

CONSTRUCTION HERITAGE MANAGEMENT PLAN

Moorebank Precinct West Stage 1

01 DECEMBER 2020

SYDNEY INTERMODAL TERMINAL ALLIANCE

Moorebank Precinct West Stage 1

Construction Heritage Management Plan

Current Revision Author Madeleine Watson-Reeves

Checker Anthony Lusher

Approver Anthony Lusher

Report No MIC1-QPMS-EN-PLN-00007

Date 1/12/2020

Revision Text SIMTA 003

Original Author Details

Original Author Details	Qualifications and Experience
Alexander Beben	

REVISIONS

Revision	Date	Description	Prepared by	Approved by
Draft Version 01	28/07/2016	(Biosis Documents)	RJS & ALA	
Final Version 01	04/08/2016	(Biosis Documents)	RJS	
Final Version 02	23/09/2016	(Biosis Documents)	AJB	
Final Version 03	07/11/2016	(Biosis Documents)	AJB	
Final Version 04	24/11/2016	(Biosis Documents)	AJB	
Final Version 05	28/11/2016	(Biosis Documents)	AJB	
Final Version 06	13/01/2017	(Biosis Documents)	LCF	
Final Version 07	27/01/2017	(Biosis Documents)	AJB	
Final Version 08	22/02/2017	(Biosis Documents)	AJB	
Final Version 09	04/07/2017	(Biosis Documents)	AJB	
SIMTA.001	29/03/2019	Rebranded CHMP to SIMTA Version	JH	JC

CONSTRUCTION HERITAGE MANAGEMENT PLAN

Revision	Date	Description	Prepared by	Approved by
		- Updated as per RfMA 002 - Updated as per RfMA 008 - Updated against RfMA 012		
SIMTA 002	31/10/2019	Addressed ER comments	RM	AL
SIMTA 003	5/11/2019	Minor updates to Figure 1 associated with additional ER comments	MWR	AL
SIMTA.004	1/12/2020	Figure 1 updated to show revised stockpile locations following DPIE approval.	AW	MW

ACRONYMS AND DEFINITIONS

Acronym/Term	Meaning
ACM	Asbestos Containing Material
CBD	Central Business District
CEMP	Construction Environmental Management Plan
CHL	Commonwealth Heritage List
CHMP	Construction Heritage Management Plan
CoC	Conditions of Consent
CUST	Cullen Universal Steel Truss
DA	Development Application
DEWHA	Department of Environment, Water, Heritage and Arts
DGRs	Director General's Requirements
DP	Deposited Plan
DPE	NSW Department of Planning and Environment
DotEE	Department of the Environment and Energy (formerly Department of Sustainability, Environment, Water, Population and Community)
EA	Environmental Assessment
EEC	Ecologically Endangered Communities
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	Environment Planning and Assessment
EPBC Act	Environment Protection Biodiversity Conservation Act 1999
EWMS	Environmental Work Method Statements
NPW Act	National Parks and Wildlife Act 1974
OEH	Office of Environment and Heritage
NSWHC	NSW Heritage Council
MPW Main Compound	MPW Early Works (Stage 1) compound relocated in accordance with RfMA 002 to meet future MPW Stage 2 requirements
MPW Stage 1	Moorebank Precinct West Stage 1 – Early Earthworks as approved under SSD 5066
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent SSD 5066 Conditions of Consent or EPBC Act Approval or EPBC Act Approval (EPBC 2011/6086) Conditions of Approval but is not an incident
Non-conformance	Observations or actions that are not in strict accordance with the CEMP and the aspect specific subplan

CONSTRUCTION HERITAGE MANAGEMENT PLAN

Acronym/Term	Meaning
Site	Means the project site or work area where the Contractor is undertaking activities on behalf of SIMTA
SoHI	Statement of Heritage Impact
SSD 5066	Means State Significant Development number 5066 – Concept Approval and Early Earthworks Approval for MPW Stage 1
STRARCH	Abbreviation of 'stressed arch' referring to the design of the STRARCH hangar
The Contractor	The company, companies or other legal entity appointed by SIMTA to undertake works under the Project Approval
UST	Underground Storage Tank

CONTENTS

REVISIONS	II
ACRONYMS AND DEFINITIONS	IV
1 INTRODUCTION	1
1.1 Project Background.....	1
1.2 Study area.....	1
1.3 General scope of works	1
1.3.1 Area of works	1
1.3.2 Heritage Works	3
1.4 Environmental Management Document System.....	3
1.5 Purpose and Objectives.....	4
2 ENVIRONMENTAL REQUIREMENTS.....	6
2.1 Relevant Legislation and Guidelines.....	6
2.2 Ministers Conditions of Consent	6
2.3 Required outcomes	13
3 CONSULTATION	14
3.1 Consultation for Preparation of the CHMP.....	14
3.2 Aboriginal Consultation Undertaken as Part of the Project Approval.....	15
3.3 Ongoing Aboriginal Consultation	16
4 EXISTING ENVIRONMENT.....	17
4.1 Aboriginal cultural heritage	17
4.2 Non-Aboriginal Heritage.....	21
5 ENVIRONMENTAL ASPECTS AND IMPACTS.....	24
5.1 Aboriginal heritage impacts.....	24
5.2 Non-Aboriginal heritage impacts.....	24
6 ENVIRONMENTAL MITIGATION MEASURES	29
6.1 Construction related measures	29
6.2 Heritage Protection Management Strategies	30
7 COMPLIANCE MANAGEMENT.....	34
7.1 Roles and responsibilities	34
7.2 Inspections.....	34
7.3 Incidents.....	34
7.4 Non-compliance, Non-conformance and Actions.....	34
7.5 Reporting	34
8 REVIEW AND IMPROVEMENT	35
8.1 Continuous improvement	35
8.2 CHMP update and amendment	35

IDENTIFYING UNEXPECTED HERITAGE ITEMS	37
--	-----------

APPENDICES

APPENDIX A: IDENTIFYING ABORIGINAL OBJECTS AND NON-ABORIGINAL HERITAGE ITEMS

APPENDIX B: CONSULTATION REGISTER

APPENDIX C: PHOTOGRAPHING UNEXPECTED HERITAGE ITEMS

LIST OF TABLES

Table 1	Conditions of Consent relevant to this CHMP	7
Table 2	Required outcomes relevant to this CHMP	13
Table 3	Summary of consultation undertaken during the preparation of the CHMP	14
Table 4	Aboriginal heritage sites associated with the project.	17
Table 5	Non-Aboriginal heritage sites associated with the project.....	22
Table 6	Impacts to Aboriginal heritage sites as outlined in the CoCs and Navin Officer Heritage Consultants 2014a	24
Table 7	Impacts to non-Aboriginal heritage sites as per Navin Officer Heritage Consultants 2014b.....	25
Table 8	Construction related measures	29

LIST OF FIGURES

Figure 1	Site layout	2
Figure 2	Aerial imagery displaying lot boundaries associated with the study area	5
Figure 3	Location of Aboriginal heritage sites associated with the project	20
Figure 4	Location of non-Aboriginal heritage sites associated with the project	23

1 INTRODUCTION

This Construction Heritage Management Plan (CHMP) forms part of the Construction Environmental Management Plan (CEMP) to manage the impacts to Aboriginal and non-Aboriginal heritage during the Moorebank Intermodal Land Preparation Works – Demolition and Remediation package ('the project'). This CHMP has been prepared to address the requirements of the Minister's Conditions of Consent (CoC), the Recommended Environmental Mitigation Measures (REMMs), *Environmental Protection and Biodiversity Conservation Act 1999* approval (EPBC approval) and all applicable legislation relating to the project.

1.1 Project Background

The *Moorebank Intermodal Terminal Environmental Assessment* (EA) (Parsons Brinkerhoff, 2014) assessed the impacts of construction of the project on Aboriginal and non-Aboriginal heritage. As part of EA development, detailed Aboriginal and non-Aboriginal cultural heritage assessment was prepared to address the Director General's Requirements issued by the then Department of Planning. The assessments were included in the EA as:

- Volume 7, Technical paper 10: Aboriginal heritage assessment (Navin Officer Heritage Consultants 2014).
- Volume 8, Technical Paper11: European heritage impact assessment (non-Aboriginal heritage) (Navin Officer Heritage Consultants 2014).

The following heritage documents were also prepared as part of the response to submissions:

- Aboriginal scar tree assessment (Navin Officer Heritage Consultants 2014).
- Cultural heritage report (Navin Officer Heritage Consultants 2014).
- Cultural heritage archival recordings (Navin Officer Heritage Consultants 2014).

1.2 Study area

The Moorebank Intermodal Terminal is located in Moorebank, NSW. The study area is located in the Liverpool Local Government Area, approximately 30 kilometres south-west of the Sydney CBD and 4 kilometres south of the Liverpool CBD (



Figure 1).

1.3 General scope of works

This scope of work is to undertake demolition and remediation works on MPW Stage 1, in order to provide unencumbered access for the subsequent works package/s. It includes the following:

- Establishment of construction site facilities and management of site security;
- Utility services and stormwater identification, termination and removal
- Heritage salvage and relocation works;
- Demolition of existing infrastructure and buildings;
- Remediation of identified contaminated areas excluding PFAS;

1.3.1 Area of works

The site is divided into two priority areas:

- Priority Area 1 is the area in which most of the demolition and remediation works will be performed and does not contain any Ecologically Endangered Communities (EECs).
- Priority Area 2 is the remainder of the Site not contained within Priority Area 1. It is densely populated with EECs and includes limited demolition and remediation.

Construction Heritage Management Plan



Figure 1 Site layout

1.3.2 Heritage Works

Non-Aboriginal Heritage Works

The Non-Aboriginal heritage work will involve the following:

- Demolition or dismantling of the CUST Hut and STRARCH Hangar, dependant on the results of the consultation completed in the preparation of the Options for Mitigations Report. Initial indications are that components of both structures will be used for on-site interpretation, subject to finalisation of the Options for Mitigation Report.
- Careful demolition of the concrete floor of the CUST hut under the direction and attendance of a heritage representative in order to identify if the earthen floor is intact and if there is potential for relics and artefacts.
- Where no features or potential for relics of local or Commonwealth significance are identified, the former earthen floor is subject to archival recording by an heritage representative.
- Where features or potential for relics of local or Commonwealth significance are identified archaeological salvage excavation must be conducted in accordance with a research design prepared by the heritage representative prior to the commencement of demolition.
- Heritage salvage of archaeological deposits at MHPAD1 and MHPAD2 in accordance with an archaeological salvage program prepared by the heritage representative.
- Preparation of an Options for Mitigation Report, including the necessary consultation for the B99 Transport Compound, MH1 Dog Cemetery, CUST Hut, STRARCH Hanger and Commemorative Garden.
- Biosis has reviewed the Navin Officer Heritage Consultants (2014) archival report and determined that no additional archival recording needs to be undertaken.
- Formulate management measures to prevent impact to sites that are to be avoided or mitigated as part of early works.

Details of the non-Aboriginal heritage salvage excavations and the Options for Mitigation Report are included in separate reports.

Aboriginal Heritage Works

The Aboriginal heritage works involves the following:

- Heritage salvage works of Aboriginal sites MA1, MA2, MA3, MA4, MA5 and MA9 in accordance with detailed salvage strategy and investigation program prepared by the heritage representative in consultation with the relevant stakeholders and authorities.
- Upon completion of the salvage works, the archaeologist will determine whether any further investigative works are required. If they are required, these will be completed prior to commencement of Early Works. If further investigation is not required, then the archaeologist will deem the archaeological salvage to be complete and Early Works will commence. Any further finds during Early Works will be treated in line with the Unexpected Finds Strategy. Any further archaeological excavation works recommended by the results of the Aboriginal archaeological investigation program affecting Aboriginal sites MA5 and MA9.

Details of the Aboriginal Salvage works is included in a separate report.

