

Sydney Metro City and Southwest - Central Station Main Works Project

Construction Heritage Management Plan

Sydney Metro City and Southwest - Central Station Main Works

Construction Heritage Management Plan

Document

Title	Construction Heritage Management Plan
Document Reference	SMCSWCSM-LOR-SMC-EM-PLN-000027
Client	Sydney Metro City & Southwest
Laing O'Rourke contract no.	K51

Author

CHMP Author	Details
Name:	Sandra Wallace
Role:	Managing Director
Company:	Artefact Heritage

Revisions

Revision	Date	Description	Prepared by	Approved by
1	12 April 2018	Draft for review	Sandra Wallace	Chris McCallum
2	3 May 2018	Update with TfNSW Heritage Manager comments	Sandra Wallace	Chris McCallum
3	11 May 2018	Reviewed by OCP	Karen Urquhart	Chris McCallum
4	30 May 2018	Reviewed as per OEH, ER and Sydney Metro comments	Karen Urquhart Sandra Wallace	Chris McCallum
5	18 June 2018	Reviewed as per OEH, ER and Sydney Metro comments		
6	17 July 2018	Reviewed as per DPIE comments		Chris McCallum
7	26 July 2018	Reviewed as per DPIE comments		Chris McCallum
8	16 November 2018/February 2019	Hold point changed to witness point, 6 monthly review	Lucas Dobrolot	Chris McCallum
9	February 2019	Review	Lucas Dobrolot	Chris McCallum
10	April 2020 August 2020	Review	Hussain Nilar	Chris McCallum
11	April 2021	Annual Review	Lucas Dobrolot	Lucas Dobrolot

Contents

Contents	3
List of Tables	5
List of Figures	Error! Bookmark not defined.
Terms and definitions	6
1. Introduction	8
1.1 Purpose and Application	8
1.2 Background - Sydney Metro City & Southwest – Chatswood to Sydenham Project	8
1.3 Planning Approval	8
1.4 Overview of the Project and Project Scope of Works – Central Station Main Works	9
1.4.1 Metro Station Works	9
1.4.2 Central Station Works	9
1.4.3 Central Walk Works	10
1.4.4 Ancillary works	11
1.4.5 Combined Services Route CSM	11
1.5 Works Location Site Layout	12
1.6 Project Specific Environmental Management System	13
1.7 Objectives and Targets	13
1.8 Consultation and Stakeholder Engagement	13
1.8.1 CHMP consultation	13
1.8.2 Registered Aboriginal Parties	14
1.8.3 RAP participation during construction	14
1.8.4 Heritage Working Group	14
1.8.5 NSW Heritage Council	14
1.8.6 Public open days	15
2. Legal and Other Requirements	15
2.1 Guidelines	16
2.2 ISCA	16
2.2.1 ISCA Her-1	17
2.2.2 ISCA Her-2	17
2.3 LOR Severe Environmental Risks	17
3. Existing Environment	17
3.1 Aboriginal Heritage	17
3.2 Built Heritage	18
3.2.1 Heritage listings	18
3.3 Non-Aboriginal Archaeology	23
3.3.1 Areas of Archaeological Potential within Central Station	23
3.3.2 Areas of archaeological potential within the Eastern entry footprint	23
4. Construction Aspects and Impacts	23
5. Management Measures	28
5.1 Aboriginal archaeological management	28
5.1.1 Cultural Heritage Assessment Report	28
5.1.2 Excavation Director	29
5.1.3 Archaeological Method Statement	29
5.1.4 Archaeological excavations	29

5.1.5	Artefact analysis and storage.....	30
5.1.6	Human remains.....	30
5.1.7	Unexpected finds	30
5.1.8	Clearance	30
5.1.9	Reporting	30
5.2	Built Heritage Management	31
5.2.1	General	31
5.2.2	Design Requirements	31
5.2.3	Heritage Specialist.....	32
5.2.4	Management of vibration impacts to elements of Central Station Railway Group.....	32
5.2.5	Demolition and Deconstruction.....	32
5.2.6	Adaptive Reuse.....	32
5.2.7	Retention and Protection of Significant Fabric & Management of Incidental Impacts	32
5.2.8	Salvage of Significant Fabric.....	33
5.2.9	Items of Moveable and Industrial Heritage	33
5.2.10	Building Condition Surveys and Archival Photographic Recording	34
5.2.11	Archival Measured Drawings.....	35
5.2.12	Recording of Views and Visual Relationships	36
5.2.13	Heritage Interpretation.....	36
5.2.14	SHR listing update.....	37
5.3	Non-Aboriginal Archaeological Management.....	37
5.3.1	Archaeological Zoning	37
5.3.2	Archaeological Management	40
5.3.3	Archaeological Method Statement	40
5.3.4	Excavation Directors.....	40
5.3.5	Unexpected finds	40
5.3.6	Archaeological Relics Management Plan	41
5.3.7	Clearance	41
5.3.8	Human Remains	41
5.3.9	Storage of archaeological remains.....	41
5.3.10	Analysis and reporting.....	41
5.4	Heritage Awareness Training (Induction)	53
5.5	Unexpected Finds Procedure	53
5.6	Ongoing Notifications – Unexpected Finds	53
6.	Roles and Responsibilities	54
7.	Monitoring, Auditing and Reporting	57
8.	Review and Improvement	58
9.	Enquiries, Complaints and Incident Management	58
	Appendix A – Government Stakeholder Correspondence	59
	Appendix B Registered Aboriginal Parties (RAPs)	65
	Appendix C - CHMP MCoA, CEMF, Environmental Performance Outcomes and REMM Compliance Matrix.....	67
	Appendix D Sample / Template Conservation Actions Schedule	77
	Appendix E - SWTC Appendix B6 Heritage Conservation Works Specification	78
	Appendix F – SER's addressed in this Management Plan	79

List of Tables

Table 2-1 Legislation and Planning Instruments	15
Table 3-1 Heritage Listed Items in and near the Project Area	18
Table 4-1 Aboriginal Heritage – Aspects and Impacts	24
Table 4-2: Built heritage – Aspects and Impacts	25
Table 4-3 Non-Aboriginal Archaeology– Aspects and Impacts	27
Table 5-1 Archaeological Management zoning relating to the Project (Artefact Heritage 2016c).....	38
Table 5-2 Construction, Management Action and Responsibilities, Aboriginal Heritage.....	43
Table 5-3 Construction, Management Action and Responsibilities, Built Heritage	46
Table 5-4 CSMW Construction, Management Action and Responsibilities, Non-Aboriginal archaeology	49
Table 6-1 Roles and Responsibilities	54
Table 9-1 Compliance Matrix - Minister’s Conditions of Approval (CoA)	67
Table 9-2 Compliance Matrix – Revised Environmental Mitigation Measures (REMMS)	71
Table 9-3 Revised environmental performance outcomes.....	74

Terms and definitions

The following terms, abbreviations and definitions are used in this plan.

