
- Representativeness - how much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?
- Rarity - is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?
- Education potential - does the subject area contain teaching sites or sites that might have teaching potential?

It is important to note that heritage significance is a dynamic value.

²² OEH 2011

²³ Australia ICOMOS 2013

Table 7: Heritage significance criteria

Criterion	Description
Social	The spiritual, traditional, historical or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them. Does the subject area have strong or special association with the Aboriginal community for social, cultural or spiritual reasons?
Historic	Historic value refers to the associations of a place with a historically important person, event, phase or activity in an Aboriginal community. Is the subject area important to the cultural or natural history of the local area and/or region and/or state?
Scientific	This refers to the importance of a landscape, area, place or object because of its rarity, representativeness and the extent to which it may contribute to further understanding and information. Information about scientific values will be gathered through any archaeological investigation undertaken. Does the subject area have potential to yield information that will contribute to an understanding of the cultural or natural history of the local area and/or region and/or state?
Aesthetic	This refers to the sensory, scenic, architectural and creative aspects of the place. It is often linked with the social values. It may consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use. Is the subject area important in demonstrating aesthetic characteristics in the local area and/or region and/or state?

5.3 Social significance

5.3.1 Cultural landscape

The World Heritage Convention of United Nations Educational, Scientific and Cultural Organisation (UNESCO) defines a cultural landscape as one which has 'powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent' (UNESCO 1991). The relationship between Aboriginal Australians and the land is conceived in spiritual terms rather than primarily in material terms (Andrews et al 2006). Aboriginal cultural knowledge has been defined as:

Accumulated knowledge which encompasses spiritual relationships, relationships with the natural environment and the sustainable use of natural resources, and relationships between people, which are reflected in language, narratives, social organisation, values, beliefs and cultural laws and custom (Andrews et al 2006).

Aboriginal cultural knowledge was traditionally bequeathed through oral traditions from generation to generation. Within all Aboriginal communities there was a time of dislocation and upheaval associated with the arrival of colonial settlers. This widespread disruption resulted in much of the detailed knowledge and understanding of many of the elements of the cultural landscape being lost from the Aboriginal community, nonetheless many Aboriginal people maintain a strong connection to the land of their ancestors and collectively possess a wealth of knowledge passed down through the generations.

5.3.2 Aboriginal cultural heritage values

Consultation has shown that the study area is part of a wider cultural landscape of high cultural significance to many of the registered Aboriginal parties.

5.4 Historic significance

The study area is located within an area rich with resources. The wetlands associated with the Cooks River and Gumbramorra Swamp would have been reliable fresh water and food sources. The Hawkesbury Sandstone around the Cooks River would have provided Aboriginal people with shelter and the surrounding environment would have provided ample materials for tools and other material culture.

Observations of Aboriginal people living on the Cooks River made early after the British arrival in Australia indicate the importance of these riverine and estuarine environments for Aboriginal people. Watkin Tench noted a camp consisting of twelve huts near the Cooks River in 1788²⁴, whilst another account by James Backhouse details the construction of canoes using heat from fires in the 1830s²⁵. Other historical accounts observed Aboriginal people in canoes, whilst the presence of shell middens indicates the procurement of fish and shell fish for food²⁶. Butchered dugong bones were identified during the excavation of Alexandria Canal in the late 19th century.²⁷ Alexandria Canal is located approximately 2.4 kilometres east of the project area.

5.5 Indicative archaeological (scientific) significance

5.5.1 Station and rail corridor survey units

With the exception of S2B PAD01 and S2B PAD02, the survey assessed the 10 station precincts (survey units) and the rail corridor as being of low archaeological significance primarily due to the very high level of disturbance particularly within the rail corridor and subsequently the nil to low archaeological potential. Any Aboriginal objects within the station and rail corridor survey units would likely be in very low densities and within highly disturbed contexts. Therefore, it is unlikely that these objects would be considered rare or that they would contribute to regional research questions.

5.5.2 S2B PAD01 and S2B PAD02

A draft summary of archaeological significance for each of the PADs recorded during the survey is provided below. Test excavation would be able to confirm the archaeological significance of these PADs.

The indicative archaeological significance of S2B PAD01 is considered to be low to moderate. The PAD has potential to contribute to research questions for this portion of the Cumberland Plain given the paucity of recorded sites in the local area.

The indicative archaeological significance of S2B PAD02 is considered to be moderate. Current design information indicates that the PAD would not be impacted. Should the project area be altered and the PAD potentially impacted, archaeological test excavation would be required to accurately determine the nature and significance of the impact.

²⁴ Muir 2013 <http://dictionaryofsydney.org/entry/aboriginal_people_of_the_cooks_river_valley> accessed 19 May 2016

²⁵ Backhouse 1834

²⁶ ibid

²⁷ Etheridge, Edgeworth David & Grimshaw 1896: 158–185

Table 8: Summary of impacts to S2B PAD01 and S2B PAD02

Work Site	Research Potential	Scientific Value	Representative Value	Rarity Value	Overall indicative significance assessment
S2B PAD01	Low-moderate	Low-moderate	Low-moderate	Low-moderate	Low-moderate
S2B PAD02	Moderate	Moderate	Moderate	Moderate	Moderate

5.6 Statement of significance

The study area is assessed as being of low archaeological significance due to the high levels of disturbance and subsequent low archaeological potential.

S2B PAD01 or S2B PAD 02 are indicatively considered to be of low to moderate and moderate archaeological significance.

6.0 AVOIDING AND MINIMISING HARM

6.1 Summary of impacts

A summary description of each survey unit, including identified impacts to Aboriginal heritage from proposed construction or operation of the project, is outlined below. Maps of each survey unit are provided in Technical Paper 4.

6.1.1 Marrickville Station survey unit

The Marrickville Station survey unit includes the Marrickville Station concourse, platforms and rail corridor and surrounds. The survey unit extends to the south incorporating Leofrene Avenue, Station Street and portions of Riverdale, Schwebel Street, Warburton Road and Illawarra Road. The survey unit also includes two construction compounds.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Marrickville Station survey unit.

Due to the landscape context and largely modified nature of the Marrickville Station survey unit the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects.

6.1.2 Dulwich Hill Station survey unit

The Dulwich Hill Station survey unit consists of the current Dulwich Hill Station concourse, platforms, the Dulwich Hill Light Rail Station platform and surrounds. It includes the Wardell Road overbridge and extends west along Ewart Lane. The survey unit also spans Bedford Crescent, and portions of Dudley Street and Wardell Lane and a construction compound.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Dulwich Hill Station survey unit.

Due to the landscape context and largely modified nature of the Dulwich Hill Station survey unit the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects.

6.1.3 Hurlstone Park Station survey unit

The Hurlstone Park Station survey unit extends approximately 130 metres to the east of the Crinan Street overbridge and approximately 370 metres to the west. The survey unit encompasses portions of Duntroon Street, Crinan Street, Mill Lane, Floss Street and surrounds. The survey unit also includes a proposed construction compound.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Hurlstone Park Station survey unit.

Due to the landscape context and largely modified nature of the Hurlstone Park Station survey unit the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the proposed works would impact Aboriginal objects.

6.1.4 Canterbury Station survey unit

The Canterbury Station survey unit includes the Canterbury Station concourse, platforms and rail corridor and surrounds. It extends approximately 115 metres east of the Canterbury Road overbridge and approximately 50 metres west from the station platforms. The survey unit encompasses portions of the surrounding streets, including Broughton Street, Charles Street and Canterbury Road and the major intersection to the north of the station concourse. The survey unit includes the buildings at the corner of Charles Street and Canterbury Road. The survey unit includes two proposed construction compounds.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Canterbury Station survey unit.