1.4 Environmental Management Document System

The CHMP is part of MPW Stage 1 environmental management framework for the project. In accordance with the requirements of CoC D21(c), this CHMP has been developed in consultation with the Heritage Council of NSW, the NSW Office of Environment and Heritage (OEH) and registered Aboriginal stakeholders. Further details of the consultation are provided in section 3 of this CHMP.

The combination of the CEMP, sub-plans strategies, procedures and Environmental Work Method Statement identify the required environmental management actions for implementation by the Contractor's personnel and sub-contractors.

The review and document control procedures for this CHMP are described in section 8 of the CEMP.

1.5 Purpose and Objectives

The purpose of this CHMP is to describe how Aboriginal and non-Aboriginal heritage will be protected and managed by the Contractor during the project. The key objective of the CHMP is to ensure that impacts to Aboriginal and non-Aboriginal heritage are minimised and within the scope permitted by the project approval. Specific objectives include:

- Facilitating engagement and partnership with the local Aboriginal community to appropriately manage the Aboriginal cultural heritage values associated with the project.
- Ensuring appropriate controls and procedures are implemented during construction activities to avoid or minimise potential adverse impacts to Aboriginal and non-Aboriginal heritage associated with the project.
- Ensuring appropriate measures are implemented to address the relevant CoCs, REMMs and EPBC approval outlined in Table 1 and Table 2.
- Ensuring appropriate measures are implemented to comply with all relevant legislation and other requirements as described in Section 2 of this CHMP.

Heritage advice has been prepared relating to the CUST Hut, STRARCH Hangar, B99 Transport Workshop, MH1 Dog Cemetery, RAE Chapel and Commemorative Garden. The outcomes of this advice has concluded that the CUST Hut and STRARCH Hanger will need to be demolished with components being salvaged for use as part of the Heritage Interpretation Strategy. The B99 Transport Compound and RAE Chapel require no further works. The MH1 Dog Cemetery is to be subject to a program of excavation to identify and retrieve canine remains. The archival report for the MH1 Dog Cemetery will be updated with the results of the salvage and additional research. It should be noted that at this time the Options for Mitigation Report (included in a separate report) is indicative and not finalised. The Heritage Interpretation Strategy is being prepared by a third party and will incorporate the results of the salvage works and previous consultation.

It should be noted that Navin Officer Heritage Consultants have completed all archival recordings pertinent to the CoCs, REMMs and other project approvals, as such archival recordings do not form part of the mitigation strategies within this CHMP.

Construction Heritage Management Plan



Figure 2: Aerial imagery displaying lot boundaries associated with the Project

Date: 31/10/2019 Path: \\hrc-aut-ma-fr-01\jobs\A4008755\GIS\A_Current\B_Maps\MPW_CONCEPT\MPW_EW\CEM\CHMP\SIMTA_MPWS1_CHMP_002_Blossi_AAP_v2.mxd
 Created by : AB
 QA by : RB

Figure 2 Aerial imagery displaying lot boundaries associated with the study area

2 ENVIRONMENTAL REQUIREMENTS

The following section outlines the environmental requirements of the project including relevant legislation and guidelines that have been used to assist in the formulation of this CHMP.

2.1 Relevant Legislation and Guidelines

Legislation relevant to heritage management includes:

- *Environmental Planning and Assessment Act 1979* (EP&A Act)
- *National Parks and Wildlife Act 1974* (NPW Act)
- *Heritage Act 1977* (Heritage Act)
- *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) (Commonwealth)
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Commonwealth).

The main guidelines, specifications and policy documents relevant to this CHMP include:

- *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010)
- *Altering Heritage Assets* (Heritage Office and DUAP 1996)
- *Assessing Significance for Archaeological Heritage Sites and Relics* (NSW Heritage Branch Department of Planning)
- *Archaeological Assessment Guidelines* (NSW Heritage Office and NSW Department of Urban Affairs and Planning 1996)
- *How to Prepare Archival Recording of Heritage Items* (Heritage Office, 1998)
- *Photographic Recording of Heritage Items Using Film or Digital Capture* (Heritage Office 2006)
- *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (2013)
- *The code of practice for the investigation of Aboriginal objects in New South Wales 2010* (DECCW, 2010).

2.2 Ministers Conditions of Consent

The CoC, REMMs and EPBC approval conditions relevant to this CHMP including where these are addressed in this CHMP or in other project management documents are outlined in Table 1.

CONSTRUCTION HERITAGE MANAGEMENT PLAN

Table 1 Conditions of Consent relevant to this CHMP

CoC No.	Condition requirements	CHMP reference
<i>CoCs relating to the CHMP</i>		
D21(c)	A Construction Heritage Management Plan to ensure construction impacts on Aboriginal and non-Aboriginal heritage will be appropriately avoided minimised and managed. The Plan shall be developed in consultation with OEH, the relevant Council, the NSW Heritage Council (for non-Aboriginal State heritage items) and the relevant Local Aboriginal Land Councils (for Aboriginal heritage), and include but not necessarily be limited to:	Section 3.1
	(i) in relation to Aboriginal heritage:	
	(a) details of management measures to be carried out in relation to Aboriginal heritage, including a detailed methodology and strategies for protection, monitoring, and conservation of sites and items;	Section 6
	(b) procedures for dealing with previously unidentified Aboriginal objects (excluding human remains), including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures, including when works can re-commence, by a suitable qualified and experienced archaeologist in consultation with the Secretary and Aboriginal stakeholders, assessment of the consistency of any Aboriginal heritage impacts of the SSD, and , where relevant registration in the OEH's Aboriginal Heritage Information Management System (AHIMS) register.	Strategy 2, Section 6.2
	(c) procedures for dealing with human remains, including cessation of works in the vicinity, notification of the Secretary, NSW Police Force, OEH and Aboriginal stakeholders and commitment to cease recommencing any works in the area unless authorised by the OEH and/or the NSW Police Force.	Strategy 4, Section 6.2
	(d) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal cultural heritage; and	Strategy 1, Section 6.2
	(e) procedures for ongoing Aboriginal consultation and involvement for the duration of the Early Works; and	Section 0
	(ii) in relation to non-Aboriginal heritage:	
	(a) identification of heritage items directly and indirectly affected by the Early Works;	Section 5.2
	(b) consideration of methods to prevent damage to any retained heritage items, including:	No heritage items to be retained. Additional salvage works are outlined in Strategy 5.

CONSTRUCTION HERITAGE MANAGEMENT PLAN

CoC No.	Condition requirements	CHMP reference
	i. procedures for identifying minimum working distances to retained heritage items (including, at minimum, vibration testing and monitoring),	N/A
	ii. detailed options for alteration of construction methodology should preferred values for vibration be exceeded.	
	iii. commitment to implementing those options if preferred values for vibration are likely to be included.	N/A
	(c) details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/or measures to protect unaffected sites during construction works in the vicinity);	Section 1.3.2, Strategy 5 and 6
	(d) details of monitoring and reporting requirements for impacts on heritage items;	Section 7
	(e) procedures for dealing with previously unidentified heritage objects (including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified and experienced archaeologist in consultation with OEH, NSW Heritage Council and the Secretary, assessment of the consistency of any heritage impacts against the approved impacts of the SSD, and, where relevant, notification of the Heritage Council of NSW in accordance with section 146 of the Heritage Act 1977, and	Strategy 3
	(f) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under this approval including site identification, protection and conservation of non-Aboriginal cultural heritage; and	Strategy 1, section 6.2
	(iii) mechanisms for the monitoring, review and amendment of this plan.	Section 8.2
<i>Specific Aboriginal and non-Aboriginal heritage CoCs</i>		
B6	The Applicant shall not harm, modify or otherwise impact any heritage items outside of the subject site.	Strategy 5, Section 6.2
B7	Prior to the commencement of Early Work affecting MA1, MA2, MA3, MA4 MA5, and MA9, the applicant shall: (a) develop a detailed salvage strategy, prepared in consultation with the OEH (Aboriginal heritage) and the Aboriginal stakeholders. The investigation program shall be prepared to the satisfaction of the Secretary; and (b) undertake any further archaeological excavation works recommended by the results of the Aboriginal archaeological excavation program. Within twelve months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall submit a report containing the findings of the excavations, including artefact analysis and Aboriginal Site Impacts Recording Forms	Aboriginal heritage salvage strategy (Biosis 2016a). Salvage excavations at MA5 and MA9 need to be completed in accordance with the above strategy prior to works commencing in these areas. The

CONSTRUCTION HERITAGE MANAGEMENT PLAN

CoC No.	Condition requirements	CHMP reference
	(ASIR), and the identification of final storage for all Aboriginal objects recovered (testing and salvage), prepared in consultation with the Aboriginal stakeholders, the OEH (Aboriginal heritage) and to the satisfaction of the Secretary.	requirement for further excavations will be established upon the completion of the Aboriginal salvage strategy.
B8	Prior to the commencement of Early Works affecting non-Aboriginal sites MHPAD1 and MHPAD2, the Applicant shall undertake any further archaeological excavation works recommended by the results of the non-Aboriginal excavation program. Within 12 months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall submit a report containing the findings of the excavations, including artefact analysis and the identification of a final repository for finds, prepared in consultation with the OEH (Heritage branch) and to the satisfaction of the Secretary.	Non-Aboriginal heritage salvage strategy (Biosis 2016b). Salvage excavations need to be completed in accordance with the above strategy prior to works commencing in these areas.
B9	Prior to the commencement of Early Works affecting the CUST Hut, RAAF STRARCH Hangar, the Dog Cemetery and Commemorative Gardens, the Applicant shall prepare a report in consultation with the Heritage Council of NSW, the local Council and the local Historical Society which considers options for mitigation of these items. In relation to the Dog Cemetery, consultation should also occur with the School of Military Engineering's Explosive Detection Dog's Unit. The report shall include the archival recordings and historical research, where required, to the Secretary, the Heritage Council of NSW, the local Council and local Historical Society.	Non-Aboriginal heritage advice (Biosis 2016c) Canine remains within the Dog Cemetery need to be salvaged in accordance with the mitigation advice need to occur prior to works at this location. Archaeological excavation of potential deposits beneath the CUST Hut need to occur prior to works at this location. Options for Mitigation Report (separate document).
<i>Aboriginal and non Aboriginal REMMs</i>		
12A	Where reasonable and feasible, options would be explored to conserve moderate to high significance sites in situ.	N/A
12B	An Aboriginal heritage interpretation strategy for the Project would be developed in close consultation with the registered Aboriginal parties.	Outside of scope of early works.