Terms	Explanation
AHD	Australian Heritage Database
AHIP	Aboriginal Heritage Impact Permit
AHIMS	Archaeological Heritage Information Management Service
Archaeological Potential	Potential of a site to contain archaeological remains. This potential is assessed by identifying former land uses and associated features through historical research and evaluating whether subsequent actions (either natural or human) may have impacted on evidence for these former land uses.
AARD	Archaeological Assessment and Research Design
AMS	Archaeological Method Statement
CAS	Conservation Actions Schedule
CCOS	Council of City of Sydney
CEMP	Construction Environmental Management Plan
CHAR	Cultural Heritage Assessment Report
CHL	Commonwealth Heritage List
CHMP	Construction Heritage Management Plan
CoA	Conditions of Approval
CSMW	Central Station Main Works
CSSI	Critical State Significant Infrastructure
DNSDC	Defence National Storage and Distribution Centre
DoE	Department of the Environment
DPIE	Department of Planning Industry & Environment
EIS	Environmental Impact Statement
EPL	Environment Protection Licence
ER	Environmental Representative
HIA	Heritage Impact Assessment
HIS	Heritage Interpretation Strategy
ISCA	Infrastructure Sustainability Council of Australia
Laing O'Rourke / LORA	Laing O'Rourke Australia Construction Pty Limited
LEP	Local Environment Plan
Local significance	An item is important in the course or pattern of the local area's cultural or natural history.
Minister, the	NSW Minister for Planning
NHL	National Heritage List
OEH	Office of Environment and Heritage
PAD	Potential Archaeological Deposit
The Burra Charter	The Australia ICOMOS Charter for Places of Cultural Significance (Adopted 31 October 2013)
RAPs	Registered Aboriginal Parties. As defined in the Aboriginal cultural heritage consultation requirements for proponents 2010
Research Potential	An item has potential to yield information that will contribute to an understanding of the NSWs (or the local area's) cultural or natural history. It is possible for an area to be of high archaeological potential but low research potential.

Terms	Explanation
RTS	Response to Submissions
SHR	State Heritage Register
SMCSW	Sydney Metro City and Southwest

1. Introduction

1.1 Purpose and Application

This Construction Heritage Management Sub-plan (CHMP) forms part of the Construction Environmental Management Plan (CEMP) for Sydney Metro City and Southwest Central Station Main Works Project (CSMW) (the Project).

Effective cultural heritage management is vital to the overall success of the Project. This CHMP is required to ensure careful management of excavation, demolition and building work so that the heritage aspects of the site and surrounding environment will be appropriately addressed during construction. It has been prepared to address the management and mitigation of potential impacts of the Project to manage heritage issues and minimise risk of impact during the first stage of development under the Minister's Conditions of Approval (CoA).

It describes how Laing O'Rourke and its sub-contractors will ensure all risks associated with heritage are considered and managed effectively during the design and construction of the Project. It has been prepared to support and should be read in conjunction with the Sydney Metro Construction Environmental Management Framework (CEMF).

This CHMP addresses the relevant requirements of the Project Approval as modified and all applicable guidelines and standards specific to heritage management during the Project. It has been developed based on the Environmental Impact Statement, which takes into consideration a comprehensive assessment and analysis of both Aboriginal and non-Aboriginal heritage risks for the Project.

1.2 Background - Sydney Metro City & Southwest – Chatswood to Sydenham Project

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

The Project forms part of the Sydney Metro City & Southwest – Chatswood to Sydenham Project and includes the construction of new underground platforms at Central Station and new related pedestrian access ways. The works will be undertaken by Laing O'Rourke. The Project consists of the Metro Station Works, the Central Station Works and the Central Walk Works which are described in Section 1.4.

1.3 Planning Approval

The Project has been assessed by the Department of Planning Industry and Environment under Section 115ZB of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as Critical State Significant Infrastructure (CSSI). The Project, its impacts, consultation and mitigation were documented in the following suite of documents:

- Critical State Significant Infrastructure Application SSI 15_7400
- Sydney Metro – Chatswood to Sydenham –Environmental Impact Statement (Jacobs/Aracadis/RPS, 2016)
- Sydney Metro – Chatswood to Sydenham –Response to Submissions and Preferred Infrastructure Report (Jacobs/Aracadis/RPS 2016); and
- The Planning Assessment Commission granted Approval for the Project on 9 January 2017 and the Laing O'Rourke scope of works for CSMW is subject to the Minister's Conditions of Approval.

Following approval of the Sydney Metro City and Southwest – Chatswood to Sydenham Project, the following modifications were approved on 21 December 2017:

- CSSI 7400 MOD 1 – Victoria Cross and Artarmon Substation (determined 18 October 2017)
- CSSI 7400 MOD 4 – Sydenham Station and Metro Facility South (determined 13 December 2017)
- CSSI 7400 MOD 2 – Central Walk (determined 21 December 2017)
- CSSI 7400 MOD 3 – Martin Place Metro Station (determined 22 March 2018).
- CSSI 7400 MOD 4 - Sydenham Station and Metro Facility South – Chatswood to Sydenham (determined 13 December 2017)
- CSSI 7400 MOD 5 - Blues Point Acoustic Shed (determined 2 November 2018)
- CSSI 7400 MOD 6 – Administrative Changes- Modification to Sydney Metro City & Southwest - Chatswood to Sydenham (determined 21 February 2019)
- CSSI 7400 MOD 7 – Administrative Changes- Modification to Sydney Metro City & Southwest - Chatswood to Sydenham (determined 24 June 2020)

CSSI 7400 MOD 8 – Blues Point Access Site (determined 25 November 2020)

1.4 Overview of the Project and Project Scope of Works – Central Station Main Works

1.4.1 Metro Station Works

The Metro Station Works are the permanent works for a new underground Metro Station for the Sydney Metro City and Southwest at Central Station. Work includes the installation of new platforms that will be constructed using sophisticated excavation techniques to create a cavern and construction of a station box and associated structural work with an island platform beneath Central Station's existing heavy-rail platforms 12, 13, 14 and 15. To facilitate this, excavation requiring the removal of approximately 230,000 cubic metres of spoil will be required. The work will include provision of vertical transport from the Metro Station island platform and associated services.

1.4.2 Central Station Works

The Central Station Works are the permanent works at Central Station associated with, and to enable, the construction, integration, operation and maintenance of the Metro Station, including new infrastructure and adjustments to existing infrastructure. The key outcomes of the Central Station Works include:

- a new North-South Concourse for Central Station which will link the new Metro Station with the existing northern entrance and North Concourse, a new East Concourse, and the existing southern baggage tunnel (Southern Intercity Interchange Tunnel); and
- adjustments to the existing Grand Concourse, Intercity Concourse, Olympic Tunnel, North Concourse and northern entrance to Central Station.

Construction activities for the Central Station Main Works will have an impact on a number of elements within the Central Station site including:

- adjustments to existing built features within the Sydney Yard cess area, including demolition of the Rolling Stock Officer's Building and the Cleaners' Amenities Building
- adjustments to existing Platforms 8/9, 10/11, 12/13 and 14/15 including:
 - demolition of existing platforms 13 and 14/15 including canopies and any rooms located on the platforms
 - extension to the southern ends of existing Platforms 8/9 and 10/11
 - shortening to the northern ends of existing platforms 8/9 and 10/11
 - demolition of portions of the retaining wall between existing Platforms 15 and 16
- adjustments to existing tracks 9, 10, 11, 12, 13, 14 and 15 including:
 - demolition of portions of existing tracks 12, 13 and 14
 - demolition of existing track 15
 - shortening of the northern end of existing tracks 9, 10 and 11

- construction of a new canopy between the Central Electric Station Building and the northern end of existing Platforms 8/9 and 10/11 and new Platforms 12/13 and 14
- construction of a void in the North Concourse in front of the Central Electric Building
- extension of the Intercity Concourse to provide connection with existing Platforms 8/9, 10/11 and 12 (as adjusted) and new platforms 113 & 14 and to provide circulation space at the top of the vertical transport connection to the North Concourse
- adjustments to the existing Devonshire Street Tunnel as required.