Due to the largely modified nature of the Canterbury Station survey unit, the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects.

6.1.5 Campsie Station survey unit

The Campsie Station survey unit consists of the Campsie Station concourse, platforms, rail corridor and surrounds. It extends east of the station structures to Duke Street and west to Dewar Street. The survey unit incorporates the surrounding streets to the north and south of the station, including North Parade, Beamish Street, South Parade and Lilian Street. The survey unit includes residential and commercial areas. The survey unit encompasses two construction compounds.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Campsie Station survey unit.

Due to the landscape context and largely modified nature of the Campsie Station survey unit the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects.

6.1.6 Belmore Station survey unit

The Belmore Station survey unit encompasses the Belmore Station concourse, platforms, rail corridor and surrounds. It extends east of the existing station to Myall Street and west to the Canterbury League Club. The survey unit includes the car park, structures and Redman Parade on the north side of the existing station and extends part way along Burwood Road, Acacia Street, Tobruk Avenue and Bridge Road.

The survey unit also includes two proposed construction compound areas. Part of the construction compound to the south of Belmore station is likely to have been used as a compound/stockpile area previously, as evidenced by introduced gravels across the ground surface. The proposed compound to the north of Belmore Station is located across an existing hardstand carpark and steep railway embankment contexts.

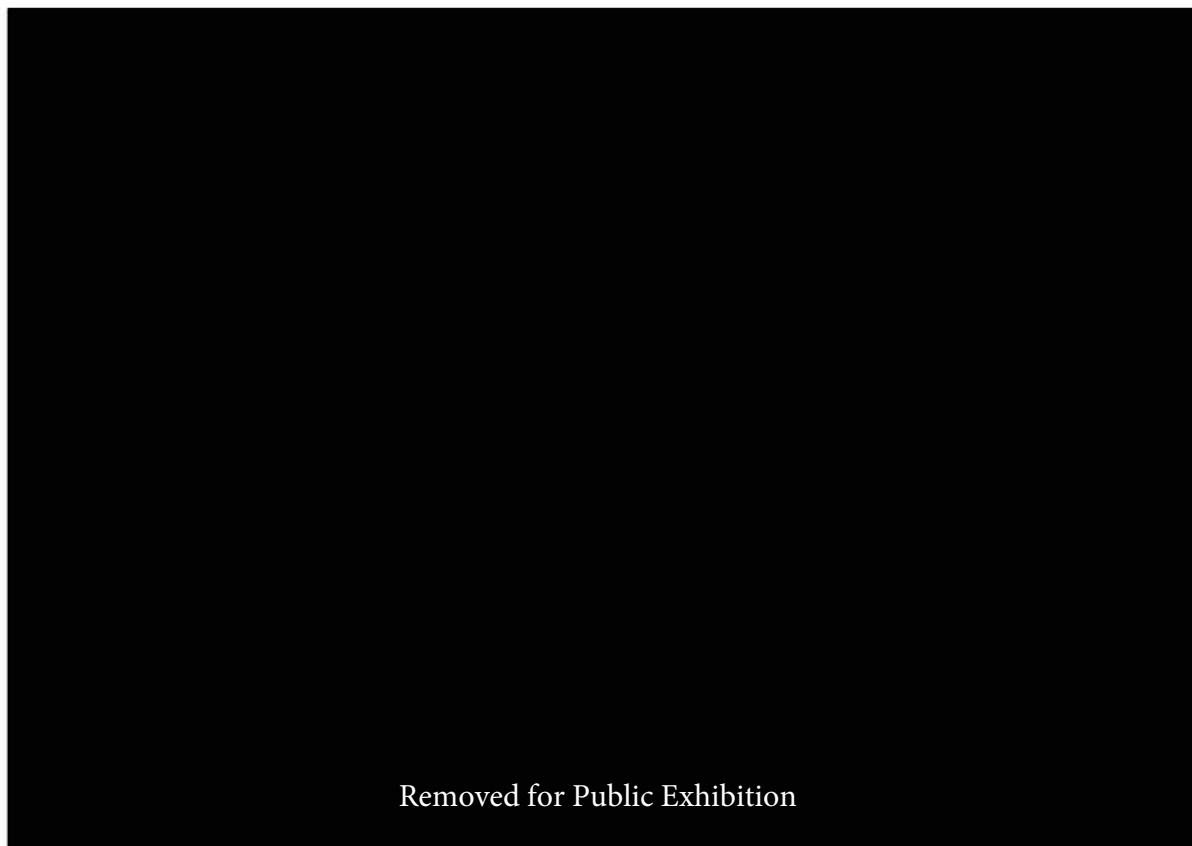
Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Belmore Station survey unit.

S2B PAD01 would not be impacted by the project as it is located outside of the project area boundary.

Due to the landscape context and largely modified nature of the remainder of the Belmore Station survey unit the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects in these areas.

Figure 9: Belmore Station survey unit and S2B PAD01



6.1.7 Lakemba Station survey unit

The Lakemba Station survey unit includes the Lakemba Station concourse, platforms, rail corridor commuter car parks and surrounds. The survey unit extends east of the existing station to Quigg Street North and Quigg Street South and extends approximately 45 metres west of the station platforms. The survey unit encompasses Railway Parade to the north and The Boulevard to the south, including portions of Haldon Street North and Haldon Street South. The survey unit also includes three construction compounds.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Lakemba Station survey unit.

Due to the landscape context and largely modified nature of the Lakemba Station survey unit the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects.

6.1.8 Wiley Park Station survey unit

The Wiley Park Station survey unit consists of the Wiley Park Station concourse, platforms and rail corridor and surrounds. It extends approximately 100 metres east of the King George Road overbridge and west to Cornelia Street. The survey unit encompasses Stanlea Parade and a section of King Georges Road to the north and The Boulevarde to the south. The survey unit also includes two proposed construction compounds.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Wiley Park Station survey unit.

Due to the landscape context and largely modified nature of the Wiley Park Station survey unit the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects.

6.1.9 Punchbowl Station survey unit

The Punchbowl Station survey unit includes the Punchbowl Station concourse, platforms, rail corridor and surrounds. The survey unit extends approximately 185 metres east of the eastern end of the platforms and the western boundary is defined by the Punchbowl Road overbridge. The survey unit extends north along Punchbowl Road and east along Urunga Parade including the small park in between these roads. The survey unit encompasses The Boulevarde along the southern boundary. The survey unit includes two proposed compound locations north and south of Punchbowl Station.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Punchbowl Station survey unit.