CONSTRUCTION HERITAGE MANAGEMENT PLAN

CoC No.	Condition requirements	CHMP reference
12C	Options for managing impacts at sites MA6 and MA7 would be explored during the detailed design phase in consultation with registered Aboriginal parties (RAP). If the scars are considered to be of Aboriginal origin, possible management options include: Conservation of the tree(s) in situ. This would involve designing the project to ensure that the tree(s) would not be impacted. Salvage and conservation of the tree(s), or the scarred portion of the tree's trunk, at a location outside the project area. In the event there is not a consensus of views among all of the RAPs, it is recommended that a precautionary approach be taken. This would involve acting upon statements of the tree(s) holding cultural value, even if only a minority of RAPs view either or both trees as holding cultural value.	Outside of scope of early works.
12D	An archaeological salvage excavation program would be implemented to preserve archaeological deposits of moderate to high archaeological/scientific significance located within the construction footprint (items recorded at MA5 and MA9). Consideration would be given to conserving both sites in situ, within open space reserves, or as an extension of the proposed conservation zone.	Strategy 5
12E	A surface salvage program would be carried out to conserve surface artefacts located within the construction footprint (items recorded at MA1, MA2, MA3 and MA4). Salvage of surface artefacts would be undertaken before any impacts in these areas.	Strategy 5
12F	The Unanticipated Discoveries Protocol described in Appendix 10 of Technical Paper 10 – Aboriginal Heritage Impact Assessment in Volume 7 of the EIS, would be followed in the event that historical items or relics or suspected burials are encountered during construction works.	Strategy 3
12G	Consultation would be ongoing with the registered Aboriginal parties during construction of the Project and would include: consultation on the future care and management of recovered Aboriginal objects; methodologies for any future investigations; and finalisation of management and mitigation strategies subject to detailed design.	Section 0
13A	Road names within the School of Military Engineering (SME) would be retained where possible.	Outside of scope of early works.
13B	Continued commemoration of significant events and individuals would be considered through the naming of buildings, streets and the rail bridge proposed for construction as part of the Project.	Outside of scope of early works.
13C	Where reasonable and feasible options exist for avoiding impacts on one or more identified heritage items, preference would be given to conserving items of Commonwealth or State significance.	Strategy 5
13D	Where avoidance of impacts on a heritage item is not reasonable or feasible, mitigation works inclusive of archival recordings, salvage of archaeological deposits, relocation of significant elements of the built environment and/or adaptive reuse would be undertaken.	Strategy 5

CONSTRUCTION HERITAGE MANAGEMENT PLAN

CoC No.	Condition requirements	CHMP reference
13E	A European heritage interpretation strategy would be developed in close consultation with local historical societies, former and current staff and military personnel.	Outside of scope of early works.
13F	No impacts would occur within the potential archaeological deposits (PAD) boundaries of Moorebank Historical Potential Archaeological Deposit (MHPAD) 1 and MHPAD2 without prior archaeological salvage, as these sites contain archaeological deposits, inclusive of in-situ building remains, that are assessed to be of local significance in the context of the history of military housing and training at Moorebank.	Strategy 5
13G	In addition to archival recording of the Transport Compound Workshop (B99), consideration would be given during the detailed design stage to the in-situ conservation or adaptive reuse of this structure within the Project site. This would assist with mitigation of heritage impacts on the structure itself and the Moorebank Cultural Landscape as a whole.	Strategy 5
13H	In addition to archival recording, the Dog Cemetery (MH1) would be repositioned and the individual graves reinterred. This would be carried out in accordance with the wishes of the SMEs Explosive Detection Dogs unit and respecting the social value of the site.	Strategy 5
13I	In addition to archival recording, consideration would be given during detailed design to the in-situ conservation of the Commemorative Garden (MH6). If in situ conservation is not possible, the plaques and planting should be relocated to an alternative location on public display within the Project.	Strategy 5
13J	For the southern rail access, heritage item Railway viaduct, Main Southern Railway Line (Item 12) should be noted on all plans and maps during construction and all care taken to avoid this item.	Outside of scope of early works.
13K	The Unanticipated Discoveries Protocol (detailed in Appendix 7 of Technical Paper 11 – European Heritage Impact Assessment in Volume 8) would be followed in the event that historical items or relics or suspected burials are encountered during excavation works.	Strategy 3
13L	The Unanticipated Discoveries Protocol (detailed in Appendix 7 of Technical Paper 11 – European Heritage Impact Assessment in Volume 8) would be followed in the event that historical maritime items or relics are encountered during bridge works within the Georges River.	Outside of scope of early works.
13M	<i>Further consideration would be given to options for the retention and/or relocation and adaptive reuse of the CUST Hut and the RAAF STRARCH Hangar to mitigate impacts on heritage values associated with these structures and to broaden their cultural landscape.</i> <i>Options considered for mitigation in order of preference are:</i> <i>Relocation (either offsite or onsite) and conserve/adaptive reuse – this would be investigated further as part of the detailed design and any future development applications.</i>	Strategy 5

CONSTRUCTION HERITAGE MANAGEMENT PLAN

CoC No.	Condition requirements	CHMP reference
	<i>Interpretive commemoration utilising materials/elements from the building – this may be required but would be determined by the findings from investigations in option 1 above.</i> <i>Demolition may be required but would be determined by the findings from investigations in option 1 above.</i> <i>The first preference would be to retain and adaptively re-use these items on the redeveloped Project site (within the precinct but outside the secure area, as part of the administrative facilities or similar). If this is not feasible or practicable, the second preference would be for relocation to another appropriate location, potentially with adaptive reuse.</i>	
<i>EPBC approval – Aboriginal and non-Aboriginal heritage requirements</i>		
C11	Sections of the CEMP and OEMP relating to Aboriginal heritage must be prepared by a suitably qualified expert and must: be consistent with the Aboriginal Heritage Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS. incorporate all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as ‘mandatory’. explain how all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as ‘subject to review’ have been addressed. be approved by the Minister or a relevant New South Wales regulator.	This CHMP
C12	11.12. Sections of the CEMP and OEMP relating to European heritage must be prepared by a suitably qualified expert and must: be consistent with the European Heritage Provisional Environmental Framework (2 July 2014), provided at Appendix O to the finalised EIS incorporate all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as ‘mandatory’ explain how all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as ‘subject to review’ have been addressed be approved by the Minister or a relevant New South Wales regulator.	This CHMP

2.3 Required outcomes

Based upon the CoCs a list of required outcomes, their timing and reference to their outcomes are addressed in this CHMP and are outlined in Table 2.

Table 2 Required outcomes relevant to this CHMP

Outcome	Ref #	Timing	CHMP reference
Strategy 1: Heritage Inductions	D21(c)(i)(d)	For all staff prior to commencing work	Strategy 1
Strategy 2: Aboriginal heritage unexpected finds protocol	D21(c)(i)(b) REMM 12F, 13K	Continuously	Strategy 2
Strategy 3: Historical heritage unexpected finds protocol	D21(c)(ii)(e), REMM 12F, 13K	Continuously	Strategy 3
Strategy 4: Unexpected human remains protocol	D21(c)(l)(c), REMM 12F, 13K	Continuously	Strategy 4
Strategy 5: Further Aboriginal and non-Aboriginal investigations	B6-B9, 12D, 12E, 13C, 13D, 13F, 13I, 13M	Prior to Early Works commencing	Strategy 5
Strategy 6: Demarcation of retained sites	D21(c)(l)(c),	During Early Works	Strategy 6

3 CONSULTATION

3.1 Consultation for Preparation of the CHMP

This CHMP has been developed in consultation with the Heritage Council of NSW, the OEH and registered Aboriginal stakeholders, in accordance with CoC D21(c). A record of consultation undertaken during the preparation of this CHMP is provided in Table 3.

Table 3 Summary of consultation undertaken during the preparation of the CHMP

Organisation	Date	Outcome
Liverpool City Council (LCC)	CHMP was submitted to Liverpool City Council for review on 26th September 2016.	Under review.
	Followed up with phone calls and voice messages were left on 28th and 29th September 2016 to check review status.	Council declined to attend site meeting 5th October 2016 via email.
	Meeting with LCC on 4 October 2016 with Ash Chan. An overview of scope of works was delivered. Liberty offered an invitation to heritage committee meeting on site to discuss the CEMP and sub plans (including CHMP). Invitation sent on the 5th October 2016.	Council recommends that no demolition of the CUST Hut and STRARCH Hanger should occur until such time as the Interpretation Strategy be reviewed and amended by Tactical. LCC response sent to Tactical for consideration.
	Response received from LCC 22nd November 2016 in regard to CHMP.	Consultation complete. LCC comments are addressed in the Options for Mitigation Report.
Office of Environment and Heritage	CHMP submitted to OEH for review on 26th September 2016.	Under review.
	Phone calls and voice messages left on 27th and 29th September 2016 to check review status.	Under review.
	Followed up with a phone call and voice message left on 17th November 2016 to check review status.	Under review.
	Called Richard on 9th January 2017 to follow up on review status, no answer.	
	Called OEH general number and left message for Susan Harrison. She advised that they have been busy the past few months and have been focusing on project pre-approvals not the post approval project plans we have submitted.	OEH responded on 18th January 2017 acknowledging that Biosis sought consultation on 19th September 2016 as per the conditions of consent. OEH commented that they were unable to review the strategy.
		Consultation closed.
Local Aboriginal Land Council(s)	Conservation Heritage Management Plan was submitted to Local Aboriginal Land Council(s) (Tharawal) on 26 September 2016 for a period of 28 days for their review.	Under review.
		No response.

Organisation	Date	Outcome
NSW Heritage Council (NSWHC)	Phone calls and messages with voice messages left on 17 October 2016. No further comments received.	Consultation closed.
	Tharawal have indicated on 16 January 2017 that the Construction Heritage Management Plan is acceptable with no further comments.	
	CHMP was submitted for review on 31st January 2017. Followed up a phone call and discussed the review of the plan with Rebecca Newell.	Under review.
	1st February 2017 - Rebecca responded via email acknowledging receipt of the CHMP.	Under review.
	Phone call to Rebecca to follow up on review of the CHMP, as the allocated review period of 21 days has passed since the document was emailed for review. Rebecca advised that she is dealing with DPE directly and Tactical and Liberty should not contact the Heritage Council but contact DPE for feedback.	Under review.
NSW Heritage Council (NSWHC)	Response received from NSW Heritage Council via DPE on 26 April 2017. The correspondence states that: Each section is updated to clearly indicate who will complete these works particularly interpretation and mitigation recommended in the finalised Options for Mitigation report. Clarification is provided on the interpretation requirements for the site, particularly the STRARCH Hangar and when they will be completed. Section 8.1 is updated to indicate that updates will be made to the CHMP based on the results of the finalised Options for Mitigation report and interpretation plan.	The report has been updated to assign responsibility to individual companies, specifically Section 6.1. Tactical provided clarity around the interpretation requirements for the site and their completion. The Options for Mitigation Report is final and no further amendments to this report will be made outside of those set out in Section 8.

3.2 Aboriginal Consultation Undertaken as Part of the Project Approval

Consultation and collaboration with registered Aboriginal stakeholders have been integral to the assessment and management of Aboriginal cultural heritage for the project. Consultation undertaken to date is outlined in the EA, this was undertaken in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010).

3.3 Ongoing Aboriginal Consultation

Ongoing consultation between the Contractor, SIMTA and Aboriginal stakeholders regarding the management of Aboriginal cultural heritage associated with the project will continue. Ongoing consultation will consist of the following actions:

- Review of the completed salvage strategy.
- Commencement of the salvage works.
- Completion of the salvage works.
- Outcomes of any unexpected Aboriginal finds.
- Other consultation in the development of future documentation such as Heritage Interpretation strategies (outside of the scope of this CEMP).

Following consultation with the various stakeholders, the CHMP will be updated to include any comments raised and to document the consultation undertaken.

In the event of an unexpected Aboriginal heritage find, the Contractor and SIMTA will consult with registered Aboriginal stakeholders regarding the management of Aboriginal heritage items.

4 EXISTING ENVIRONMENT

The following sections summarise what is known about Aboriginal and non-Aboriginal heritage within and adjacent to the study area based on information provided in:

- Volume 7, Technical paper 10: Aboriginal heritage assessment (Navin Officer Heritage Consultants 2014a).
- Volume 8, Technical Paper11: European heritage impact assessment (non-Aboriginal heritage) (Navin Officer Heritage Consultants 2014b).

The following heritage documents were also prepared as part of the response to submissions:

- Aboriginal scar tree assessment (Navin Officer Heritage Consultants 2014c).
- Cultural heritage report (Navin Officer Heritage Consultants 2014d).
- Cultural heritage archival recordings (Navin Officer Heritage Consultants 2014e).

4.1 Aboriginal cultural heritage

The Aboriginal cultural heritage values were subject to assessment through the following processes:

- Literature and database review
- Archaeological survey
- Archaeological testing
- Aboriginal consultation
- Assessment of significance and proposed impacts.

Based upon these tasks fourteen Aboriginal heritage sites are associated with the project have been identified, these are detailed in Table 4 including early works requirements for the sites. Their locations are identified in Figure 3.

Table 4 Aboriginal heritage sites associated with the project.