1.4.3 Central Walk Works

The Central Walk Works include the provision of other infrastructure to provide improved connectivity and other operational enhancements throughout Central Station. The key features of the Central Walk Works include:

- a new Eastern Entrance for Central Station
- a new East Concourse (Central Walk) for Central Station beneath existing Platforms 16 to 23, which will link the new Eastern Entrance, the new North-South Concourse, existing Platforms 16 to 23 and the existing Eastern Suburbs Railway (ESR) concourse; and
- provisions to enable the future construction (by others) of an extension of the Central Walk through a new west concourse and a new western entrance for Central Station.

Construction activities for the Central Walk Works will have an impact on a number of elements within the Central Station site including:

- demolition of the Bounce Hostel, former MGM building at 20-28 Chalmers Street, Surry Hills
- excavation for the Eastern Entrance structure
- construction of a new station entrance including vertical transport, associated services and architectural and urban design elements
- excavation for the Central Walk, construction of the station box and associated structural work
- new vertical transport from the Central Walk to the Suburban Platforms 16 to 23, including localised adjustment of canopies
- platform voids for temporary stairs from Olympic Tunnel to Platforms 20/12 and 22/23
- strengthening of Suburban Platforms as necessary for construction of the Central Walk (East Concourse)
- demolition of existing buildings on Suburban Platforms and general station refresh works.

Refer to Figure 1.1 below for the locations of the works.

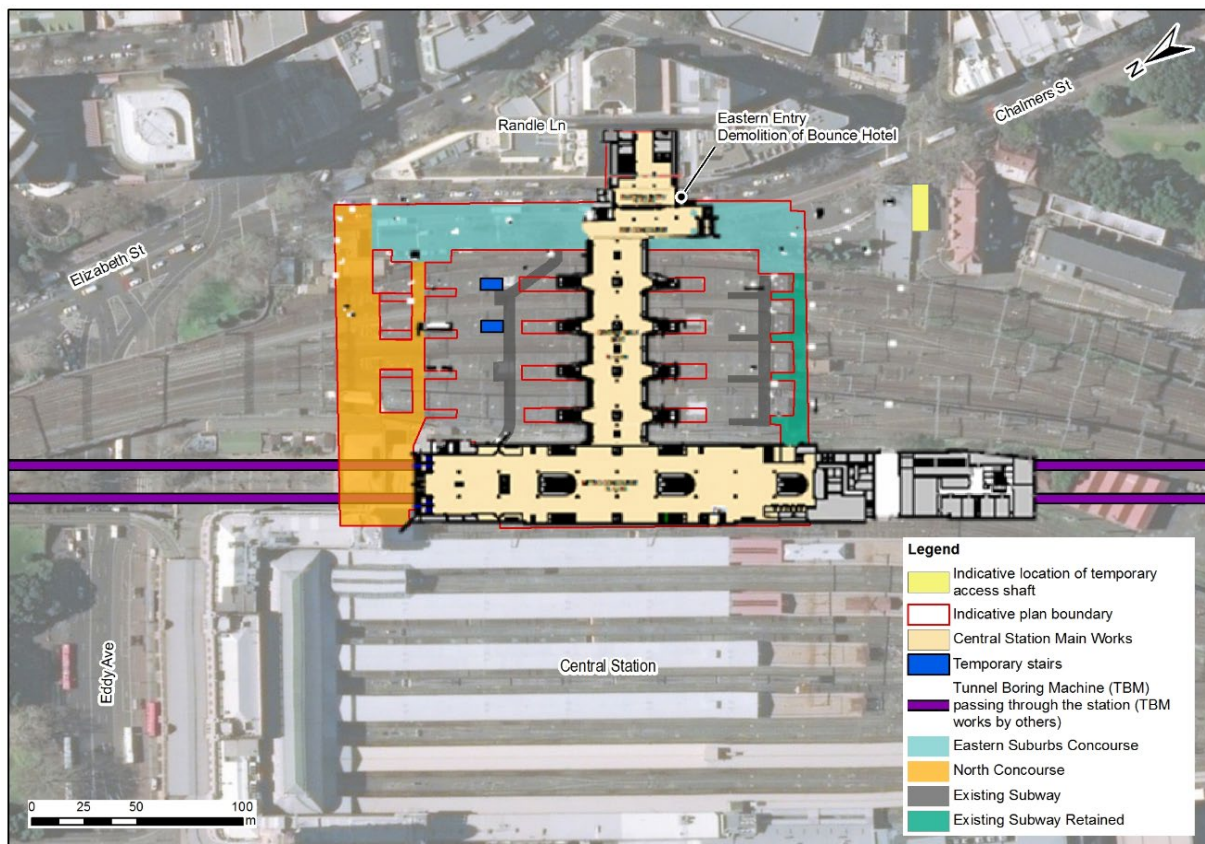


Figure 1.1: CSMW Project Works

1.4.4 Ancillary works

Ancillary works include fencing, maintenance access, utilities works, drainage, noise barriers, road and transport network works and temporary site office, laydown and work sites to support construction.

Other temporary works that will be required throughout the construction period include:

- temporary arrangements (including wayfinding and signage) to divert and control pedestrians and to provide public access, amenity, security and safety during all stages of design and construction
- temporary arrangements to replace all passenger and public walkways affected by works
- temporary construction hoardings, fencing, noise walls, access gates and barriers on and around the site
- temporary arrangements for site facilities, infrastructure, utilities, groundwater and stormwater collection, treatment and discharge and other temporary works as may be required from time to time
- excavation and construction of an advanced adit parallel to the Central Walk to facilitate construction of the Central Walk

1.4.5 Combined Services Route CSM

The CSR for Central Station will provide for Communications (Comms) services (voice, data and IT connectivity, requiring 6 to 8 cables) and High Voltage electrical (HV) services that will service the whole site, both existing and the new infrastructure installations that are being introduced as part of the Central Station Main Works. It will extend as a circular route around the site, utilising existing service infrastructure where this is available and providing new installations as required to complete the system.

The CSR was included in the Environmental Impact Statement that was approved under SSI 15_7400 as part of the concept design (refer EIS Chapter 7, Project Description – Construction, Part 7.10.9, p231) and has progressed through a detailed design process (see figure 1.2). The CSR will be delivered in two phases. Phase A occurs in areas, 2, 3 and 4 and is restricted to the Western Baggage Tunnel, Northern Baggage Tunnel and Platform 1. Phase B occurs in all other Areas and extends to the Darling Harbour Goods Line, Mortuary Tunnel, Sydney Yard, Water Mains tunnel, Prince Alfred Substation, Railway Institute driveway and Sydney Network Base.