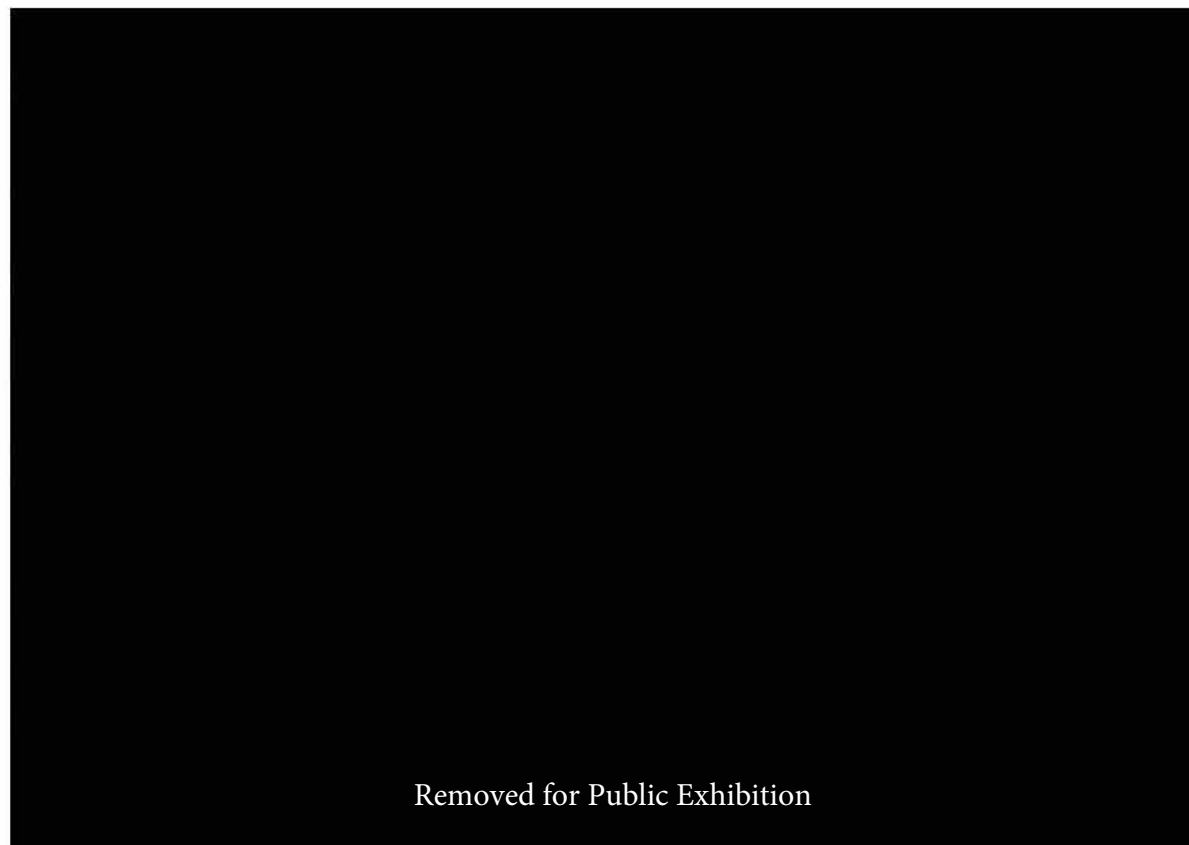
A portion of S2B PAD02 would be impacted by the proposed new access way from Punchbowl Road to Punchbowl Station, as well as a small portion impacted by proposed landscaping works. The proposed layout of Punchbowl Station and associated landscaping and access track works in relation to S2B PAD02 is shown in Figures 10 and 11.

Due to the landscape context and largely modified nature of the remainder of the existing Punchbowl Station survey unit, the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects.

Figure 10: Punchbowl Station survey unit and S2B PAD02



Figure 11: Indicative layout of Punchbowl Station with reference to S2B PAD02



6.1.10 Bankstown Station survey unit

The Bankstown Station survey unit includes the existing Bankstown station concourse, platforms, rail corridor and surrounds. The survey unit encompasses the Bankstown City Plaza and extends east to the West Terrace overbridge including North and South Terrace. The survey unit also includes two proposed constructions compound north and south of the station. The construction compound south of the station includes a landscaped area and bus interchange. The construction compound to the north of the station includes the commuter car park and small park between the rail corridor and North Terrace.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within the Bankstown Station survey unit.

Due to the landscape context and largely modified nature of majority of the Bankstown Station survey unit, the archaeological potential has been assessed as nil to low. Therefore, it is unlikely that the project would impact Aboriginal objects in areas of nil to low potential.

6.1.11 Remaining areas of the rail corridor

The rail corridor consists of an undulating landform including slope, crest and flat landform contexts. Large portions of the rail corridor are located through significantly modified landform contexts, including large cuts through the underlying shale and sandstone geology.

Identified impacts to Aboriginal heritage

No identified Aboriginal sites would be impacted by construction or operation of the project within this section of the survey unit.

6.2 Summary of impacts

The works would not impact any registered Aboriginal sites.

Two areas of archaeological potential have been identified within the project area, S2B PAD01 at Belmore Station, and S2B PAD02 at Punchbowl Station. The proposed works will not impact S2B PAD01. Construction of the proposed new Punchbowl Station concourse and associated landscaping will partially impact the identified extent of S2B PAD02.

Due largely to disturbance from construction of the existing rail line, the remainder of the project area has been identified as demonstrating nil to low archaeological potential, with no identified impacts to Aboriginal objects or areas of archaeological potential from the proposed works.

Table 9: Indicative impact assessment for S2B PAD01 and S2B PAD02

Work Site	Archaeological Potential	Type of Harm	Degree of Harm	Consequence of Harm
S2B PAD01	Low-moderate	None	None	No loss of value
S2B PAD02	Moderate	Direct	Partial	Partial loss of value

6.3 Consideration of alternatives and justification of impacts

Chapter 6 of the Environmental Impact Statement provides a detailed analysis of the need and options assessment for the project.

The Sydney Metro City & Southwest Sydenham to Bankstown project has been deemed necessary by Transport for NSW in light of the above factors to provide a long term solution to increasing demand on public transport services. The project is mainly located within an existing rail corridor that has generally been substantially modified.

The project would not impact any existing AHIMS registered sites. This ACHAR has been compiled in part to propose mitigation measures to manage the impacts to areas of archaeological potential where these impacts are considered to be unavoidable. Aboriginal objects encountered throughout the project will be impacted, either through archaeological excavation or works and the impact is likely to be very low.

6.4 Ecologically Sustainable Development principles

In accordance with the OEH *'Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW'*²⁸, Ecologically Sustainable Development (ESD) principles have been considered in the preparation of this ACHAR, including options to avoid impacts to Aboriginal cultural heritage, assessment of unavoidable impacts, identification of mitigation and management measures, and taking into account Aboriginal community views.

The principles of ESD are detailed in the NSW *Protection of the Environment Administration Act 1991*. Chapter 29 of the EIS discusses the ESD principles in regards to the project as a whole. The ESD principles relevant to the assessment of the project as it relates to Aboriginal cultural heritage are considered below.

6.4.1 The integration principle

Decision-making processes should effectively integrate both long term and short term economic, environmental, social and equitable considerations (the 'integration principle'). The project would comply with the integration principle in regards to Aboriginal heritage. The Aboriginal heritage values of the study area have been considered as part of the planning process for the project. Through the consideration of various design options²⁹ Transport for NSW have considered the findings of the Aboriginal Heritage assessment³⁰.

6.4.2 The precautionary principle

If there are threats of serious or irreversible environmental damage, lack of full scientific confidence should not be used as a reason for postponing measures to prevent environmental degradation (the 'precautionary principle').

The construction phase of the project will impact a portion of the identified extent of S2B PAD02, which has been indicatively assessed as demonstrating moderate archaeological significance. Where these impacts are unavoidable this ACHAR proposes mitigation measures such as archaeological excavations to ensure that full scientific confidence is achieved prior to irreversible impacts occurring.

²⁸ OEH 2011

²⁹ EIS Chapter Chapter 4

³⁰ Artefact Heritage 2016

6.4.3 The principle of intergenerational equity

The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the 'principle of intergenerational equity').

The construction phase of the project will impact a portion of the identified extent of S2B PAD02, which has been indicatively assessed as demonstrating moderate archaeological significance. Where these impacts are unavoidable this ACHAR proposes mitigation measures to ensure that full scientific confidence is achieved prior to irreversible impacts occurring.