Site	Description	Significance		To be mitigated as part of Early works program
		Burra Charter	CHL	
MA1	This recording consists of three surface artefacts on or adjacent to an approximate 90 m interval of roadway near the entrance to the Initial Employment Training Squadron Building. The area was noted to be extensively disturbed by earthworks, importation of fill and gravel, and the installation of underground services. A total of four mechanical test pits were excavated which retrieved eight artefacts.	Low	Yes	Yes
MA2	This recording consists of a single artefact (banded grey fine grained metamorphic sedimentary rock) situated in a shallow scald within mown grass north of the entry gates to the SME. The area has undergone vegetation clearance, agricultural development, grading, soil removal and construction of surface drainage.	Low	Yes	Yes
MA3	This recording consists of a single artefact located at the base of the cut and graded Tertiary terrace edge and is approximately 300 m south of MA4 (Figure 20.3). The area has been extensively disturbed by Defence-related earthworks and excavations. The artefact was a banded grey-green rhyolite multi-platform core.	Low	Yes	Yes

Site	Description	Significance		To be mitigated as part of Early works program
		Burra Charter	CHL	
MA4	This recording is a low density artefact scatter of three artefacts exposed on the edge of a Tertiary terrace and situated on a gravelled dirt track. The track slopes down onto river flats, which were highly disturbed by excavation and landscaping.	Low	Yes	Yes
MA5	This recording consists of three artefacts situated on the high side of an artificially benched slope atop the Tertiary terrace, and adjacent to the lower lying dirt pan. Eleven pits were excavated within MA5 (nine mechanical and two hand excavated). A total of 110 artefacts were retrieved. The excavations indicated that the site may have the potential to contain an intact deposit that reflects sporadic activity through time.	Moderate to high	Yes	Yes
MA6	The scarred tree is an old growth Eucalyptus in fair to good health, with a number of hollows and missing limbs. The scar was of an irregular and asymmetrical shape and was assessed to be of possible Aboriginal origin. The scar on MA6 has been estimated to be between 265 and 219 years old.	High	Yes	No
MA7	The scarred tree was recorded as a smooth barked Eucalyptus (Red gum). The tree is located close to a playing field and the Tertiary terrace edge, and is approximately 80–100 m from the river. The scar regrowth is irregular and the age of the tree and the scar may be post-European settlement. It was assessed to be of possible Aboriginal origin. MA7 has been estimated to been made 86 years ago	High	Yes	No
MA8	The scarred tree was recorded as a rough barked Eucalyptus, becoming smooth barked two thirds of the way up the trunk. The tree is located approximately 60 m from the river. The scar may have been caused by machinery during the cutting and benching of the area. A possible Aboriginal origin is supported by the possible age and symmetrical shape of the scar, the amount of scar regrowth and the tree type, as well as its proximity to the Georges River.	High	Yes	No
MA9 (MA PAD 1)	This recording consists of the banks and a fringing 50 m radius around a natural lake basin situated in the far northern portion of the project site. This lake basin is situated close to the riparian corridor of the Georges River. It provides a strong basis for predicting evidence of past Aboriginal occupation along its original banks and surrounds. A total of 10 hand excavated pits were excavated within MA9 which identified 130 artefacts.	Moderate to high	Yes	Yes
MA10 (MRSA 1)	This potential archaeological deposit was described by AHMS (2012) as a river terrace running along the eastern side of the Georges River, based on the landform, the presence of intact soil profile and the presence of artefacts. A total of six hand excavated pits were excavated within MA10 with 16 artefacts retrieved.	Moderate to low	Yes	No
MRSA2 (MA14)	MRSA2 is located on the tertiary terrace edge of the Georges River. A total of 7 test pits were completed at MRSA2 with a total of 34 artefacts were recovered.	Moderate to high	Yes	No

Site	Description	Significance		To be mitigated as part of Early works program
		Burra Charter	CHL	
MA PAD 2 (Unit 1)	MAPAD2 is located on an archaeologically sensitive landform. Disturbance within this PAD is moderate, and is mostly related to previous use as a golf course. The most common impacts on the original ground surface of this landform are earthworks, resulting in both cuttings into and capping of the PAD. As the deposit depth is considered to be more than 1 m, archaeological subsurface potential exists in both disturbed (cut into and capped) and undisturbed areas of this PAD. As part of the subsurface testing program 45 test pits were excavated across MAPAD2 comprising 37 by-hand test pits and eight mechanical pits. A total of 14 artefacts were recovered from 9 pits (Pits 1, 5, 9, 10, 12, 13, 14, 34 and 42). This testing program led to the identification of MA11, MA12 and MA13.	High	Potentially	No
MA PAD 2 (Unit 2)				
MA 11	MA 11 consists of artefacts associated with the Unit 3 fill that has been reworked and deposited as the result of mechanical earth works at the southern end of MAPAD2 (Pits 1 and 5).	Low	No	No
MA 12	MA12 consists of artefacts associated with Unit 2 fluvial sands across the central southern portion of MAPAD2 (Pits 9, 10, 12, 13, 14 and 42).	Low	Yes	No
MA 13	MA13 is a single artefact associated with the Unit 1 silts at the northern end of the test area (Pit 34, Spit 9).	Low	Yes	No
PAD2	PAD2 is located 40m outside of the impact area. 1	Unknown	Unknown	No

¹ AHMS 2012 indicate that at this stage the significance of PAD2 (formerly referred to as MA14) cannot be determined based upon the current information. It may contain high research potential based upon the landforms ability to contain undisturbed archaeological deposits.

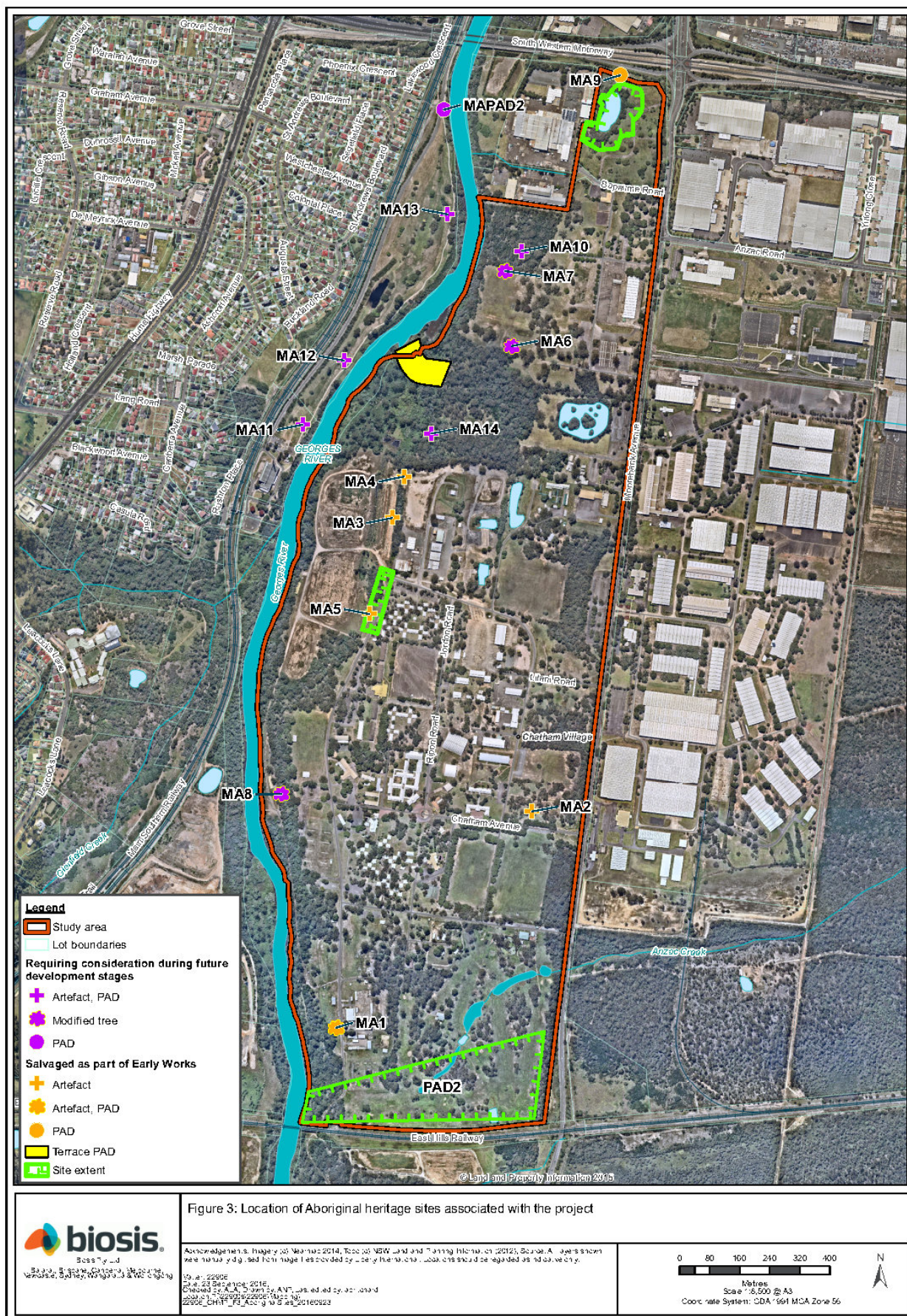


Figure 3 Location of Aboriginal heritage sites associated with the project

4.2 Non-Aboriginal Heritage

The assessment of non-Aboriginal heritage values within the study area was undertaken through the completion of the following tasks:

- Literature and database review
- Assessment of the built and non-built environment
- Archaeological test excavation
- Assessment of the cultural landscape and social values
- Assessment of the heritage significance and heritage impacts for individual items.

The non-Aboriginal assessment identified the following sequence of occupation within the study area:

- Pre-Non-Aboriginal (Aboriginal)
- The Moorebank and Collingwood Estates
- Military use and land tenure up to World War II
- World War II
- Post War 1940s and 1950s
- 1960s and 1970s
- 1980s onwards.

The physical characteristics associated with the study area can be defined and characterised as a heritage landscape that exists across four precincts and is associated with several key archaeological features and areas of archaeological potential. These are summarised in Table 5 including their status as part of the early works program. Their locations are identified in Figure 4.

Table 5 Non-Aboriginal heritage sites associated with the project

Site ID	Description	Significance		To be mitigated as part of Early works program
		NSW	Commonwealth	
Archaeological features				
MH1	Dog Cemetery	Local	Yes	Yes
MH2	Drainage ditches (military origin)	Nil		No
MH3	Portion of light rail (not in situ)	Nil		No
MH4	Portion of light rail (not in situ)	Nil		No
MH5	Large above ground concrete slab (military origin)	Nil		No
MH6	Commemorative garden	Local	Yes	Yes
MH7	Liverpool Golf Course	Nil		No
-	CUST Hut	State	Yes	Yes
-	RAAF STRARCH Hangar	State	Yes	Yes
B99	Building 99	Local	No	Yes
-	Remaining elements of the RAE Museum Sandstone Wall	Local	Yes	No
-	Remaining elements of the RAE Chapel	Local	Yes	Yes
Areas of archaeological potential				
MHPAD1	Potential archaeological deposit – Titalka Park (location of former group of WWII buildings and WWI isolation camp)	Local	Yes	Yes
MHPAD2	Potential archaeological deposit (location of WWII period buildings)	Local	Yes	Yes
MHPAD3	Remnant paved and garden areas in the vicinity of the former Drill Hall group of buildings (former buildings B36 – 40)	Nil		No