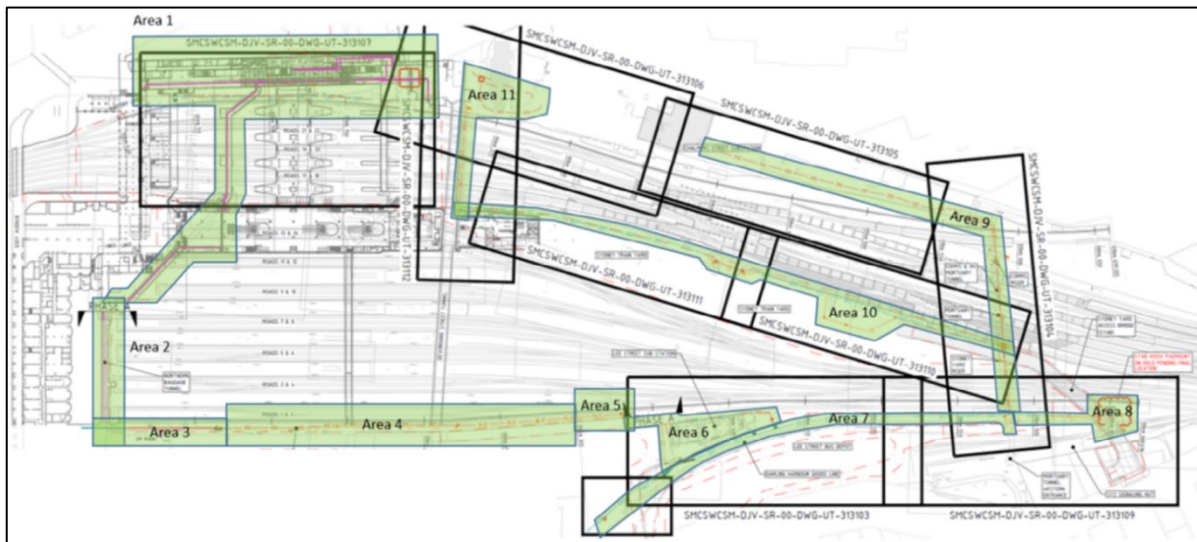


Figure 1.2 CSR around Central Station,

1.5 Works Location Site Layout

The CSM work location and site layout is highlighted in Figure 1.3 below.

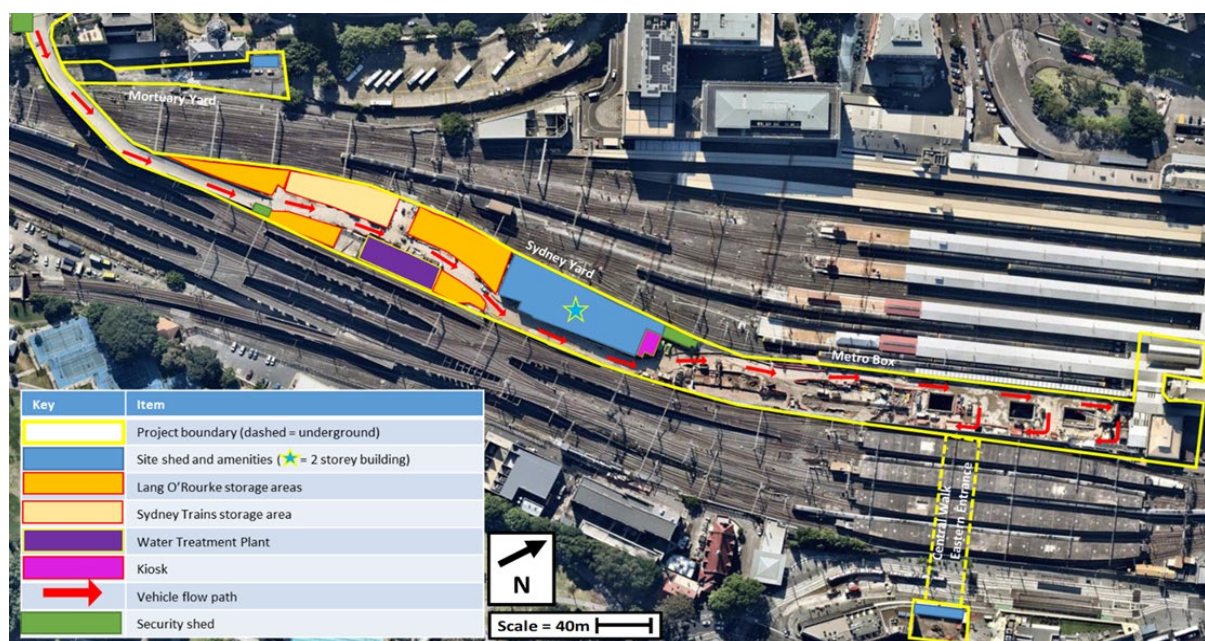


Figure 1.3 – Project layout.

1.6 Project Specific Environmental Management System

The Project CEMP is the primary Environmental Management System (EMS) document for the delivery of the proposed works. This CHMP is one of a suite of aspect-specific support plans that have been prepared to support the CEMP. Refer to Section 3 of the CEMP for further details.

1.7 Objectives and Targets

This CHMP provides the basis for the management of heritage issues and to minimise risk of impact during the first stage of development. Its key objective is to ensure that impacts to Aboriginal and non-Aboriginal heritage are minimised and within the scope permitted by the planning approvals. The supporting objectives and targets of heritage management and mitigation in regard to heritage are outlined below:

- minimise the adverse impacts on the significant heritage buildings, elements, fabric, spaces and vistas that contribute to the overall significance of Central Station as a place listed on the NSW State Heritage Register
- maximise awareness of Aboriginal and non-Aboriginal heritage values for all involved in the Project
- maximise the retention and legibility of those heritage buildings, structures, fabric, spaces and vistas that are individually significant and contribute to the overall significance of Central Station
- protect all significant heritage buildings, structures, fabric and moveable heritage items proposed to be retained, against damage during the CSM Contractor's Activities
- reuse all retained significant heritage buildings and elements for original or new complementary uses as part of the viable ongoing function of Central Station
- design new buildings and other elements of the Project Works to complement retained significant heritage buildings, elements, fabric, spaces and vistas, and avoid outcomes that compromise the significance of these heritage items
- record all significant heritage buildings, fabric, elements, spaces and vistas to be removed or subject to substantial alteration
- salvage and store significant elements, fabric and moveable heritage items for future interpretive or maintenance or repair purposes
- consult with relevant stakeholders throughout the course of works about decisions that are relevant to the heritage significance of the site and its elements
- interpret the history and cultural value of Central Station to its future users
- establish effective procedures and processes for the long-term conservation management of Central Station following the conclusion of the Project Works
- identify, investigate, record and assess the significance of any discovered Aboriginal and non-Aboriginal archaeological resources before any further action, including harm, can take place
- consult with all relevant stakeholders prior to impacts in areas which have been assessed to possess archaeological potential, and/or upon the discovery of unexpected Aboriginal objects or cultural features.

1.8 Consultation and Stakeholder Engagement

1.8.1 CHMP consultation

Condition C3 requires that the CHMP be prepared for the Project in consultation with the relevant Council and the NSW Heritage Council (or its delegate).

The key stakeholders related to Heritage who have been consulted in preparation of this CHMP include:

- NSW Heritage Council (Heritage Division as delegate)
- City of Sydney Council

- Sydney Trains, Heritage

Outcomes of consultation are included in Appendix A – Government Stakeholder Correspondence. Consultation with Sydney Trains forms part of the internal document review process coordinated by Sydney Metro. All comments from Sydney Trains have been included in this plan and responses returned to Sydney Metro and Sydney Trains.

1.8.2 Registered Aboriginal Parties

Consultation with Registered Aboriginal Parties (RAPs) was undertaken during concept design as part of the Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and also during preparation of the Cultural Heritage Assessment Report (CHAR) in accordance with OEH's guidelines *Aboriginal cultural heritage consultation requirements for proponents* (2010) (AH1).

Aboriginal community consultation has been guided by OEH 'Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation'¹, using the OEH 'Aboriginal cultural heritage consultation requirements for proponents'² as best practice. Consultation has been conducted for the entirety of the Sydney Metro route between Chatswood and Sydenham, encompassing the Project.

In accordance with the CEMF, further consultation with RAPs was undertaken in relation to this plan. A Register of Aboriginal Parties and responses from the RAPs are included in Appendix B.