6.4.4 Conservation of biodiversity

Cultural values of biodiversity are intertwined with the lives of Aboriginal people and their use of the landscape. Biological impacts of the project are considered as part of the Environmental Impact Statement.

6.4.5 Improved valuation, pricing and incentive mechanisms

Transport for NSW are committed to delivering transport services, projects, operations and programs in a manner that balances economic, environmental and social issues to ensure a sustainable transport system for NSW. In order to achieve this, the *Transport Environment and Sustainability Policy Framework* (the Framework) is applied at all levels of planning policy development and project delivery.

The Framework is a collective and coordinated approach to deliver the NSW Government's environmental and sustainability agenda across the Transport cluster (Transport for NSW, RailCorp, Roads and Maritime). The Framework is outcomes based and seeks to improve Transport's environmental sustainability performance.

In regards to heritage Transport for NSW aims to promote a transport system that conserves and celebrates the rich Aboriginal heritage for which they are the custodian by focussing on³¹:

- minimising transport operation and construction impacts on heritage
- ensuring heritage is used positively to enrich the customer experience.

³¹ TfNSW 2013 Transport Environment and Sustainability Policy Framework Attachment 3:25

7.0 EXCAVATION METHODOLOGY

This excavation methodology for S2B PAD02 is prepared to meet requirements AH2 and AH3 of the Environmental Impact Statement as detailed in Table 8 below:

Table 10: Mitigation measures AH2 and AH3

Reference	Mitigation measure	Portion of the study area
AH2	<p>An Aboriginal cultural heritage assessment report (this document) would be prepared in accordance with the OEH <i>Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW</i>. The Aboriginal cultural heritage assessment report would include:</p> <ul style="list-style-type: none"> • Details of Aboriginal stakeholder consultation conducted in accordance with AH1 • An assessment of cultural significance for the project area and identification of any specific areas of cultural significance based on consultation with Aboriginal stakeholders <p>A methodology for archaeological management, including test excavation and salvage (refer to AH3).</p>	All
AH3	<p>Archaeological test excavation (and salvage if required) would be carried out S2B PAD02 (Punchbowl). Excavations would be conducted in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report (Section 7.0).</p>	Punchbowl Station

Archaeological excavation at S2B PAD02 would be conducted in two stages, Stage one test excavation and if required Stage two salvage excavation. Stage two salvage excavation would occur where a series of triggers are met during Stage one excavation, as outlined in Section 7.5.2.

7.1 Excavation justification

The proposed works will partially impact the identified extent of S2B PAD02. The background context in the Environmental Impact Statement and summarised in Section 4 demonstrates that the extent of previous archaeological investigations in the vicinity of the project area is limited. Archaeological investigation provides a unique opportunity to investigate the intactness and significance of S2B PAD02.

7.1.1 Research questions

Key research questions for the proposed excavation at S2B PAD02 include:

- **Intactness** – investigate the intactness of an identified area of archaeological potential in an urban context.
- **Nature and extent** – establish the nature and extent of S2B PAD02. Is the PAD aligned with landform or disturbance footprint?

- **Significance** – assess the archaeological and cultural significance of S2B PAD02 in consultation with RAPs.
- **Comparative** – compare the results and significance of identified Aboriginal sites with previous archaeological investigations in the region.

7.2 Archaeological Method Statements

An Archaeological Method Statement (AMS) will be prepared by the nominated Aboriginal archaeological Excavation Director for excavation at S2B PAD02. The AMS would adhere to the excavation methodology outlined below and provide detailed information on site-specific and/or activity specific archaeological management requirements.

The Aboriginal archaeological excavation director (ED) would oversee preparation of the AMS. It is anticipated that site inspections would be conducted, where required, during preparation of the AMS. The Aboriginal archaeological ED must meet the qualification requirements as outlined in Section 1.6 of the OEH code of practice.

7.3 Participation in archaeological investigations

RAP representatives would participate in all Aboriginal archaeological excavations. The AMS prepared for S2B PAD02 would be provided to RAPs prior to archaeological work commencing. RAP sign off on the AMS would not be required as the AMS would be prepared in adherence to the approved ACHAR.

7.4 Geomorphology

It is anticipated that a geomorphology specialist would be involved in the investigative process, where required as per the AMS.

7.5 Excavation methodology

7.5.1 Stage one

The methodology of Stage one test excavation would be influenced by:

- The extent of the potential archaeological resource available to test at S2B PAD02. The extent of Stage one excavation would depend upon worksite constructability, potential depth of the archaeological resource, and the area extent of any remaining potential archaeological resource.
- Proposed impacts. Excavation should not extend outside the proposed impact area unless required for safety reasons.

Stage one would require hand excavation of test pits in controlled Excavation Units. Excavation Units would comprise of one square metre test pits excavated in either arbitrary 100 mm spits or stratigraphic units where applicable. Excavation Units could be joined together to form a two square metre test pit, where appropriate. In some instances, where the available area to test in portions of S2B PAD02 is small, the Excavation Unit size would be smaller than one square metre.

Excavation Units would be excavated to a depth where archaeologically sterile deposit has been reached, enough information has been retrieved to trigger Stage two salvage excavation, or a depth of 1.5 metres (or safe working depth) has been reached, whichever is the shallowest. Although not

anticipated in the residual Blacktown soil landscape, if archaeological deposit extends below a safe depth (1.5 metres) deeper archaeological excavation should be considered which may require shoring or stepping.

A grid of Stage one test pits would be established across the portion of S2B PAD02 to be tested. The AMS would outline the number of Excavation Units to be excavated, the grid layout, and spacing of test pits. Where there are constraints on the grid layout, such as disturbed areas or services, test pits may be offset to an adjacent location within the area of proposed impact.

Machine excavation would be utilised to remove introduced fill layers where required, or to excavate below a safe depth where archaeological sterile deposits have not been reached.

7.5.2 Stage two

Triggers for Stage two excavation at S2B PAD02 would include:

- identification of more than 5 artefacts per Excavation Unit during Stage one excavation
- identification of rare artefacts, features or site type
- identification by the Aboriginal archaeological ED and/or the geomorphologist of Aboriginal artefacts in contexts that may provide significant information on site formation, including identification of contexts and/ or materials suitable for dating.

The Aboriginal archaeological ED would then assess the need for Stage two excavations given the nature and context of the find and the extent of proposed impacts. Stage two excavation would proceed under the methodology discussed in the AMS and in adherence to the core methodology presented in the ACHAR.

Stage two excavation would involve the continuation of hand excavation in one square metre Excavation Units to form open area excavation. Stage two will cease once the excavation has retrieved a sufficient sample to describe the intactness, nature, extent, significance and is a statistically comparable quantity. The number of Stage two open area excavations to be excavated, the extent of open area excavation, and the cessation of Stage two excavation, would be determined by the Aboriginal archaeological ED in accordance with the ACHAR, and the AMS and in consultation with the RAPs on site.

7.6 Specific methodological considerations

7.6.1 Historical archaeology contexts

Where historical archaeological contexts are encountered during controlled Stage one or Stage two excavation, the Aboriginal archaeological ED will consult with the historical ED for the project. on any requirements for an alteration to methodology to account for impacts to historical archaeological remains.

7.6.2 Artefacts retrieved from fill

Where artefacts are identified in fill that is not considered to be a historical archaeology context, the Aboriginal archaeological ED would first establish whether further investigation of the find is required. Further investigation may include sample excavation by machine and sieving of fill material. Where no further investigation is required, the find will be recorded and stored in the nominated temporary locked storage area.