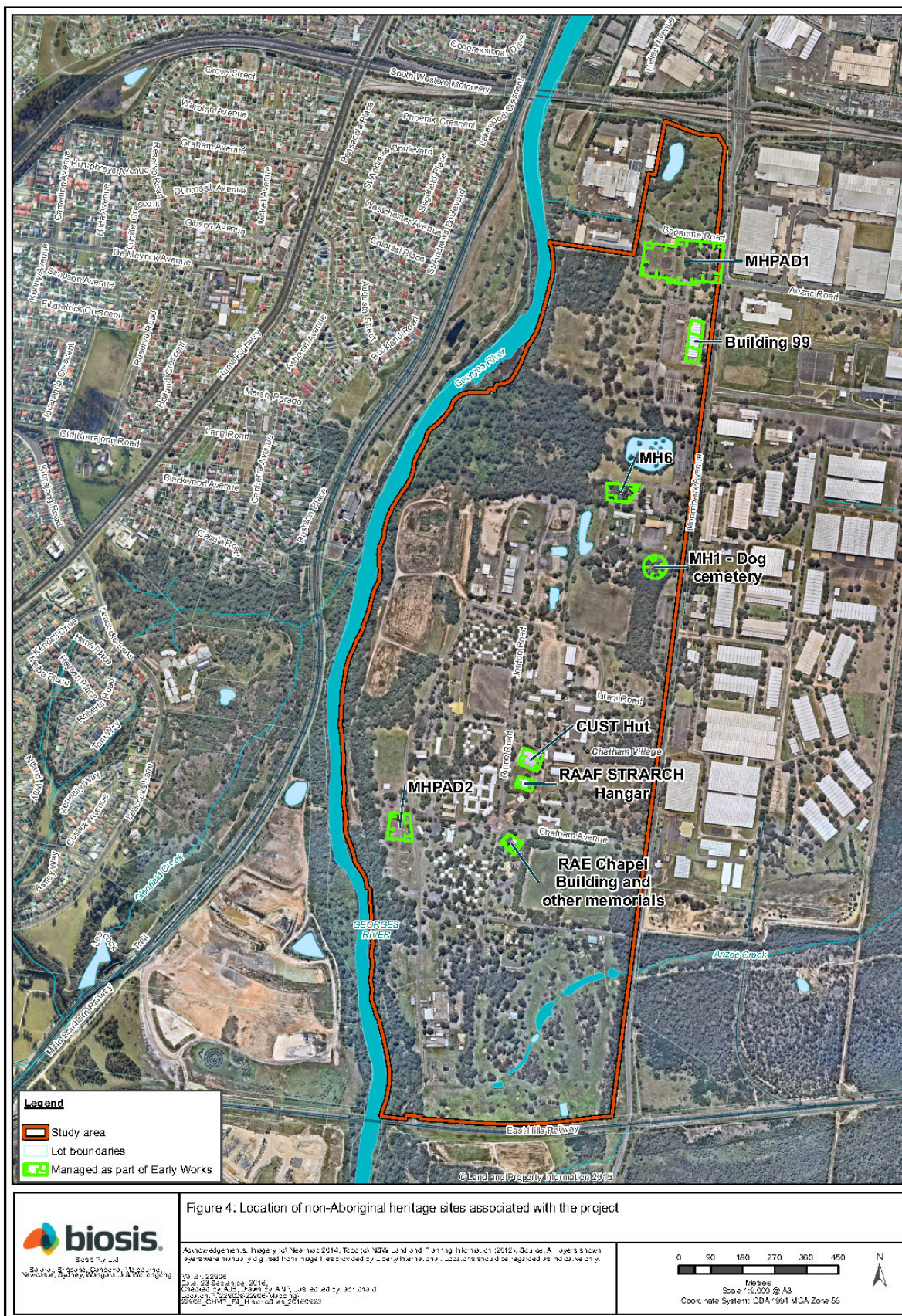


Figure 4 Location of non-Aboriginal heritage sites associated with the project

5 ENVIRONMENTAL ASPECTS AND IMPACTS

The key construction activities and the associated potential impacts to heritage values (both Aboriginal and non-Aboriginal) were identified through a risk management approach. The consequence and likelihood of each activity's impact on the environment was assessed to prioritise its significance.

5.1 Aboriginal heritage impacts

The potential impacts on Aboriginal heritage recordings include:

- Direct impacts and disturbance to the entire site or the majority of a site containing Aboriginal objects due to the construction of the project. This impact can be complete or partial.
- Indirect impacts to Aboriginal objects or cultural values, such as from development related changes to the landscape or scenic context of a site or item.

Impacts to Aboriginal heritage sites as outlined in Navin Officer Heritage Consultants 2014a are presented in Table 6.

Table 6 Impacts to Aboriginal heritage sites as outlined in the CoCs and Navin Officer Heritage Consultants 2014a

Aboriginal Site	Location relative to indicative concept layouts	Impact
MA1	To be impacted by Early Works	Salvage
MA2	To be impacted by Early Works	Salvage
MA3	To be impacted by Early Works	Salvage
MA4	To be impacted by Early Works	Salvage
MA5	To be impacted by Early Works	Salvage
MA6	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.
MA7	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.
MA8	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.
MA9	To be impacted by Early Works	Salvage
MA10	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.
MA11	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.
MA12	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.
MA13	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.
MA14	Outside Early Works	Conserve – implement No-Go zones as part of Strategy 6.

In the event that additional disturbance is anticipated to occur outside of the CoCs; then these disturbances will need to undergo additional heritage assessment and impact mitigation processes prior to the commencement of any associated works. It is likely that any additional impacts outside of the CoCs would need to be assessed as a modification to the existing approval or as part of a Review of Environmental Effects.

All cultural material will be dealt within in accordance with the care arrangements for Aboriginal objects for the project; this has been negotiated to specify that all Aboriginal objects will be reburied on site.

5.2 Non-Aboriginal heritage impacts

The potential impacts of the project on non-Aboriginal heritage can be categorised as follows:

- A whole or complete degree of direct impact to a heritage item resulting in the physical loss of the item.
- Partial or minor direct impact to heritage item(s).
- Indirect impacts, such as to the contextual and landscape values associated with an item.

- Indirect impact to items of heritage which could be moved to avoid direct impact and as a consequence lose contextual integrity.
- No significant impact. This category involves instances where the development would either not pose an impact to a heritage item (direct or indirect) or any impacts would be insignificant and would not reduce the heritage value or significance of the item.

The Moorebank Units Relocation Project resulted in many of the heritage items that comprised Steele Barracks being relocated to Holsworthy Barracks as part of the mitigation of heritage impacts to the base. Statements of Heritage Impact (SoHI) have been prepared for all impacted heritage items, with the overall impact being assessed as acceptable, subject to the implementation of management recommendations.

Table 7 Impacts to non-Aboriginal heritage sites as per Navin Officer Heritage Consultants 2014b

Site ID	Location relative to indicative concept layouts	Aspects of the project that respect or enhance the item's heritage significance	Aspects that could detrimentally affect the item's heritage significance	Resultant impact on the item's heritage significance
Moorebank Cultural Landscape	Within construction footprint	Retention of elements of the landscape such as Moorebank Avenue (road alignment and name) and portions of regrowth bushland respect some aspects of heritage values associated with the cultural landscape.	The project would detrimentally affect the residual Moorebank Cultural Landscape; it would result in disturbance to archaeological deposits, removal of remaining landscape elements, loss of the existing landscape setting, historical associations and loss of access to items. The Moorebank Cultural Landscape has been assessed to be of local and Commonwealth significance in terms of historical associations, research potential, technological characteristics, uniqueness, and Aboriginal cultural values. No further management requirements under the CoCs or REMMs outside of the interpretation of the Moorebank Cultural Landscape as part of the Heritage Interpretation Plan	Disturbance of archaeological deposits, demolition of remaining landscape elements, loss of the existing landscape setting and loss of access to items would result in loss of research potential. It would also result in the loss of the site's uniqueness and technological significance.
MHPAD1	Within construction footprint	Not applicable/none	The project would result in archaeological disturbance of locally significant deposits and in situ building remains at the site. These deposits have also been assessed to be of significance against Commonwealth criteria. Archaeological salvage of MHPAD1 to take place as part of early works. Implementation of Unexpected finds protocol as part of CHMP.	The archaeological disturbance would result in the loss of the research potential associated with these deposits.

Site ID	Location relative to indicative concept layouts	Aspects of the project that respect or enhance the item's heritage significance	Aspects that could detrimentally affect the item's heritage significance	Resultant impact on the item's heritage significance
MHPAD2	Within construction footprint	Not applicable/none	The project would result in archaeological disturbance of locally significant deposits and in situ building remains at the site. These deposits have also been assessed to be of significance against Commonwealth criteria. Archaeological salvage of MHPAD2 to take place as part of early works. Implementation of Unexpected finds protocol as part of CHMP.	The archaeological disturbance would result in the loss of the research potential associated with these deposits.
CUST Hut	Within construction footprint	Not applicable/none	The project would require relocation or demolition of the CUST Hut, as well as disturbance of potential archaeological deposits associated with the building. The CUST Hut and associated archaeological deposits have been assessed to be of local and Commonwealth significance and potentially to have State significance. This is addressed in Section 1.3.2.	The archaeological disturbance would result in the loss of the research potential associated with these deposits. The demolition of the building would result in a total loss of significance in terms of rarity and representativeness, as well as the loss of technical and aesthetic significance. Historical associations with this building will also be lost.
Building 99	Within construction footprint	Not applicable/none	The project would result in demolition of the building. The workshop has been assessed to be of significance in terms of its rarity in a local context. It also contributes to the overall historical significance of the Moorebank Cultural Landscape at local and Commonwealth levels. In terms of mitigation, an archival recording has been prepared. Options for relocation or adaptive reuse have been explored but are not applicable.	The demolition of the building would result in a total loss of significance in terms of rarity.
Dog Cemetery (MH1)	Within construction footprint	Not applicable/none	The project would have a detrimental impact on the dog cemetery at MH1; it would result in subsurface/	The archaeological disturbance would result in the loss of significance in terms of

Site ID	Location relative to indicative concept layouts	Aspects of the project that respect or enhance the item's heritage significance	Aspects that could detrimentally affect the item's heritage significance	Resultant impact on the item's heritage significance
			archaeological disturbance to the graves. The cemetery has been assessed to be of local and Commonwealth significance in terms of its historical importance. Dog Cemetery has been subject to an archival recording and salvage as part of the MUR Project. As part of Early Works and line with the consultation which occurred with Defence, the exhumation of the graves will be undertaken with recovered remains given to Holsworthy Barracks for commemoration.	its historical association.
Commemorative Garden (MH6)	Within construction footprint	Not applicable/none	Post-MUR the site as a memorial would lose some social value, as it would lose the immediate and ongoing connection with the members of the SME community and a functioning military establishment. The place would retain local significance as a memorial to SME personnel and their actions. The project would result in disturbance across the entire area. The garden has been assessed to be of local and Commonwealth significance in terms of its historical value. In terms of mitigation, an archival recording has been prepared. Mitigation options would be considered and included in an Options for Mitigations Report, which will be developed in consultation with relevant stakeholders. The outcome of the Options for Mitigation Report will determine the fate of the item. At this stage, it is anticipated that components of the garden (e.g. plaques and stones) will be used for interpretive displays. **Note: Nothing from the	The ground disturbance would result in the loss of significance in terms of its historical association.

Site ID	Location relative to indicative concept layouts	Aspects of the project that respect or enhance the item's heritage significance	Aspects that could detrimentally affect the item's heritage significance	Resultant impact on the item's heritage significance
			garden will be 'collected' by MHG.	
Remaining elements of the RAE Chapel	Within construction footprint	Not applicable/none	This item has been identified for partial relocation as part of the MUR Project. The remaining architectural elements of the site would serve as a historical marker of the location and former function of the chapel. The Moorebank IMT Project would require demolition and/or relocation of the remaining parts of the RAE Chapel. This site has been assessed to be of local and Commonwealth significance in terms of its historical associations. In terms of mitigation, an archival recording has been prepared. Options for relocation or adaptive reuse have been explored but are not applicable. **Note: Nothing from the RAE Chapel will be 'collected' by MHG.	The demolition of the remaining items will result in the loss of the remaining elements of historical significance.
RAAF STRARCH Hangar	Within construction footprint	Not applicable/none	The project would have a detrimental impact on the RAAF STRARCH Hangar; it would require the demolition or relocation of the STRARCH Hangar. This building has been assessed to be of local, State and Commonwealth significance in terms of its technical value. This is addressed in Section 1.3.2.	The demolition would result in the loss of significance in terms of technical value.