A consultation log will be maintained for the project to detail any correspondence or ongoing consultation being undertaken with the RAPs (refer to Appendix B) as part of the requirements of this CHMP.

Consultation with the RAPs will also be required in regard to heritage interpretation which will be undertaken during detailed design (AH4) and during construction.

1.8.3 RAP participation during construction

RAPs would be given the opportunity to participate in any archaeological test or salvage excavations in regard to Aboriginal archaeology. Artefact Heritage would liaise with the RAPs to organise participation and scheduling of fieldwork.

RAPs would also be notified in the event of an unexpected find of an Aboriginal object in accordance with E25, or human remains that may be Aboriginal (in accordance with the Sydney Metro Project Exhumation Management Plan).

1.8.4 Heritage Working Group

The Sydney Metro Heritage Working Group will be kept updated on progress of the Project. Presentations by the heritage specialist and Excavation Directors would be provided when needed. The Heritage Working Group also provides a forum for ongoing consultation on detailed design with agencies and stakeholders.

1.8.5 NSW Heritage Council

A number of conditions of approval require consultation with NSW Heritage Council (or its delegate the Heritage Division). Outcomes of consultation with OEH as a delegate of the Council are included in Appendix A – Government Stakeholder Correspondence. Heritage Council will also be informed of project progress through attendance at the Heritage Working Group.

¹ Department of Environment and Conservation 2005

² Department of Environment, Climate Change and Water 2010

1.8.6 Public open days

Where significant archaeological remains that have educational value are uncovered a public open day may be required (E21). Although it is unlikely an open day will be required at Central Station its need will be confirmed by the Excavation Director, Laing O'Rourke and Metro.

2. Legal and Other Requirements

Table 2.1 below details the legislation and planning instruments considered during development of this Plan.

Table 2-1 Legislation and Planning Instruments

Legislation	Description	Relevance to this CHMP
<i>Environmental Planning and Assessment Act 1979</i>	This Act establishes a system of environmental planning and assessment of development proposals for the State.	The approval conditions and obligations are incorporated into this CHMP.
<i>Environment Protection and Biodiversity Conservation Act 1999 (Cwth)</i>	<p>The main purpose of this Act is to provide for the protection of the environment especially those aspects that are of national environmental importance and to promote ecological sustainable development.</p> <p>Heritage places are listed on the National Heritage List (NHL) for their 'outstanding heritage value to the nation' and are owned by a variety of constituents, including government agencies, organisations or individuals. Only items owned or controlled by the Commonwealth that meet the threshold for national heritage listing under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) are listed on the Commonwealth Heritage List (CHL) and/or the World Heritage List (WHL) and afforded protection under the EPBC Act.</p>	Not relevant as no NHL, CHL or WHL items
<i>National Parks and Wildlife Act 1974</i>	<p>The relevance of this Act is firstly in respect to the protection and preservation of aboriginal artefacts. Discovery of material on site suspected as being of aboriginal origin must be reported and protected pending assessment and direction by the Client's Representative.</p> <p>Secondly it is an offence under Part 8A of this Act to pick or harm threatened species. (Refer to the notes under the Threatened Species Conservation Act for more information)</p>	<p>Potential for impacts to Aboriginal Heritage Items has been identified for the Project. An Aboriginal heritage impact permit under section 90 of the <i>National Parks and Wildlife Act 1974</i> is not required for works approved under Part 5.1 of the EP&A Act.</p> <p>Management of Aboriginal heritage is outlined in Section 3.1 of this plan.</p>

Legislation	Description	Relevance to this CHMP
<i>Heritage Act 1977</i>	<p>This Act provides for the preservation and conservation of heritage items such as building, works, relic, places of historic interest, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance.</p> <p>It is an offence under this Act to wilfully and knowingly damage or destroy items of heritage value.</p> <p>Do not demolish, damage, move or develop around any place, building, work, relic, moveable object, precinct, or land that is the subject of an interim heritage order or listing on the State Heritage Register or heritage listing in a Local Environmental Plan without an approval from the Heritage Council (NSW) or local council.</p>	<p>Heritage Items are identified on the site and addressed as part of the CoA. An approval under Part 4, or an excavation permit under section 139, of the <i>Heritage Act 1977</i> is not required for works approved under Part 5.1 of the EP&A Act.</p> <p>Management of non-Aboriginal heritage is outlined in Sections 5.2 and 5.3 of this plan.</p>
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwth)</i>	<p>This Act provides for the preservation and protection from injury or desecration to areas and objects of particular significance to Aboriginals. Areas and objects can be protected by Ministerial Declaration and it is then an offence to contravene such a declaration.</p>	<p>No areas or objects within the Project have been identified as being subject to such a declaration and this Act is of little relevance to the project.</p>
<i>Coroners Act</i>	<p>This Act enables coroners to investigate certain kinds of deaths or suspected deaths in order to determine the identities of the deceased persons, the times and dates of their deaths and the manner and cause of their deaths.</p>	<p>This Act is relevant if Human Skeletal Remains are found within the former Devonshire Street Cemetery site.</p>

2.1 Guidelines

Additional guidelines and standards relating to the management of Aboriginal and historic cultural heritage include:

- Code of Practice for the archaeological investigation of Aboriginal objects in NSW (OEH 2010)
- Aboriginal cultural heritage consultation requirements for proponents 2010 (OEH 2010)
- Due Diligence Code of practice for protection of Aboriginal objects in NSW (OEH 2010)
- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2010)
- Guide to Aboriginal Heritage Impact Permit processes and decision making
- Assessing Heritage Significance (NSW Heritage Office 2001)
- Levels of Heritage Significance (NSW Heritage Office 2008)
- Assessing Significance for Historical Archaeological Sites and Relics (NSW Heritage Branch, Department of Planning 2009)
- Investigating Heritage Significance (NSW Heritage Office 2001)
- NSW Government's Aboriginal Participation in Construction Guidelines (2007).
- How to Prepare Archival Recording of Heritage Items (Heritage Branch 1998).
- Photographic Recording of Heritage Items Using Film or Digital Capture (Heritage Branch 2006).
- Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977

2.2 ISCA

The Project will pursue a rating under the IS Rating Scheme V1.2. This plan relates to several of the IS credits listed below:

2.2.1 ISCA Her-1

- *Measures to minimise adverse impacts to heritage during construction have been identified and implemented.*
- *Heritage aspects relevant to this credit must be managed, reviewed or audited by a suitably qualified professional. A suitably qualified professional is someone who has a formal cultural heritage qualification and minimum of five years' experience.*

2.2.2 ISCA Her-2

- *Monitoring of heritage is undertaken at appropriate intervals during construction*
- *Monitoring and modelling demonstrates enhancements to heritage values.*
- *Heritage aspects relevant to this credit must be managed, reviewed or audited by a suitably qualified professional. A suitably qualified professional is someone who has a formal cultural heritage qualification and minimum of five years' experience.*

2.3 LOR Severe Environmental Risks

LOR is committed to implementing necessary measures to negate severe environmental risks where possible and when relevant to a given project. A Severe Environmental Risk (SER) is an activity if not managed effectively; severe environmental impacts could eventuate, resulting in permanent or long-term damage to the environment that is not easily rectified. They would substantially alter the receiving environment and result in a significant impact on the project's and Laing O'Rourke's environmental policy and objectives. Each SER provides clear guidance on the requirements and control measures that when implemented are intended to manage these risks. They describe the critical controls that must be in place, demonstrated and working effectively such that severe environmental impacts are prevented. All SER's addressed in this management plan can be located in Appendix F which also details where they are addressed within this Management Plan.