7.6.3 Protection of the archaeological resource during excavation

Where there is a halt in excavation at S2B PAD02, such as a cessation of excavation due to inclement weather, establishment of the Punchbowl Station worksite, or for other reasons outside the control of the Aboriginal archaeological ED, suitable measures should be put in place to protect open Excavation Units until archaeological excavation re-commences.

Protective measures may include back-filling open Excavation Units under the guidance of an archaeologist and include protection of any remaining archaeological resource using geofab material or similar and clean back-fill. Other protective measures may include the site contractor deploying sand bags and sediment fencing to divert surface water away from open Excavation Units.

7.6.4 Sieving

All retrieved material from hand excavation would be sieved through nested 5mm and 3mm sieve mesh. It is likely that most material would be wet sieved, however dry sieving may be more appropriate in certain contexts.

7.6.5 Identification of rare site types

Where these site types are encountered, a more detailed approach to excavation, sampling and recording will be required for.

- hearths
- middens
- sites associated with outcropping sandstone, such as engravings or grinding grooves
- contact archaeology.

7.7 Unexpected finds

The Construction Heritage Management Plan (CHMP) prepared for the project by the main contractor, would include a detailed unexpected finds procedure for the project. The excavation methodology outlined in the ACHAR should be utilised for further investigation of unexpected finds, where required.

7.8 Site clearance

Site clearance at S2B PAD02 would be required from the Aboriginal ED at least 14 days prior to construction commencing. This clearance would be in the form of a memo or report.

7.9 Geomorphological investigations

It is anticipated that intrusive geomorphological investigations of different types will be conducted at S2B PAD02, if required. These investigations may retrieve samples for dating, or for providing more data for site formation analysis. The potential scope and outline of geomorphological investigation at S2B PAD02 would be outlined in the AMS.

7.10 Reporting and analysis

All Aboriginal objects retrieved during the course of archaeological excavation would be washed and placed in re-sealable bags for further analysis and recording. Once test excavation has been

completed, the artefact assemblage would be recorded and stored as stipulated in the OEH code of practice. This includes recording key attributes of material, artefact type, platform type, termination type and dimensions, as well as photographic and drawn records of representative artefacts. All recorded information would be entered into a Microsoft Excel (or similar) table with detail linked to the provenance of each artefact. Once entered into the Excel table, the data can be readily supplied with associated reporting to RAPs and the proponent in either electronic or hard-copy form. An archaeologist experienced in stone artefact recording will conduct the attribute recording and analysis.

All artefacts would be given a unique number and stored in double re-sealable snap lock bags. A permanent marker will be used to record the provenance and unique number of artefacts in each bag in writing on the outside of the bag and on an archival grade tag such as Dupont™ Tyvek® paper.

7.11 Temporary and long-term care and management of retrieved Aboriginal objects

The temporary repository of any retrieved artefacts will be a locked cupboard on the premises of the archaeological consultant.

Anthony Johnson (MBMAC) and Jamie Workman (DLO) recommended that artefacts recovered during excavation should be reburied. Phil Khan (KYWG) has recommended that they should be stored in a keeping place or as part of an interpretative display.

Further consultation with RAPs will be required during the project to determine the preferred long-term care and management of any retrieved Aboriginal artefacts once the nature, location, significance and size of the assemblage is known.

7.12 Interpretation and educational outcomes

Aboriginal heritage would be included in the Heritage Interpretation Strategy for the project, in consultation with the RAPs on accordance with mitigation measure AH4.

Mr Tony Williams (AAS) has recommended that the excavation and its findings be filmed and made available in suitable form for distribution to schools. This would be considered as part of the Heritage Interpretation Strategy if practicable and appropriate.

8.0 Management Measures

8.1 Management framework

Key heritage management plans/documentation relating to Aboriginal heritage required prior to construction which relate to the ACHAR will likely include:

- Construction Environmental Management Plan (CEMP)
- Construction Heritage Management Plan (CHMP) (Heritage sub-plan)
- Archaeological Method Statement for excavation at S2B PAD02.

8.2 Construction Heritage Management Plan

A CHMP should be prepared for the project that outlines the methodology discussed in this ACHAR and include an unexpected finds procedure. Details of RAPs and circumstances where additional consultation would be required must be included.

8.3 Discovery of human remains

If suspected human skeletal remains are uncovered the Unexpected Finds Procedure prepared by the delivery contractor and Sydney Metro Exhumation Management Procedure would be followed.

9.0 REFERENCES

- Australia ICOMOS. 2013. Australia ICOMOS Charter for Places of Cultural Significance. The Burra Charter, 2013.
- AECOM 2015. WestConnex New M5, Technical Working Paper: Aboriginal Heritage.
- Artefact Heritage 2016 Draft Wickham Transport Interchange Archaeological Salvage Excavation Report. Report to GHD.
- Attenbrow, V. 1984. St Peters Brick Pit, Sydney NSW Investigation of Shell Material.
- Attenbrow, V. 2010. Sydney's Aboriginal Past: Investigating the archaeological and historical records. UNSW Press.
- Backhouse, J. 1834. A Narrative of a Visit to the Australian Colonies. Hamilton, Adamas and Company, London.
- Baker, N. 2004. Archaeological Salvage of an Aboriginal Site at William Street, East Sydney. Report to Zonie Construction and Design Pty Ltd.
- Department of Environment Climate Change & Water. 2010a. Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010. Department of Environment Climate Change & Water NSW.
- Department of Environment Climate Change & Water. 2010b. Aboriginal cultural heritage consultation requirements for proponents 2010. Department of Environment Climate Change & Water NSW.
- Etheridge, R., T.W. Edgeworth David and Grimshaw JW. 1896. On the occurrence of the Submerged Forest, with remains of Dugong, at Shea's Creek, near Sydney. Journal and Proceedings of the Royal Society of New South Wales, vol 30, 1896,
- JMCHM. 2005a, Archaeological salvage excavation of site CG1 (NPWS ID 45-5-2648), at the corner of Charles and George Streets, Parramatta, NSW. Report for Meriton Apartments Pty Ltd.
- JMCHM. 2005b Archaeological assessment of Aboriginal site (45-6-615) a rock shelter with art and midden at 32 Undercliffe Road, Undercliffe, NSW.
- Matthews, RH, and Everitt, MM. 1900. *The Organisation, Language and Initiation Ceremonies of the Aborigines of the South-East Coast of NSW*, Journal and Proceedings of the Royal Society of NSW, 34: 262-281.
- McIntyre-Tamwoy, SM, 2003, MetroGrid Project Test Excavation of Buried Shell Bed at Fraser Park, Marrickville, NSW – Preliminary Report.
- Muir, L 2013, Aboriginal People of the Cooks River Valley, *Dictionary of Sydney*, <http://dictionaryofsydney.org/entry/aboriginal_people_of_the_cooks_river_valley> accessed 19 May 2016.
- Navin Officer Heritage Consultants 2005. Intermodal Logistics Centre at Enfield, EIS, Assessment of Indigenous Heritage.
- Office of Environment and Heritage. 2011. *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*. Office of Environment and Heritage, Department of Premier and Cabinet, Sydney.

White, E. and J. McDonald. 2010. Lithic Artefact Distribution in the Rouse Hill Development Area, Cumberland Plain, New South Wales. *Australian Archaeology*, 70: 29-38.