6 ENVIRONMENTAL MITIGATION MEASURES

6.1 Construction related measures

A range of environmental requirements are identified in the CoCs. Specific mitigation measures to address impacts on Aboriginal and non-Aboriginal heritage are outlined in Table 8. Where required, further details of the proposed mitigation measures are provided in Section 6.2

Table 8 Construction related measures

Strategy	Requirement	Timing		Responsibility
		PE	E	
Inductions and management processes				
1	Heritage inductions to be completed as part of the overall site induction.	X	X	The Contractor's Project Manager
2	Procedure to follow in the event of unexpected finds Aboriginal finds	X	X	The Contractor's Project Manager
3	Procedure to follow in the event of unexpected finds Non-Aboriginal finds	X	X	The Contractor's Project Manager
4	Procedure to follow in the event of the discovery of human remains	X	X	The Contractor's Project Manager
Aboriginal and non-Aboriginal investigations				
5	Complete all onsite works associated with the Aboriginal heritage salvage strategy. Salvage of MA1, MA2, MA3, MA4 MA5, and MA9.	X		The Contractor's Project Manager
5	Complete all onsite works associated with the Non-Aboriginal heritage salvage strategy. Salvage excavation of MH PAD1, MH PAD2, CUST Hut and Dog Cemetery. These works have not yet been finalised.	X		The Contractor's Project Manager
5	Complete all onsite works associated with the Non-Aboriginal heritage advice (Including	X		SIMTA

Strategy	Requirement	Timing		Responsibility
		PE	E	
	the implementation of the Interpretation Strategy).			
<i>Stakeholder consultation</i>				
-	Aboriginal stakeholder consultation is to continue as part of the broader community stakeholder engagement strategy.	X	X	Community Engagement Officer

Notes to table: PE = pre-early works E = early works

6.2 Heritage Protection Management Strategies

Strategy 1: Heritage Inductions and Tool Box Talks

All Contractor's staff (including subcontractors) working on site will undergo site induction training relating to Aboriginal and non-Aboriginal heritage management issues. The induction training will address elements related to heritage management including:

- Requirements of this CHMP and relevant legislation.
- Roles and responsibilities for heritage management.
- Location of identified heritage sites.
- Proposed heritage management and protection measures including the progress of the Aboriginal and non-Aboriginal salvage works.
- Basic identification skills for Aboriginal and non-Aboriginal artefacts and human remains.
- Specific training for personnel working in the vicinity of Aboriginal and non-Aboriginal heritage sites identified on sensitive area mapping.
- Procedure to follow in the event of an unexpected heritage item find during construction works.
- Procedure to follow in the event of discovery of human remains during construction works.
- Penalties, non-compliance and non-conformance with this CHMP.

Training records for all project personnel will be kept and maintained in a register detailing names, dates, content and type of training undertaken. This CHMP should be kept on site at all times and be readily accessible.

The requirements of the CHMP and the unexpected finds protocols should be incorporated into tool box talks, where works are commencing in the vicinity of heritage items or sites, the mapping presented in this report should be reviewed and management measures assessed to ensure no impacts beyond the CoCs are likely to take place.

Strategy 2: Procedure to follow in the event of unexpected Aboriginal finds

The CoCs allow for impacts to known Aboriginal objects within the study area. Where additional objects are identified, an assessment will need to be made as to the significance of the object.

Appendix A contains guidelines around the identification of Aboriginal objects. The *National Parks and Wildlife Act 1974* defines an Aboriginal object 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 following process should be followed with respect to unexpected finds:

- Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist.
- The archaeologist will investigate and assess the Aboriginal object to determine the nature, extent and significance of the find. This will enable recommendations to be provided on how work can proceed and whether any further work is required. The archaeologist must supply written advice to the Project Manager within 24 hours stating:
 - Determination of whether the find is an Aboriginal object.
 - Advice on whether how the project is to proceed and whether the establishment of any no-go areas is necessary.
 - Recommendation on further works that may be required and timeframe for completion of these works.
 - Any Aboriginal objects will be registered on the Aboriginal Heritage Information Management System (AHIMS). Where sites are impacted, a site impact form will be completed and lodged with AHIMS prior to impact.
- Create a no-go area around the find based upon the advice of the archaeologist.
- The archaeologist's written advice will be supplied to OEH, the secretary and Aboriginal stakeholders for their review. This will include a statement concerning the find, management measures implemented and notification of any further works arising. Aboriginal stakeholders are to be involved in any further assessments or works as required. Any comments made by OEH, the secretary and Aboriginal stakeholders will be incorporated into the written advice prior to finalisation and works proceeding.
- Details of the newly identified site will be recorded on the Aboriginal Heritage Information Management System (AHIMS) within five working days of the inspection. Any relevant reporting forwarded to OEH for their records.
- Should any Aboriginal objects be identified this will trigger a review of this CHMP in accordance with Section 8.
- Work will be able to recommence once further investigations have been completed.

Strategy 3: Procedure of follow in the event of unexpected non-Aboriginal finds

The CoCs allow for impacts to known non- Aboriginal items within the study area. Where additional items are identified, an assessment will need to be made as to the significance of the item. Non-Aboriginal) heritage items may include Archaeological 'relics' or other non-Aboriginal items (i.e. works, structures, buildings or movable objects). The *Heritage Act 1977* defines a relics as:

"...any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and is of State or local heritage significance..."

The following process should be followed with respect to unexpected items:

- Should any suspected non-Aboriginal items be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist.
- The archaeologist will investigate and assess the non- Aboriginal item to determine the nature, extent and significance of the find. This will enable recommendations to be provided on how work can proceed and whether any further work is required. The archaeologist must supply written advice to the Project Manager within 24 hours stating:
 - Determination of whether the find is a non-Aboriginal item.
 - Advice on whether how the project is to proceed and whether the establishment of any no-go areas is necessary.
 - Recommendation on further works that may be required and timeframe for completion of these works.
- Create a no-go area around the find based upon the advice of the archaeologist.

- Heritage Council of NSW and DPE will need to be notified. This will include a statement concerning the find, management measures implemented and notification of any further works arising.
- Should any non-Aboriginal item be identified this will trigger a review of this CHMP in accordance with Section 8.
- Work will be able to recommence once further investigations have been completed.
- Where impacts to the site are able to be avoided or mitigated, monitoring of the condition of the site may need to take place.

Appendix A contains guidelines around the identification of non-Aboriginal items.

Strategy 4: Procedure to follow in the event of the discovery of human remains

If any suspected human remains are discovered during all activity in the area must cease. The following process must be undertaken:

- Immediately cease all work at that location and not further move or disturb the remains.
- Notify the NSW Police, DPE and OEHS Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location.
- Establish an appropriate no-go area. This will need to be established in consultation with NSW Police, OEHS and if necessary, a qualified archaeologist.
- Works will not be able to recommence within the location of the find until confirmation from NSW Police and OEHS is obtained. If the remains are confirmed as not being human then works may recommence. In the event that remains are human then consultation, with NSW Police, OEHS and the Aboriginal stakeholders to establish a plan of management.
- Works in the vicinity of the find will only be able to commence once the plan of management has been established and approval has been obtained from all relevant parties.
- Should any human remains be identified this will trigger a review of this CHMP in accordance with Section 8.

Strategy 5: Aboriginal and non-Aboriginal investigations

Prior to early works commencing the onsite works associated with the Aboriginal and non-Aboriginal investigations need to be completed in accordance with the strategies and advice required as part of conditions B6 – B9.

The Aboriginal and non-Aboriginal salvage strategies outline the requirements for the following aspects of the project:

- The Aboriginal salvage strategy specifies that Aboriginal sites MA1, MA2, MA3, MA4, MA5 and MA9 are to be salvaged prior to the commencement of early works at these locations. No works are to proceed at this location until these works have been completed.
- The non-Aboriginal salvage strategy specifies the requirements around the salvage of MHPAD1, MHPAD2 and beneath the concrete floor associated with the CUST Hut. The canine remains within the MH1 Dog Cemetery will require salvaging as part of an excavation program.
- No further mitigation measures are anticipated for the STRARCH Hangar, RAE Chapel, Commemorative Garden or B99 Transport Compound. Biosis has noted that archival recordings of these structures have been undertaken prior to the MUR Project and therefore are not required.

Strategy 6: Demarcation of heritage sites

Figures 3 and 4 identified Aboriginal sites that have been identified as being outside of the early works footprint or that are to be conserved. To ensure that these sites are not impacted the following management measures should be implemented:

- The location of these sites should be identified on all construction drawings, heritage inductions and in prestart meetings.
- Where works are taking place within 100 metres of a site, the boundaries of the site should be fenced, or where the site is an individual artefact or tree a minimum distance of 50 metres should be observed.

Fencing should be erected and maintained for the duration of the activity and may only be removed once the activity has concluded.

- Fencing should consist of non-invasive fencing or marking tape dependent on the activity and should be marked as an "environmentally sensitive area".
- In the event that the boundary of a site cannot be adequately located or identified, the assistance of an archaeologist may be required.
- Heritage sites and fencing should be subject to weekly monitoring inspections by the site environmental officer. The location and condition of heritage sites and fencing should be compared to the locations identified within the CEMP to ensure that adequate management measures are being maintained.

7 COMPLIANCE MANAGEMENT

7.1 Roles and responsibilities

The Contractor's and SIMTAs organisational structure and overall roles and responsibilities are outlined in Section 5.2 of the CEMP. Specific responsibilities for the implementation of environmental controls are detailed in Section 6 of this CHMP.

The following roles and responsibilities are defined in Section 5.2 of the CEMP and are pertinent to this CHMP:

- The Environmental Representative.
- Contractor's Senior Managers/Directors.
- Contractor's Project Manager/s.
- Contractor's Environment Manager.

7.2 Inspections

Inspections will be undertaken to assess the effectiveness of environmental controls, compliance with this sub-plan, CoC and other relevant approvals, licenses and guidelines. Inspections will be undertaken in accordance with Section 9 of the CEMP.

7.3 Incidents

If an incident occurs that results in actual or potential impacts on known heritage items and/or archaeological items that are discovered unexpectedly, the Secretary and other relevant government agencies will be notified in accordance with Strategy 2 or 3.

Incident reporting and documentation should be made in accordance with the MPW Stage 1 *Incident Report Plan*.

7.4 Non-compliance, Non-conformance and Actions

It is the responsibility of all site personnel to report non-compliances and non-conformances to the Site Supervisor and/or the Contractor's EM.

Non-compliances, non-conformances and corrective and preventative actions will be managed in accordance with Section 10.3 of the CEMP.

7.5 Reporting

Reporting requirements and responsibilities of heritage related issues should be documented in accordance with the environmental management processes in the CEMP. Specifically, monitoring and reporting will be required where approved or unapproved impacts to Aboriginal and non-Aboriginal heritage items take place.

8 REVIEW AND IMPROVEMENT

8.1 Continuous improvement

Opportunities for the improvement of this CHMP will be found through the ongoing evaluation of environmental management performance against environmental policies, objectives and targets. The purpose of this is to:

- Identify opportunities for the improvement of environmental management and performance.
- Determine the cause or causes of non-conformances and deficiencies.
- Development and implementation of a plan of corrective and preventative actions to address any non-conformances and deficiencies in this CHMP.
- Corroborate the efficiency of the corrective and preventative actions.
- Document any changes in procedures resulting from process improvement.
- Revise the objectives and targets of this CHMP accordingly.

8.2 CHMP update and amendment

The processes described in Section 6 and Section 7 of the CEMP may result in the need to update or revise this CHMP. This will occur if there are unexpected finds, incidents to heritage items, or as needed. A copy of the updated CHMP and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure.