3. Existing Environment

The existing environment and heritage context of the Project has been assessed in the following background reports prepared to support the Environmental Impact Statement (EIS) for the Project:

- Sydney Metro City and Southwest – Chatswood to Sydenham: Aboriginal Heritage Archaeological Assessment, prepared by Artefact Heritage (2016a)
- Sydney Metro City and Southwest – Chatswood to Sydenham: Non-Aboriginal Heritage Impact Assessment, prepared by Artefact Heritage (2016b).

Additional reports, which have been prepared for the project and have been used to support this management plan also include:

- Sydney Metro City and Southwest – Chatswood to Sydenham Historical Archaeological Assessment and Research Design by Artefact Heritage (2016c)
- Sydney Metro City and Southwest – Chatswood to Sydenham: Aboriginal Cultural Heritage Assessment Report (CHAR), prepared by Artefact Heritage (2016e)
- Central Walk Addendum Archaeological Research Design by Artefact Heritage (2017a)

These reports have been referenced to inform this management plan in regard to existing environment, heritage significance and archaeological potential.

3.1 Aboriginal Heritage

Artefact Heritage (2016a) undertook a heritage assessment of the Sydney Metro City and Southwest – Chatswood to Sydenham Project. No previously registered Aboriginal sites were located within the project

area at Central Station. Two AHIMS sites were identified approximately 600 metres to the north-west of the Project. These sites would not be impacted by the proposed works.

An assessment of Aboriginal archaeological potential at the Central Station site reported that:

The survivability of Aboriginal archaeological deposit on sites in inner Sydney depends largely on the extent and nature of subsequent phases of historical construction activities. Geotechnical information is available for the area around the proposed station box but not for Regent Street.

Geotechnical information indicates that an intact Quaternary sand layer is present beneath overlying layers of fill and disturbance in the vicinity of Platforms 14 and 15. This information indicates potential for significant intact sand deposits beneath those portions of the Central Station site.

Information relating to the survivability of natural ground surface beneath the Regent Street portion of the Central Station site is unknown (Artefact Heritage 2016a: 86).

The archaeological significance of any potential intact Aboriginal archaeological deposits has been described as high, due to the rarity of Aboriginal sites in the local area. Out of context Aboriginal artefacts which may be present in fill however would not be considered to be of high archaeological significance (Artefact Heritage 2016a: 87).

Previous Aboriginal archaeological excavations in the local area have identified Aboriginal artefacts in historical contexts where nineteenth or early twentieth century structures have been present. Historical buildings from these periods do not often involve significant ground disturbance during their construction. As such, historical archaeological remains from these periods often lie over original and intact pre-European ground surfaces, where Aboriginal archaeological resources may reside.

Geotechnical information indicated the possibility of intact Quaternary sand layers, especially in the vicinity of the Devonshire Street Tunnel, which may be artefact bearing.

3.2 Built Heritage

3.2.1 Heritage listings

Works for the Project are typically located within the SHR curtilage of the Sydney Terminal and Central Railway Stations Group (SHR 01255, also SLEP 2012 I 824 and RailCorp S170 register). Works for the Project will also directly affect the Metro Goldwyn Mayer building and interior (SLEP 2012 I 1470) adjacent to the Central Station site (20-28 Chalmers Street). Site sheds and amenities will also be located within the Mortuary Station siding, adjacent to Platform 0, until the main site compound can be constructed within the Sydney Yard as well as to support the construction of the CSR in the area. Mortuary Station is listed separately on the SHR (SHR 00157). A number of other heritage items are also located in the vicinity of the Project, namely the Railway Institute Building, the Dental Hospital (2-18 Chalmers Street), the former RC Henderson factory (11-13 Randle Street) and Belmore Park.

These heritage items and their registered listings are shown in **Table 3-1** below.

Table 3-1 Heritage Listed Items in and near the Project Area

Item	Listings	Significance
Central Railway Station	<ul style="list-style-type: none"> Sydney Terminal & Central Railway Stations Group (SHR 01255) 	State
	<ul style="list-style-type: none"> Central Railway Station Group (Sydney LEP 2012 I 824) 	
	<ul style="list-style-type: none"> Central Railway Station and Sydney Terminal Group (RailCorp Section 170 Register, SHI 4801296) 	

Item	Listings	Significance
Mortuary Station	<ul style="list-style-type: none"> Mortuary Railway Station (SHR 00157) Mortuary Railway Station (Sydney LEP 2012 I 194) Mortuary Railway Station and Gardens (RailCorp Section 170 Register, SHI 4803219) 	State
Metro Goldwyn Mayer building and interior	<ul style="list-style-type: none"> Metro Goldwyn Mayer building and interior (Sydney LEP 2012 I 1470) 	Local
Railway Institute Building	<ul style="list-style-type: none"> Railway Institute Building (SHR 01257) Former 'Railways Institute' building including fence and interior (Sydney LEP 2012 I 1472) 	State
Dental Hospital	<ul style="list-style-type: none"> Dental Hospital including interior (Sydney LEP 2012 I 1469) 	Local
RC Henderson Factory	<ul style="list-style-type: none"> Former RC Henderson Ltd factory including interiors (Sydney LEP 2012 I 2270) 	Local
Belmore Park	<ul style="list-style-type: none"> Belmore Park grounds, landscaping and bandstand (Sydney LEP 1825) 	Local

Central Railway Station

Central Station is the largest railway station and transport interchange in NSW and is of State significance for its historical, aesthetic, technical values and for its research potential. With its grand sandstone edifices and approaches it is a well-known landmark in Sydney.

The significance of Central Station is widely appreciated by the broad community for its sense of place and theatre; as an extraordinary place of work for employees past and present and their families; and by many specialist transport and heritage community groups.

The site contains the original Sydney Railway Company grant on which the first Sydney Station and yards were opened, in 1855, and so represents over 150 years of railway operations in the same place, making it the oldest and the longest continuously operated yard in Australia.

The Sydney Terminal precinct has a high level of historic significance associated with its early government and institutional uses, as well as being the site of Sydney's second major burial ground, the Devonshire Street cemetery.

The Project would impact a number of significant elements of the listing including platforms, canopies, archaeological remains and structures in the Sydney Yard as outlined in the NAHIA (Artefact Heritage 2016b) and the Non-Aboriginal Heritage Technical Information and the Historical Archaeological Assessment and Research Design – Central Walk Addendum contained respectively in Appendix E and Appendix F of the *Central Walk Modification Report*. There are also a number of moveable heritage items within the site which would be affected by works and will require protection and management.

In addition to impacts associated with approved works, a range of significant items and elements that are to be retained in the site are in close proximity to the works and will require protection. This includes platforms and canopies to be retained, the Main Terminal and Central Electric buildings and the remnant boundary fence in the Western Yard precinct that is adjacent to Platform 0 where temporary site shed will be located.

Finally, proposed works regarding the installation of a new booster assembly in the Eddy Avenue forecourt and installation of high-level piping and soffit level of the East Deck colonnade may have an

impact on heritage. The main consideration will be visual impacts and the removing of pavers for trenching and later reinstatement. Overall, the works are not considered to affect fabric of exceptional, high or moderate significance and in terms of physical impacts is therefore minor.

Mortuary Station

The former Mortuary Station is historically and socially significant as a physical reminder of former funeral customs in nineteenth century Australia, and of the central role in funeral services played by the railway. It would have been a place with memorably sad associations for many Sydney people over a long period. The building is aesthetically significant as a fine example of Gothic inspired design attributed to James Barnet, a style adopted for its religious associations in the construction of a funeral station. It is a rare surviving example of this building type in Australia.