10.0 Appendices

Please note: Contact information has been removed from the following appendices
for privacy reasons

10.1 Appendix 1 – Technical paper 4

Available at:

https://majorprojects.accelo.com/public/45e6e0aa483af8f3fdfa482b1c022a56/07_%20S2B%20ES%20Vol%204%20Technical%20paper%20-%20Aboriginal%20heritage%20assessment.pdf

10.2 Appendix 2 – Stakeholder consultation

Consultation Log

Contact / Organisation	Contacted by / Organisation	Method	Date / Time	Comments
	TfNSW	Advertisement	4/05/2016	Sydney Morning Herald
Metropolitan Local Aboriginal Land Council	TfNSW	Letter	12/05/2016	
Office of the Registrar	TfNSW	Letter	12/05/2016	Agency contact
Simone Schwarz/Marrickville Council	TfNSW	Letter	12/05/2016	Agency contact
Willoughby City Council	TfNSW	Letter	12/05/2016	Agency contact
Bryony Cooper/ City of Sydney	TfNSW	Letter	12/05/2016	Agency contact
Andy Sammut/Cit of Canterbury	TfNSW	Letter	12/05/2016	Agency contact
Graeme Beattie/Bankstown Council	TfNSW	Letter	12/05/2016	Agency contact
Brad Stafford/North Sydney Council	TfNSW	Letter	12/05/2016	Agency contact
Greater Sydney CMA	TfNSW	Letter	12/05/2016	Agency contact
National Native Title Tribunal	TfNSW	Emailed letter	12/05/2016	Agency contact
Gandangara LALC	TfNSW	Letter	12/05/2016	Agency contact
OEH Parramatta	TfNSW	Letter	12/05/2016	Agency contact
NTSCORP	TfNSW	letter	12/05/2016	Agency contact
Sandra Wallace/Artefact	Phillip Khan/ KYWG	Letter	6/05/2016	Registration of Interest
Sandra Wallace/Artefact	Gordon Workman/ DLO	Email	6/05/2016	Registration of Interest
Sandra Wallace/Artefact	Danny Franks/ Tocomwall	Email	9/05/2016	Registration of Interest
Sandra Wallace/Artefact	Ryan Johnson/ Murra Bidgee Mullangarri	Email	10/05/2016	Registration of Interest
Sandra Wallace/Artefact	Celestine Everingham/ DACHA	Phone	10/05/2016	Registration of Interest
Sandra Wallace/Artefact	Chris Payne/ Gandangara	Phone	11/05/2016	Registration of Interest
Sandra Wallace/Artefact	Tony Williams/ Aboriginal Archaeological Services	Email	11/05/2016	Registration of Interest
Claire Rayner/Artefact	Darlene Johnson/ Murra Bidgee Mullangarri	Phone	12/05/2016	Called to confirm receipt of registration
Sandra Wallace/ Artefact	Kayla Williamson/ Woronora Plateau Gundangarra Elders Council	Email	17/05/2016	Registration of Interest
Sandra Wallace/ Artefact	Susan Harrison/OEH	Letter	18/05/2016	List of stakeholders
Sandra Wallace/ Artefact	George Tonna/ NTSCorp	Letter	19/05/2016	Agency reply
				Canterbury Aboriginal Advisory Group member list
Sandra Wallace/ Artefact	Joanna Stobinski/ Canterbury City Council	email	23/05/2016	
Sandra Wallace/ Artefact	Bryony Cooper/ City of Sydney	Letter	23/05/2016	Agency reply
Sandra Wallace/ Artefact	Marcelo Occhiuzzi/ North Sydney Council	Letter	24/05/2016	Agency reply

Claire Rayner/Artefact	Celestine Everingham/ DACHA	Phone	26/05/2016	checking that she was registered
Sandra Wallace/ Artefact	Ann & Jamie Workman/ DLO	Email	27/05/2016	Registration of Interest (Gordon Workman had already registered DLO)
Mark Doran/TfNSW	Karia Lea Bond/ Badu	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Seli Storer/ Biamanga	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Simalene Carriage/ Bilinga	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Jennifer Newman/ CAAG	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Joan Tanter/ CAAG	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	John Blair/ CAAG	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Andrew Bond / Dharug	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Darren Duncan/ Duncan Suey & Associates	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Basil Smith/ Goobah Developments	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Terri Ann Hoskins/ GTTS	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	David Bell/ GTTS	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Peter Foster/ GTTS	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Tony Williams/ GTTS	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Darlene Hoskins-McKenzie/ Gunyuu Cultural Heritage Technical Services	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Kylie Ann Bell/ Gunyuu	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Joanne Anne Stewart/ Jerringong	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Kelly Slater, Vicky Slater/ Kawul Cultural Services	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Aaron Broad/ Minnamunnung	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Suzannah McKenzie/ Munyunga Cultural Heritage Technical Services	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Roxanne Smith/ Murramarang	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Wandai Kirkbright/ Wingikara Cultural Heritage Technical Services	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Hika Te Kowhai/ Walbunja	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Lee-Roy James Boota/ Wullung	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Robert Parson/ Yerramurra	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Newton Carriage/ Nundagurri	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Mark Henry/ Murrumbul	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Pemulwuy Johnson/ Pemulwuy CHTS	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Hayley Bell/ Wingikara	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Ronal Stewart/ Walgalu	Email	30/05/2016	Invitation to register

Mark Doran/TfNSW	Shane Carriage/ Thauaira	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Robert Brown/ Bilinga Cultural Heritage Technical Services	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Levi McKenzie-Kirkbright/ Murrumbul Cultural Heritage Technical Services	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Wendy Smith/ Gulaga	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Corey Smith/ Callendulla	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Kaya Dawn Bell/ Munyanga	Email	30/05/2016	Invitation to register
Mark Doran/TfNSW	Margaret Williams/ CAAG	Letter	30/05/2016	Invitation to register
Mark Doran/TfNSW	Eric Keidge	Letter	30/05/2016	Invitation to register
Sandra Wallace/ Artefact	Chris Payne/ GTTS	Email	30/05/2016	Registering on behalf of Peter Foster and Dave Bell for GTTS
Mark Doran/ TfNSW	Chris Payne/ GTTS	Email	8/06/2016	Registering on behalf of Tony Williams for GTTS
Claire Rayner/Artefact	Chris Payne/GTTS	Phone	9/06/2016	called to check he was registered
Tony Williams/ AAS	Claire Rayner/ Artefact	Phone	10/06/2016	called to clarify email as the ACHAR methodology bounced back.
Gordon Workman/ DLO	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Jamie Workman/ DLO	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Christopher Payne/ GTTS	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Ryan Johnson/MBMAC	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Danny Franks/ Tocomwall	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Kayla Williamson/ WPGEC	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Tony Williams/ AAS	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Peter Foster/ GTTS via Chris Payne	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
David Bell/ GTTS via Chris Payne	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
Tony Williams/ GTTS via Chris Payne	Claire Rayner/ Artefact	Email	10/06/2016	sent ACHAR methodology
David Watts/ Aboriginal Heritage Office (North)	Claire Rayner/ Artefact	Letter	10/06/2016	sent ACHAR methodology
Celestine Everingham/ DACHA	Claire Rayner/ Artefact	Letter	10/06/2016	sent ACHAR methodology
Pollowan Phillip Kahn/ KYWG	Claire Rayner/ Artefact	Letter	10/06/2016	sent ACHAR methodology
GLALC	Claire Rayner/ Artefact	Letter	10/06/2016	sent ACHAR methodology
Nathan Moran/ MLALC	Claire Rayner/ Artefact	Letter	10/06/2016	sent ACHAR methodology
Mark Doran/TfNSW	Darren Duncan	Email	13/06/2016	late registration