APPENDIX A: IDENTIFYING ABORIGINAL OBJECTS AND NON-ABORIGINAL HERITAGE ITEMS

This appendix includes an excerpt from Roads and Maritime Services: *Standard management procedure – Unexpected heritage items*.

IDENTIFYING UNEXPECTED HERITAGE ITEMS

The following images can be used to assist in the preliminary identification of potential unexpected items (both Aboriginal and non-Aboriginal) during construction and maintenance works. Please note this is not a comprehensive typology.



Top left-hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from refuse pit associated with a Newcastle Hotel (Pacific Highway, Adamstown Heights, Newcastle area).



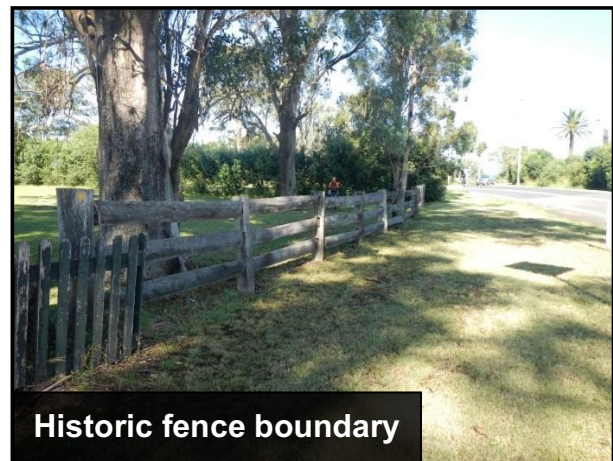
Top left hand picture continuing clockwise: Woodstave water pipe with tar and wire sealing (Horsley Drive); Tram tracks (Sydney); Brick lined cistern (Clyde); Retaining wall (Great Western Highway, Leura).



Top left hand picture continuing clockwise: Road pavement (Great Western Highway, Lawson); Sandstone kerbing and guttering (Parramatta Road, Mays Hill); Telford road (sandstone road base, Great Western Highway, Leura); Ceramic conduit and sandstone culvert headwall (Blue Mountains, NSW); Corduroy road (timber road base, Entrance Road, Wamberai).

**Alignment pin****Survey tree****Alignment stone****Survey tree****Milestone**

Top left hand corner continuing clockwise: Alignment Pin (Great Western Highway, Wentworth Falls); Survey tree (MR7, Albury); Survey tree (Kidman Way, Darlington Point, Murrumbidgee); Survey tree (Cobb Highway, Deniliquin); Milestone (Great Western Highway, Kingswood, Penrith); Alignment Stone (near Guntawong Road, Riverstone). Please note survey marks may have additional statutory protection under the *Surveying and Spatial Information Act 2002*.



Top left hand corner continuing clockwise: Remnant bridge piers (Putty Road, Bulga); Wooden boundary fence (Campbelltown Road, Denham Court); Dairy shed (Ballina); Golden Arrow Mine Shaft.



Top left hand corner: Culturally modified stone discovered on Main Road 92, about two kilometres west of Sassafras. The remaining images show a selection of stone artefacts retrieved from test and salvage archaeological excavations during the Hume Highway Duplication and Bypass projects from 2006-2010.

APPENDIX B: CONSULTATION REGISTER

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
1	Liverpool Bicycle User Group	CTMP		Maree Stacy	0419203379	mastacy@aims1.every1.net.	Nethan Kana	23/09/2016	Called mobile Left message and text
								6/10/2016	Called mobile Left message
								6/10/2016	Maree called back and I resent email for her to review
								12/10/2016	Email from Maree stating that cyclists are not impacted. No further comment.
2	Liverpool Police station	CTMP	Sargent	Leemon	(02) 9765 9499	mahl1kri@police.nsw.gov.au	Nethan Kana	26/09/2016	Called left message, was on night shift
			Senior Constable	Christy Mahlberg	(02) 9765 9499			23/09/2016	Called and discussed project start with rob Stanford at the desk request I call in on Monday
								23/09/2016	Set Email to Christy Malberg
								27/09/2016	Called Christy Malberg doc to be reviewed by end of the week
								6/10/2016	Called Christy Malberg. She advised they have reviewed and have no feedback/comment.
3	Liverpool Fire Station	CTMP	Station officer	Gibson Fletcher	02 9824 0521	fletcher.gibson@fire.nsw.gov.au	Nethan Kana	23/09/2016	Called and discussed project start with officer Gibson
		Emergency Hydrant and Stand Pipe Map						23/09/2016	Sent Email
								25/09/2016	Follow up with Station Officer fire brigade to collect lock from core blding Glen
								6/10/2016	Called and was advised they have reviewed and have no comments.
								21/12/2016	Map emailed to Gibson Fletcher.
4	Road user groups	CTMP					Nethan Kana	23/09/2016	Called council talked Phill customers service, no registered groups, Searched internet (Google) no user groups Sent email to KJA no Listing on their database

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
5	Pedestrian groups	CTMP					Nethan Kana	23/09/2016	Called council talked Phil customer service, no registered groups, Searched internet (Google) no user groups Sent email to KJA no Listing on their database
6	Liverpool City Council	CEMP	Director Planning and Growth	Toni Averay	(02) 9821-9396	T.Averay@liverpool.nsw.gov.au	Nethan Kana	23/09/2016	Called council discussed with Sheela (PA to Toni Averay) drop of management plans
		CTAMP (Traffic)						26/09/2016	Dropped Management Plans to Council (Liz)
		CHMP (Heritage)						27/09/2016	Called Ash Chan 98219285 will review and advise by end of the week
		CSAWMP (Soil and Water)						29/09/2016	Called Ash Chan meeting next week 5th wed and friday7th
								30/09/2016	Held meeting with council Ash Chan @ 3pm gave him overview of scope of works. Requested invitation to heritage committee meeting on site and CEMP Sub plans. Sub Plans & invitation sent on the 5/10/2016. Council declined to attend site meeting 5/10/2106 via email
								19/10/2016	Email received asking for Dilapidation report to be completed.
		Options for Mitigation Report					Alex Beben	28/10/2016	Emailed options for mitigation report.
								22/11/2016	Response received from LCC. "Council recommends that no demolition of the CUST Hut and STRARCH Hanger should occur until such time as the Interpretation Strategy be reviewed and amended by Tactical"
								12/12/2016	Final report sent to LCC for information.
								16/12/2016	LCC acknowledged receipt of report.
		CEMP						26/09/2016	Document package dropped off

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
7	Environment Protection Authority (EPA)	CNAVMP	Environmental Officer	George Orel	(02) 9995-6849	george.orel@epa.nsw.gov.au	Nethan Kana	27/09/2016	Called George Orel Left message
		CAQMP (Air Quality)						27/09/2016	George called back will review plans and advise
		CSAWMP (Soil and Water)						6/10/2016	Called left message
								7/10/2016	Email received from George Orel stating that the EPA does not intend to review the plans.
8	Office of Environment and Heritage (OEHL)	CHMP (Aboriginal Salvage)	Conservation Planning Officer	Susan Harrison	(02) 9995-6917		Rebecca Morris (Biosis)	19/09/2016	Aboriginal salvage strategy sent, via email
								20/09/2016	Email received from OEHL stating they do not intend to review and comment on the Aboriginal salvage strategy.
9	NSW Heritage Council (for non-Aboriginal Heritage Items)	CHMP (Heritage)	Senior Team Leader, Archaeology	Katrina Stankowski	(02) 9873 8569	Katrina.Stankowski@environment.nsw.gov.au	Rebecca Morris (Biosis)	19/09/2016	Non-Aboriginal salvage strategy sent, via email
10	Tharawal Local Aboriginal Land Council (Aboriginal Heritage)	CHMP (Heritage)	Registered Aboriginal Party	Denise Ezzy	(02) 4681 0059	informationofficer@tharawal.com.au	Alexander Beben	16/09/2016	CHMP sent, via email
							Rebecca Morris (Biosis)	19/09/2016	Aboriginal salvage strategy sent, via email
							Alexander Beben	17/10/2016	Called and left a voicemail regarding the CHMP but no response received
							Samantha Keats (Biosis)	31/10/2016	Emailed invitation to participate in salvage excavations. Denise accepted ands will attend.
							Mitch Broughton (LIB)	13/01/2017	Called and spoke to Kim. She was not sure if they ever received the Salvage strategy but advised to email it to Denise for review.
								13/01/2017	Emailed Salvage Strategy to Denise for review.
							Mathew Smith (Biosis)	13/01/2017	Spoke with Denise. She has responded with a letter accepting the strategy.

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
11	Cubbitch Barta Native Title Claimants Aboriginal Corporation	CHMP (Heritage)	Registered Aboriginal Party	Glenda Chalker	0427218425	kgchalker@bigpond.com	Rebecca Morris	19/09/2016	Aboriginal salvage strategy sent, via email
							Samantha Keats (Biosis)	31/10/2016	Emailed invitation to participate in salvage excavations.
							Mitch Broughton (LIB)	13/01/2017	Phone call to discuss strategy, no answer.
								13/01/2017	Emailed Salvage Strategy to Glenda for review.
								14/01/2017	Email received from Glenda. She has requested a hardcopy of the strategy be posted to her.
								16/01/2017	Hardcopy of Salvage strategy dropped off to Glenda.
								20/01/2016	Sent email following up on Glenda's review.
12	Darug Land Observations	CHMP (Heritage)	Registered Aboriginal Party	Gordon Workman		gordow51@bigpond.net.au	Rebecca Morris (Biosis)	19/09/2016	Aboriginal salvage strategy sent, via email
								25/09/2016	Jamie Workman contacted Alex Beben via phone agreeing with salvage strategy.
							Alex Beben (Biosis)	10/10/2016	Letter received via email supporting the strategy and stating their preference for reburial of artefacts.
							Samantha Keats	31/10/2016	Emailed invitation to participate in salvage excavations.
13	Darug Custodian	CHMP (Heritage)	Registered Aboriginal Party	Leanne Watson	(02) 4577 5181	Leanne@murumittigar.com.au justinecoplin@optusnet.com.au	Rebecca Morris	19/09/2016	Aboriginal salvage strategy sent, via email
							Samantha Keats	31/10/2016	Emailed invitation to participate in salvage excavations.
							Mitch Broughton (LIB)	13/01/2017	Phone call to discuss strategy, no answer.
								13/01/2017	Emailed Salvage Strategy to Leanne for review.

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
	Aboriginal Corporation						Rebecca Morris (Biosis)	13/01/2017	Spoke with Leanne. She said to contact Justine. Phone call to Justine, no response.
								13/01/2016	Spoke to Justine. She agrees with the salvage methodology. Also notified Justine that salvage field work has been postponed.
14	Darug Aboriginal Cultural Heritage Assessments	CHMP (Heritage)	Registered Aboriginal Party	Celestine Everingham			Rebecca Morris (Biosis)	19/09/2016	Aboriginal salvage strategy sent, via registered post
							Alex Beben	23/09/2016	Celestine contacted Alex Beben via phone agreeing with salvage strategy.
15	Darug Aboriginal Landcare Incorporated	CHMP (Heritage)	Registered Aboriginal Party	Des Dyer		desmond4552@hotmail.com	Rebecca Morris (Biosis)	19/09/2016	Aboriginal salvage strategy sent, via email
							Alex Beben (Biosis)	27/09/2016	Email received accepting the strategy with comments. "We agree with the all your recommendation and methodology, in your report. The area is very important to the Darug people. We would like to see a plan of management be put in place to reburied of artefacts, or can be displayed with signage ,buried close to where they were found and were they won't be impacted on once the development in completed. Any scared trees, Rock engraving or grinding grooves in a site, be protected."
							Mitch Broughton (LIB)	13/01/2017	Emailed salvage strategy to Des for review.
							Rebecca Morris (Biosis)	13/01/2017	Discussed strategy with Des. He has agreed to the methodology.
				Ricky Fields				13/01/2017	Spoke to Ricky and advised him that salvage field work has been postponed.
							Rebecca Morris (Biosis)	19/09/2016	Aboriginal salvage strategy sent, via registered post

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
16	Banyadjaminga Swagg Inc.	CHMP (Heritage)	Registered Aboriginal Party				Mitch Broughton (LIB)	13/01/2017	Called Tharawal Local Aboriginal Land Council and spoke to Denise to try and get some contact details for Banyadjaminga Swagg Inc. She advised that she does not have details for them and that they would not review the plan as they do not have an interest in Aboriginal heritage salvage, as they are a charity.
				Danny Franks			Rebecca Morris (Biosis)	13/01/2017	Aboriginal salvage strategy sent via email.
								13/01/2017	Called to discuss strategy. Left voicemail.