Mortuary Station would not be directly impacted by the Project.

Metro Goldwyn Mayer building and interior

20-28 Chalmers Street, Surry Hills, the former Metro Goldwyn Mayor building now Bounce Hostel, provides evidence of the consolidation and dominance of American film interests in Australia during the 1930s and is one of three purpose designed head office and film exchange buildings constructed by major American film studios between 1933 and 1941 in the Surry Hills area. However, this level of significance has been diminished by modifications that have been undertaken to its interiors generally. Nevertheless, the original sections of the building façade demonstrate a relatively high standard of architectural quality and resolution and make a positive contribution to the streetscape and there are remnant significant elements internally, specifically within the entrance foyer.

The building has associations with the designers of the building, prominent and influential architectural firm of Robertson & Marks.

The Bounce Hostel would be demolished as part of the Approved Project as modified. Following the demolition of the building, the site would be used as a construction site to support the construction of the eastern entry and east concourse (via the unused Platforms 26/27 of the Eastern Suburbs Railway). On completion of the Project, the site would become the new Eastern Entry.

Railway Institute Building

The Railway Institute Building was constructed between 1891 and 1898 as a social and educational facility for railway employees. The stages of expansion which were undertaken in the first thirty years of its operation are evident on its exterior and are defined by architectural style and materials employed for each stage. The Railway Institute Building of 1891 incorporates many distinguishing characteristics of the Federation Anglo-Dutch style, such as red brickwork, Flemish gables, shallow pilasters, moulded bricks and picturesque massing. The 1898 section was constructed more simply, although brick type and detailing closely matched the earlier structure.

The building maintained its original function for most of the twentieth century before being vacated during the mid-1990s after which ensued a period of neglect. The building, formerly having a direct association with Central Station, is now in private ownership. It has been conserved and the interiors adapted as a series of office spaces and display areas for commercial use. The building retains its historic, aesthetic and representative social significance.

There is potential for indirect impacts to the setting Railway Institute Building associated with construction of new infrastructure (ventilation outlet) and temporary services gantry. Potential direct impacts are associated with vibration arising from the underbore to the Chalmers Street Substation below the Railway Institute Building and excavation works for the Project in general.

Dental Hospital

The Dental Hospital is a nine storey “wedge” shaped functionalist building located at the intersection of Chalmers, Elizabeth and Foveaux Streets. The original Dental Hospital on this site was built in 1910, but by the 1930s it could no longer meet demands. The new Dental Hospital was designed by Stephenson, Meldrum and Turner in 1937 and built by H. G. Whittle, incorporating the earlier buildings.

The Dental Hospital is significant for its long-standing function as a specialist health care facility and for its landmark aesthetic values associated with its dramatic wedge-shaped plan and clean geometric lines terminating an important city vista along Elizabeth Street.

The Project works will have an indirect impact on the setting of the building via demolition of the Bounce Hostel adjacent to it and construction of the new Eastern Entry. Potential direct impacts are associated with vibration arising from the demolition work and adjacent excavation activities within Chalmers Street and Randle Lane frontages.

Former RC Henderson Ltd Factory

The former RC Henderson Ltd factory was built in 1912 as a factory to manufacture ladies' hats. The building represents industrial development that occurred in Surry Hills during the early part of the twentieth century subsequent to construction of Central Station. Designed in the Federation Warehouse style, the building comprises face brick walls and fenestration that have survived largely intact, although the original loading bay doors and basement carpark entrance on Randle Lane have been removed or altered. The building has been adapted internally. The former RC Henderson factory is of local heritage significance for its historical, aesthetic and representative values.

The Project works will have an indirect impact on the setting of the building via demolition of the Bounce Hostel construction of the new Eastern Entry. Potential direct impacts are associated with vibration arising from the demolition work and excavation activities in its vicinity.

Belmore Park

Belmore Park is a late Victorian park with a variety of mature trees and an octagonal bandstand (1910). The form and layout of the park, including the curvilinear paths, dates from 1906 and 1917 and has changed relatively little since then.

Belmore Park would not be directly impacted by the Project.



Figure 3-1 Heritage curtilages

3.3 Non-Aboriginal Archaeology

3.3.1 Areas of Archaeological Potential within Central Station

Artefact Heritage (2016b and 2016c) have identified several areas of non-Aboriginal archaeological potential, as shown in **Figure 5.1**. More detail on historic background, archaeological potential and significance is provided in previous documents (2016b and 2016c).

Within the Central Station precinct, non-Aboriginal archaeological resources relating to the first and second stations (1855 and 1874) have the potential to remain. Variable levels of ground disturbance have likely impacted these archaeological remains to an uncertain extent.

Remains relating to the former Devonshire Street Cemetery, such as human remains, coffin furniture, incidental rubbish deposits and remains of walls and other structures may be present in association with any remnant sand profiles.

3.3.2 Areas of archaeological potential within the Eastern entry footprint

The site of 20-28 Chalmers Street is part of a grant of land made to Daniel Cooper that was formalised on 15 May 1830. Prior to the construction of Central Railway Station, the area that would become Chalmers Street contained the eastern portion of the Devonshire Street Cemetery.

The eastern boundary of the cemetery was formed by dense residential development lining a street called Railway Place, part of a triangle of streets and lanes to the west of Randle Street. The area was resumed under the provisions of the *Public Works Act of 1900* and the *City Railway Extension (Devonshire Street) Act of 1900*.

In c.1948, after the Second World War, the portion of Chalmers Street adjacent to Central Railway Station was excavated for the construction of the Eastern Suburbs Line underground platforms 24-27. This work would have removed archaeological remains of the former Railway Place residences immediately adjacent to Central Station. It is unclear from historical images if the excavation removed the entirety of the present-day Chalmers Street road corridor, and photographs seem to indicate that a narrow portion of the road remained open. It is therefore possible a narrow strip of archaeology in the frontage of the buildings on Chalmers Street remains intact including within the site of the Bounce Hostel.

The archaeological remains of the former Railway Place residences have the potential to provide information relating to the early development of Surry Hills, as an urbanised suburb near the first and second railway stations and the centre of the city of Sydney. The analysis of remains would provide information related to the preferences and socio-economic standing of the occupants of Railway Place, traditionally considered to have been a 'working-class' area. The archaeological remains of the former Railway Place residences would have local significance under Criteria A and E (Assessing Significance for Historical Archaeological Sites and Relics, Heritage Branch, 2009).

4. Construction Aspects and Impacts

Impacts of the Project are described in Table 4 1, Table 4 2 and the Risk Register in Appendix C of the CEMP. Management measures to address these identified risks are included in Section 5.