Darren Duncan	Claire Rayner/ Artefact	Email	14/06/2016	sent ACHAR methodology
Claire Rayner/ Artefact	Chris Payne/ GTTS	phone	14/06/2016	Called to register, I advised him that he was already registered
Claire Rayner/ Artefact	Paul Cummings/ WPGEC	phone	20/06/2016	Called about another project but also enquired aboout how the project was progressing and possible involvement in the future.
Sandra Wallace/ Artefact	Phil Kahn/ KYWG	Letter	22/06/2016	agrees with methodology, would like to be involved in any fieldwork
Claire Rayner/ Artefact	Celestine Everingham/ DACHA	Phone	27/06/2016	Called to say agrees with the methodology, had some comments on the EIS chapter: Chatswood is an early contact site and the location of one of the earliest farms in the colony she enquired if a historic assessment had been done, I let her know it has. She also disagreed with the assessment of the archaeological potential as low as the area is near a remnant stream near the railway and is quite elevated making it a suitable spot for occupation. She suggested we have another look and monitor any subsurface impacts following demolition. She was also concerned with what was going to happen with the spoil from the dive site.
Celestine Everingham/ DACHA	Claire Rayner/ Artefact	Phone	27/06/2016	Let Celestine know that the ACHAR would be sent out nxt week and an AFG would be held in July so she can raise any concerns and ask any specific construction questions at that.

Sandra Wallace/ Artefact	Ryan Johnson/MBMAC	Email	28/06/2016	agrees with the methodology, noted that there are a number of Aboriginal sites within the study area and that the Sydney Harbour was a significant area for Aboriginal in the past and today
Claire Rayner/ Artefact	Brad Maybury/ GLALC	Email	28/06/2016	Brad submitted comments on the site inspection of the Bankstown station and rail corridor (southern end of the study area). He considered the areas of the station and surrounding the rail corridor do not require further investigation. He would like to inspect inside the rail corridor prior to works commencing
Gordon Workman/ DLO	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Jamie Workman/ DLO	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Christopher Payne/ GTTS	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Ryan Johnson/MBMAC	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Danny Franks/ Tocomwall	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Kayla Williamson/ WPGEC	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Tony Williams/ AAS	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Peter Foster/ GTTS via Chris Payne	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
David Bell/ GTTS via Chris Payne	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Tony Williams/ GTTS via Chris Payne	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Darren Duncan	Claire Rayner/ Artefact	Email	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016

David Watts/ Aboriginal Heritage Office (North)	Claire Rayner/ Artefact	Letter	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Celestine Everingham/ DACHA	Claire Rayner/ Artefact	Letter	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Pollowan Phillip Kahn/ KYWG	Claire Rayner/ Artefact	Letter	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
GLALC	Claire Rayner/ Artefact	Letter	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Nathan Moran/ MLALC	Claire Rayner/ Artefact	Letter	13/07/2016	Sent draft ACHAR and invitation to AFG 19 July 2016
Sandra Wallace/ Artefact & Matthew Errington	Darlene Hoskins-McKenzie	email	18/07/2016	Darlene manages and represents 5 registered Aboriginal stakeholder groups these are: Bilंगा (Wandai Kirkbright), Gunyuu (Darlene), Munynga (Robert Brown), Murrumbal (Levi McKenzie-Kirkbright) and Wingikara (Suzanne McKenzie). She is registering on behalf of these groups.
Sandra Wallace/ Artefact	Ryan Johnson/MBMAC	email	19/07/2016	MBMAC agrees with the findings and recommendations of the ACHAR, no further comments
Sandra Wallace/ Artefact	Jamie Workman & Gordon Workman/ DLO	email	25/07/2016	DLO agree with the ACHAR, they want artefact reburied somewhere within the study area, would like a copy of the AHIP (this project is SSI), would like to be involved in monitoring topsoil removal and other forms of work to be carried out on site.
Wandai Kirkbright & Robert Brown/ Bilंगा Cultural Heritage Technical Services	Claire Rayner/ Artefact	email	1/08/2016	sent ACHAR methodology and draft ACHAR, also sent to Darlene's gmail address

Darlene Hoskins-McKenzie/ Gunyuu Cultural Heritage Technical Services	Claire Rayner/ Artefact	email	1/08/2016	sent ACHAR methodology and draft ACHAR, also sent to Darlene's gmail address
Robert Brown & Suzanne McKenzie/ Munyunga Cultural Heritage Technical Services	Claire Rayner/ Artefact	email	1/08/2016	sent ACHAR methodology and draft ACHAR, also sent to Darlene's gmail address
Levi McKenzie-Kirkbright/ Murrumbul Cultural Heritage Technical Services	Claire Rayner/ Artefact	email	1/08/2016	sent ACHAR methodology and draft ACHAR, also sent to Darlene's gmail address
Suzannah McKenzie & Wandai Kirkbright/ Wingikara Cultural Heritage Technical Services	Claire Rayner/ Artefact	email	1/08/2016	sent ACHAR methodology and draft ACHAR, also sent to Darlene's gmail address
Claire Rayner/ Artefact	Chris Payne/ GTTS	phone	5/08/2016	Called to see if he would like to comment on the ACHAR, he was driving and will call back
Claire Rayner/ Artefact	Danny Franks/ Tocomwall	phone	5/08/2016	Left message to call me back about the ACHAR
Claire Rayner/ Artefact	Phil Kahn/ KYWG	phone	5/08/2016	Called to see if he would like to comment on the ACHAR, he said he was happy with the findings and recommendations of the ACHAR and would like to be involved in any field work
Claire Rayner/ Artefact	Kayla Williamson/ Woronora	phone	5/08/2016	Called to see if she would like to comment on the ACHAR, she said she was happy with the findings and recommendations of the ACHAR
Claire Rayner/ Artefact	Tony Williams/ AAS	phone	5/08/2016	Called to see if he would like to comment on the ACHAR, he will send an email with his comments
Claire Rayner/ Artefact	Darren Duncan	phone	5/08/2016	Called to see if he would like to comment on the ACHAR, no answer
Claire Rayner/ Artefact	David Watts/ AHO North Sydney	email	5/08/2016	after trying to call and getting a bad line I sent an email asking for comments on the ACHAR

Kayla Williamson	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Christopher Payne	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Gordon Workman	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Jamie Workman	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Peter Foster	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Tony Williams	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Danny Franks	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Ryan Johnson	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Darren Duncan	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Tony Williams	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
David Bell	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Darlene Hoskins McKenzie	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Metro LALC	Veronica Norman/Artefact Heritage	Email	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG

Celestine Everingham	Veronica Norman/Artefact Heritage	Letter	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Phil Khan	Veronica Norman/Artefact Heritage	Letter	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Gandangara LALC	Veronica Norman/Artefact Heritage	Letter	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Metro LALC	Veronica Norman/Artefact Heritage	Letter	11/09/2017	Project information and ACHAR methodology sent to RAPS with date for AFG
Veronica Norman/Artefact Heritage	Tony Williams	Email	14/09/2017	Tony RSVPd to the meeting and said he could not access the dropbox link in the email
Tony Williams	Veronica Norman/Artefact Heritage	Email	14/09/2017	Responded to Tony's email with the contents of the link attached to email
Kayla Williamson	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Christopher Payne	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Gordon Workman	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Jamie Workman	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Peter Foster	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Tony Williams	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Danny Franks	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Ryan Johnson	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Darren Duncan	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Tony Williams	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG