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
17	Tocumwall (Yarrawalk Enterprises/ division of Tocumwall)	CHMP (Heritage)	Registered Aboriginal Party		Office - 02 9542 7714 Scott Franks - 0404 171 544 Danny Franks - 0415226725	danny@tocumwall.com.au info@tocumwall.com.au	Mitch Broughton (LIB)	19/01/2017	Contacted the owner of Tocumwall, Scott Franks. I gave him back ground on the project and our consultation with the RAP's, as part of our planning approval process. He said he was aware of the project, as they were involved in the tender with Liberty. He said he had received the strategy from Biosis last week, so if I had the same document he didn't need to be re-sent it. Basically he is very annoyed that ocomwall were involved with Liberty in the tender, but were dropped for the project works. He advised that due to this fact Tocomwal would obviously reject the Biosis strategy compared to Tocumwall's initial heritage recommendations. He did give me a phone number of Danny Franks who manages the Heritage works for Tocumwall and said to discuss with him what had happened since the tender process. He seems quite interested in finding out why they were not involved in the project works and not so interested in responding to the request for review.
				Scott Franks				19/01/2016	Spoke to Danny Franks and Chaz. They are reviewing and have many comments on the strategy. They will send through to Alex Beben today / tomorrow.

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
				Danny Franks			Alex Beben (Biosis)	19/01/2016	Phone call from Jakub Czastka verbally communicating content of letter (received shortly after). Requested a copy of the approval (submitted via email by Alex Beben) and geotechnical information (directed to the Major projects website during conversation).
								19/01/2016	Letter detailing recommendations to salvage strategy. See Appendix B of ACH Strategy.
								19/01/2016	Email thanking Tocomwall for comments and supplying project approval as requested. No further comments received.
18	Gandangara Local Aboriginal Land Council	CHMP (Heritage)	Registered Aboriginal Party	Brad Maybury			Rebecca Morris (Biosis)	13/01/2017	Aboriginal salvage strategy sent via email.
								13/01/2016	Advised that Brad is on leave, returning to work 16/01/2017.
19	Office of Water	CSWMP	Officer	Janne Grose	88387505	janne.grose@water.nsw.gov.au	Nethan Kana	27/09/2016	Called left Message
		CEMP						29/09/2106	Email management plans
								29/09/2016	Called discussed follow up next week, has not had a chance to review
								6/10/2016	Janne called and advised that it's a 4 week turn around.
		CFFMP						18/10/2016	CFFMP emailed to Janne
								8/11/2016	Review comments received
								17/11/2016	Plan amended. Consultation closed.
20	Department of Primary Industries (Fisheries & Office of Water) (DPI)	CSAWMP (Soil and	Land Use Planning Coordinating Officer	Wayne Jones	(02) 9338-6708	wayne.jones@dpi.nsw.gov.au	Nethan Kana	27/09/2016	Email management plans
		CEMP						27/09/2016	Called left message
								29/09/2016	Called left message
								12/10/2016	sent email bounced back
								27/09/2016	Called left message

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
21	Fisheries	CEMP	Fisheries Conservation Manager	Carla Ganassin	(02) 4222-8342	carla.ganassin@dpi.nsw.gov.au	Nethan Kana	28/09/2016	Email management plans
								29/09/2016	Called left message.
								5/10/2016	Called left message.
22	Office of Environment and Heritage (OEH)	CEMP	Conservation Planning Officer	Richard Bonner	(02) 9995-6917	richard.bonner@environment.nsw.gov.au	Nethan Kana	26/09/2016	Dropped Management Plans to OEH.
		CHMP (Heritage)						27/09/2016	Called left Message to follow up on status of review.
		CFFMP (Flora & Fauna)						29/09/2016	Called left message to follow up on status of review.
								12/10/2016	Sent email to follow up on status of review.
								17/11/2016	Called left message to follow up on status of review.
								9/01/2017	Called Richard no answer. Called OEH general number and spoke to Susan Harrison. She advised that they have been swamped the past few months and have been focusing on project pre approvals not the post approval project plans we have submitted. As we have not received any comments to date consider "no comment" from OEH.
23	Office of Environment and Heritage (OEH)	Aboriginal salvage strategy		Marnie Stuart		'Marnie.Stewart@environment.nsw.gov.au'	Alex Beben	28/10/2016	Clarification over whether OEH is aware that the archaeological salvage strategy submitted on 19 September 2016 forms part of CoA B7 of the Early Works Approval and not the Concept Approval.
								3/11/2016	Follow up email to check status of review. No response.
								5/12/2016	Email sent advising that and unexpected Aboriginal find was discovered.
			Major Projects	Bronwyn Smith	(02) 9873 8569	bronwyn.smith@environment.nsw.gov.au	Alex Beben	28/10/2016	Emailed options for mitigation report for review.

SIMTA-LPWDR-Consultation register									
Item	Organisation	Management Plan	Position	Contact	Phone	Email address	LI Rep	Date Contacted	Notes
24	NSW Heritage Council (for non-Aboriginal Heritage Items)	Options for Mitigation Report	Archaeologist, Archaeological Heritage - Conservation Section	Rebecca Newell	(02) 9873 8517	Rebecca.Newell@environment.nsw.gov.au	Alex Beben	9/11/2016	Initial comments received. Detailed comments expected by 18/11/2016.
								17/11/2016	Final review comments received.
								12/12/2016	Final report sent for information.
								16/12/2016	Phone call received from Rebecca acknowledging receipt of report.
		Mitch Broughton (LIB)					31/01/2017	Phone call to Rebecca to discuss review of CHMP. CHMP emailed to Rebecca for review.	
							1/02/2017	Rebecca acknowledged receipt of report.	
	Alex Beben	21/02/2017	Phone call to Rebecca to follow up on review of the CHMP, as the allocated review period of 21 days has passed since the document was emailed for review. Rebecca advised that she is dealing with DPE directly and Tactical and Liberty should not contact the Heritage council but contact DPE for feedback. No feedback or comments have been received from DPE.						
25	Moorebank Heritage Group (MHG)	Options for Mitigation Report	n/a	Pam Browne	0408 579 781	info@moorebankheritage.org.au	Alex Beben	28/10/2016	Emailed options for mitigation report.
								10/11/2016	Response received.
								12/12/2016	Final report sent for information.
								16/12/2016	MHG acknowledged receipt of report.
26	Rural Fire Service (RFS)	Emergency Hydrant and Stand Pipe Map	Inspector	Michael Markwort		Michael.Markwort@rfs.nsw.gov.au	Nethan Kana	20/12/2016	Map emailed to Inspector Markwort.
								21/12/2016	Inspector Markwort responded via email acknowledging receipt of the map.
27	Department of Defence (SME)	Options for Mitigation Report	Major	David Pitts		david.pitts@defence.gov.au	Marc Ragowski (TAC)	21/10/2016	Report emailed to Major Pitts
								27/10/2016	Major Pitts responded stating he will review.
								7/11/2016	Major Pitts responded with review comments.

APPENDIX C: PHOTOGRAPHING UNEXPECTED HERITAGE ITEMS

 Removal of the item from its context (e.g. excavating from the ground) for photographic purposes is not permitted.

Photographs of unexpected items in their current context (*in situ*) may assist heritage staff and archaeologists to better identify the heritage values of the item. Emailing good quality photographs to specialists can allow for better quality and faster heritage advice. The key elements that must be captured in photographs of the item include its position, the item itself and any distinguishing features. All photographs must have a scale (ruler, scale bar, mobile phone, coin) and a note describing the direction of the photograph.

Context and detailed photographs

It is important to take a general photograph (Figure 1) to convey the location and setting of the item. This will add much value to the subsequent detailed photographs also required (Figure 2).

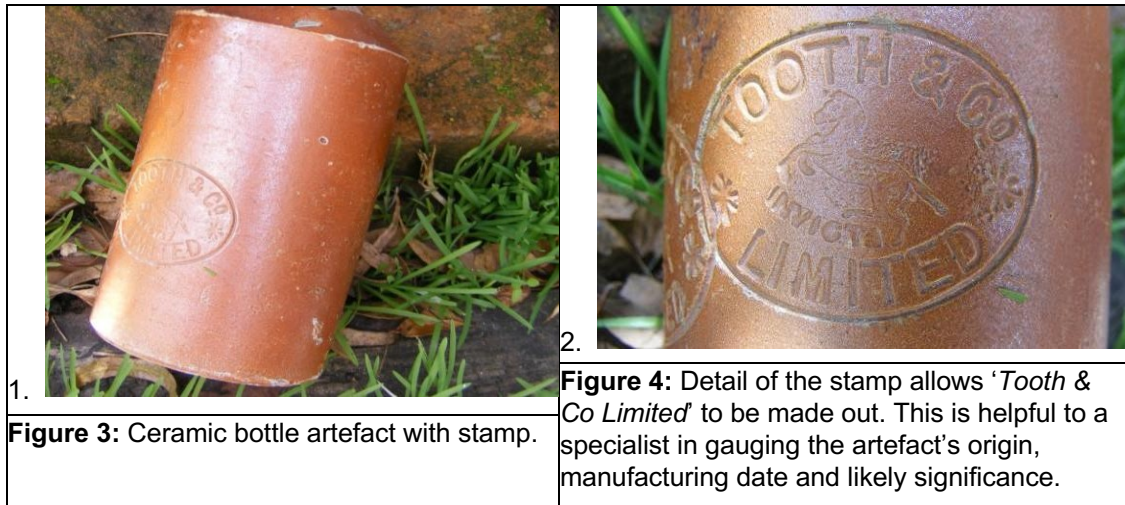
Figure 1: Telford road uncovered on the Great Western Highway (Leura) in 2008.



Figure 2: Close up detail of the sandstone surface showing material type, formation and construction detail. This is essential for establishing date of the feature.

Photographing distinguishing features

Where unexpected items have a distinguishing feature, close up detailed photographs must be taken of this, where practicable. In the case of a building or bridge, this may include diagnostic details architectural or technical features. See Figures 3 and 4 for examples.



Photographing bones

The majority of bones found on site will those of be recently deceased animal bones often requiring no further assessment (unless they are in archaeological context).

However, if bones are human, Roads and Maritime must contact the police immediately (see Appendix F for detailed guidance). Taking quality photographs of the bones can often resolve this issue quickly. Heritage staff in Environment Branch can confirm if bones are human or non-human if provided with appropriate photographs.

Ensure that photographs of bones are not concealed by foliage (Figure 5) as this makes it difficult to identify. Minor hand removal of foliage can be undertaken as long as disturbance of the bone does not occur. Excavation of the ground to remove bone(s) should not occur, nor should they be pulled out of the ground if partially exposed.

Where sediment (adhering to a bone found on the ground surface) conceals portions of a bone (Figure 6) ensure the photograph is taken of the bone (if any) that is not concealed by sediment.

-



Figure 5: Bone concealed by foliage. **Figure 6:** Bone covered in sediment

Ensure that all close up photographs include the whole bone and then specific details of the bone (especially the ends of long bones, the *epiphysis*, which is critical for species identification). Figures 7 and 8 are examples of good photographs of bones that can easily be identified from the photograph alone. They show sufficient detail of the complete bone and the epiphysis.



Figure 7: Photograph showing complete bone. **Figure 8:** Close up of a long bone's epiphysis.