David Bell	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Darlene Hoskins McKenzie	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Metro LALC	Veronica Norman/Artefact Heritage	Email	15/09/2017	Contacted RAPs regarding new date for AFG
Veronica Norman/Artefact Heritage	Danny Franks/Tocomwall	Email	15/09/2017	Danny requested all communication be sent to Jen Norfolk
Danny Franks/Tocomwall	Veronica Norman/Artefact Heritage	Email	15/09/2017	Responded to Danny's email saying I had passed the information on to the rest of the office
Ryan Johnson/Murra Bidgee Mullangari	Veronica Norman/Artefact Heritage	Email	19/09/2017	Ryan said MMB would attend the AFG
Veronica Norman/Artefact Heritage	Kayla Williamson/Woronora Plateau Gundangara Elders Council	Email	19/09/2017	Kayla said Paul Cummins from WPGEC would attend the AFG
Veronica Norman/Artefact Heritage	Anna Workman/DLO	Email	26/09/2017	DLO will not be attending AFG, but would like to forward any minutes taken. DLO support the proposed ACHAR methodology
Veronica Norman/Artefact Heritage	Danny Franks/Tocomwall	Email	12/10/2017	Danny requested all communication be sent to himself and Scott Franks
Danny Franks/Tocomwall	Veronica Norman/Artefact Heritage	Email	12/10/2017	Responded to Danny's email saying I had passed the information on to the rest of the office
Gordon Workman / DLO	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Christopher Payne/ GTTS	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Peter Foster/ GTTS	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
David Bell/ GTTS	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Ryan Johnson/ MBMAC	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Danny Franks/ Tocomwall	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Celestine Everingham/ DACHA	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Pollowan Phillip Kahn/ KYWG	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Kayla Williamson/ Woronora Plateau Gundangara	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Tony Williams/ AAS	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Brad Maybury/ Gandangara LALC	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Nathan Moran/ Metro LALAC	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent

Darren Duncan/ Duncan Suey & Associates	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Wandai Kirkbright/ Robert Brown	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Darlene Hoskins-McKenzie	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Robert Brown/ Suzanne McKenzie	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Levi McKenzie-Kirkbright	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Suzannah McKenzie/ Wandai Kirkbright	TfNSW	Email/Mail	1/11/2017	Draft ACHAR sent
Anna Workman / DLO	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Christopher Payne/ GTTS	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Two attempts, no answer, no provision to leave voice message.
Peter Foster/ GTTS	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Two attempts, no answer, no provision to leave voice message.
David Bell/ GTTS	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Two attempts, no answer, no provision to leave voice message.
Ryan Johnson/ MBMAC	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Two attempts, no answer, no provision to leave voice message.
Danny Franks/ Tocomwall	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Celestine Everingham/ DACHA	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Pollowan Phillip Kahn/ KYWG	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Kayla Williamson/ Woronora Plateau Gundam	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.

Tony Williams/ AAS	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Brad Maybury/ Gandangara LALC	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Nathan Moran/ Metro LALAC	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Darren Duncan/ Duncan Suey & Associates	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Document received.
Wandai Kirkbright/ Robert Brown	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Phone number disconnected.
Darlene Hoskins-McKenzie	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Phone number disconnected.
Robert Brown/ Suzanne McKenzie	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Phone number disconnected.
Levi McKenzie-Kirkbright	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Phone number disconnected.
Suzannah McKenzie/ Wandai Kirkbright	Julia McLachlan/ Artefact Heritage	Phone call	8/11/2017	Courtesy call to confirm draft ACHAR was received. Phone number disconnected.
Christopher Payne/ GTTS	Julia McLachlan/ Artefact Heritage	Email	8/11/2017	Courtesy email to confirm draft ACHAR was received. Sent to Christopher on behalf of Peter Foster and David Bell.
Ryan Johnson/ MBMAC	Julia McLachlan/ Artefact Heritage	Email	9/11/2017	Courtesy email to confirm draft ACHAR was received.
Darlene Hoskins-McKenzie	Julia McLachlan/ Artefact Heritage	Email	9/11/2017	Courtesy email to confirm draft ACHAR was received.
Julia McLachlan/ Artefact Heritage	Ryan Johnson/ MBMAC	Email	10/11/2017	Notified that ACHAR was not received.

Agency Letters



12 May, 2016

Metropolitan Local Aboriginal Land Council
PO Box 1103
Strawberry Hills
SYDNEY NSW 2012

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest



12 May, 2016

National Native Title Tribunal
GPO Box 9973
SYDNEY NSW 2001

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest

12 May, 2016

Native Title Services Corporation Limited
PO Box 2105
Strawberry Hills
SYDNEY NSW 2012

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest



12 May, 2016

North Sydney Council
PO Box 12
North Sydney
SYDNEY NSW 2059

Attention: Brad Stafford

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest



12 May, 2016

Regional Operations Group
Office of Environment and Heritage
PO Box 644
Parramatta
SYDNEY NSW 2124

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest

12 May, 2016

Office of the Registrar
PO Box
Glebe
SYDNEY NSW 2037

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest

12 May, 2016

Heritage Officer
Sydney Metropolitan Catchment Management Authority
PO Box 3720
Parramatta
SYDNEY NSW 2124

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest

12 May, 2016

Willoughby City Council
PO Box 57
Chatswood
SYDNEY NSW 2057

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest



12 May, 2016

Bankstown Council
PO Box 8
Bankstown
SYDNEY NSW 1885

Attention: Graeme Beattie

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest



12 May, 2016

City of Canterbury
PO Box 77
Campsie
SYDNEY NSW 2194

Attention: Andy Sammut

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest



12 May, 2016

City of Sydney
GPO Box 1591
SYDNEY NSW 2001

Attention: Bryony Cooper

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest

12 May, 2016

Gandangara Local Aboriginal Land Council
PO Box 1038
Liverpool BC
SYDNEY NSW 1871

To Whom It May Concern

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest



12 May, 2016

Marrickville Council
PO Box 14
Petersham
SYDNEY NSW 2049

Attention: Simone Schwarz

Re: Sydney Metro City & Southwest Aboriginal Cultural Heritage Assessment

Sydney Metro is Australia's largest public transport project. It will transform Sydney, delivering more trains and faster services for customers across the network.

Sydney Metro has two core components:

Stage 1: Sydney Metro Northwest – formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.

Stage 2: Sydney Metro City & Southwest – a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest is being assessed as two separate components, Chatswood to Sydenham and Sydenham to Bankstown.

The purpose of the Aboriginal community consultation is to assist the assessment of both components of Sydney Metro City & Southwest under the *Environmental Planning and Assessment Act 1979*. TfNSW therefore seeks to consult with all Aboriginal persons and organisations who hold cultural knowledge relevant to determining the significance of Aboriginal object or places within the project area.

In line with the relevant consultation guidelines, I am writing to you to request the names and contact details that your organisation has for Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects or places within the Chatswood to Bankstown area. Please forward any information that you have before 25 May, 2016 to:

South Building, 22 Giffnock Avenue, Macquarie Park NSW 2113
PO Box 588, North Ryde Business Centre NSW 1670
T 02 8265 6000 F 02 8265 9501
<http://nwrail.transport.nsw.gov.au/>
ABN 18 804 239 602

TfNSW c/o Dr Sandra Wallace
Director
Artefact Heritage
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009

For further information, please contact Sandra by email at sandra.wallace@artefact.net.au,
or on 9518 8411.

Kind Regards

Carolyn Riley

Senior Manager – Environmental Planning
Sydney Metro – City and Southwest