Table 4-1 Aboriginal Heritage – Aspects and Impacts

Activity	Aspect/s	Impact/s
The shortening of platforms 8 to 11 at the northern end and a corresponding lengthening at the southern end	Excavation, vibration	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects.
Demolition of platforms 13 to 15 and re-instatement of platforms 13 to 14 to accommodate the construction of the new metro station	Excavation, piling, cutting and filling	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects.
Station excavation requiring the removal of approximately 230,000 cubic metres of spoil	Excavation, vibration, piling	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects.
Demolition of the 'Bounce Hotel' and construction of the new Eastern pedestrian portal	Excavation, vibration, cutting and filling, construction of buildings	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects
Construction of the Eastern pedestrian portal, Eastern Concourse and related station access arrangements to existing stations	Construction of buildings	Impacts expected during excavation phase
Construction and use of compound sites and laydown areas	Excavation, vibration, cutting and filling, construction of buildings	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects.
Utilities and drainage works	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing.	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects.
Adjustments to track, signalling, security and signage as a result of the Project	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects.
Installation of drainage lines and extension of utilities/services	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Finding/disturbance to and/or destruction of unexpected burials, human remains or other Aboriginal objects.
Temporary works	Pedestrian control, installation of hoarding, fencing and other temporary works	Impacts unlikely

Table 4-2: Built heritage – Aspects and Impacts

Activity	Aspect/s	Impact/s
The shortening of platforms 8 to 11 at the northern end and a corresponding lengthening at the southern end	Excavation, vibration, demolition	Removal of significant fabric (platforms, awnings and associated finishes and structure assessed to have Moderate significance)
Adjustments to tracks 9 to 15 comprising shortening (tracks 9 to 11), partial demolition (tracks 12 to 14) and demolition (track 15)		Potential vibration impacts to retained significant fabric
Demolition of platforms 13 to 15 and reinstatement of platforms 13 to 14 to accommodate the construction of the new Metro Station	Demolition, excavation, piling, cutting and filling	Removal of significant fabric (platforms, awnings and associated finishes and structure assessed to have Moderate significance, station signage, clocks, retaining wall penetrations etc.) Potential vibration impacts to retained significant fabric Visual impacts to Central Railway Station Group
Station excavation requiring the removal of approximately 230,000 cubic metres of spoil, demolition of the Rolling Stock Officers' Building and associated Garden and the Cleaners' Amenities Building.	Demolition, excavation, vibration, piling	Removal of significant fabric of High and Moderate significance Relocation of Shunter's Hut (Moderate significance) Relocation of items of moveable / industrial heritage Potential vibration impacts to retained significant fabric, including beyond the SHR curtilage Visual impacts to Central Railway Station Group
Demolition of the former Metro Goldwyn Mayer building, now 'Bounce Hostel'	Demolition, excavation, vibration, cutting and filling	Removal of a heritage item of local significance Potential vibration impact to adjacent heritage items in the vicinity e.g. Dental Hospital and former RC Henderson factory Visual impact in the streetscape

Activity	Aspect/s	Impact/s
Construction of the Eastern pedestrian portal, Central Walk and related station access arrangements to existing stations	Construction of buildings	<p>Visual impacts to Central Railway Station Group and streetscape, with consideration for adjacent heritage items</p> <p>Potential vibration impacts to retained significant fabric, including beyond the SHR curtilage</p> <p>Alterations to elements of the Suburban Platforms, including stairs and balustrades, platforms and paving and localised alteration of canopies for new vertical transport (fabric of Moderate and High significance)</p> <p>Relationship of new items and elements with existing heritage items, both within and beyond the SHR curtilage</p> <p>Work in the vicinity of items of moveable heritage e.g. in ESR Concourse</p>
Construction of new canopy between Central Electric and the northern end of Platforms 8 to 14	Construction activities	<p>Alteration of visual relationships; relationship of new items and elements with existing heritage items</p> <p>Potential vibration impacts to retained significant fabric</p>
Construction of void in North Concourse and extension of the Intercity Concourse	Construction activities, vibration and cutting	<p>Removal of fabric of Moderate significance (paving and tiling)</p> <p>Alteration of visual / functional relationships</p> <p>Potential vibration impacts to retained significant fabric</p>
Adjustments to Devonshire Street tunnel	Construction activities	Minor alterations that would not affect retention and continued operation of the tunnel, which is of High significance.
Adjustments to subway passage system	Construction activities	Permanent alteration / closure of some routes and associated removal of significant fabric (Moderate / High significance)
Construction and use of compound sites and laydown areas	Excavation, vibration, cutting and filling, construction of buildings	<p>Temporary visual impacts to Central Railway Station Group</p> <p>Risk of damage to significant fabric e.g. western boundary fence</p> <p>Potential vibration impacts to retained significant fabric</p>

Activity	Aspect/s	Impact/s
Utilities and drainage works	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Temporary visual impacts to Central Railway Station Group Potential vibration impacts to retained significant fabric
Adjustments to track, signalling, security and signage as a result of the Project	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Temporary visual impacts to Central Railway Station Group Potential vibration impacts to retained significant fabric
Installation of drainage lines and extension of utilities services	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Temporary visual impacts to Central Railway Station Group Potential vibration impacts to retained significant fabric
Temporary works	Pedestrian control and access, installation of hoarding, fencing and other temporary works	Temporary visual impacts to Central Railway Station Group Resolution of junctions with retained significant fabric

Table 4-3 Non-Aboriginal Archaeology– Aspects and Impacts

Activity	Aspect/s	Impact/s
The shortening of platforms 9 to 11 at the northern end and a corresponding lengthening at the southern end	Excavation, vibration, demolition	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local or State significance
Demolition of platforms 13 to 15 and re-instatement of platforms 13 to 14 to accommodate the construction of the new metro station	Excavation, piling, cutting and filling	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local or State significance
Station excavation requiring the removal of approximately 230,000 cubic metres of spoil	Excavation, vibration, piling	Disturbance to and/or destruction of non-Aboriginal archaeological deposits (potentially human remains) of State significance
Demolition of the 'Bounce Hotel' and construction of the new Eastern pedestrian portal	Excavation, vibration, cutting and filling, construction of buildings	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance
Construction of the eastern pedestrian portal, eastern concourse and related station access arrangements to existing stations	Construction of buildings	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local or State significance associated with former phases of Central Station.
Construction and use of compound sites and laydown areas	Excavation, vibration, cutting and filling, construction of buildings	Finding/disturbance to and/or destruction of unexpected burials, human remains or other non-Aboriginal archaeological remains Visual impacts to Central Railway Station Group

Activity	Aspect/s	Impact/s
Utilities and drainage works	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing.	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local or State significance associated with former phases of Central Station.
Adjustments to track, signalling, security and signage as a result of the Project	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local or State significance associated with former phases of Central Station.
Installation of drainage lines and extension of utilities services	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local or State significance associated with former phases of Central Station.
Temporary works	Pedestrian control, installation of hoarding, fencing and other temporary works	Visual impacts to Central Railway Station Group

5. Management Measures

This Section describes the overall approach and principles associated with managing and mitigating Aboriginal and non-Aboriginal cultural heritage risks of the Project. The management measures are based on the mitigation measures compiled from the relevant requirements of the Project Approval as modified, Revised Environmental Mitigation Measures (REMMs), requirements from the Design and Construction Deed, Scope of Works and Technical Criteria (SWTC), relevant elements of TfNSW's Construction Environmental Management Framework and the requirements and standards of Laing O'Rourke.

The actions that Laing O'Rourke undertakes to fulfil the consent conditions are summarised in Table 5.2, Table 5.3 and Table 5.4. These actions have been categorised into:

- Monitoring
- Management; and
- Incident Response.

The following sections discuss management measures as required under the Conditions of Approval, REMMS, SWTC and other relevant Metro documents which are referenced in text.

5.1 Aboriginal archaeological management

5.1.1 Cultural Heritage Assessment Report

A Cultural Heritage Assessment Report (CHAR) was prepared by Artefact Heritage (2016e) as part of the PIR which forms part of the Approved Project as modified. Comprehensive Aboriginal consultation was undertaken as part of the preparation of the CHAR, including an AFG meeting. All RAPs who responded through consultation were in support of the proposed archaeological management methodology included in the CHAR.

The CHAR outlined an archaeological management and response methodology for test and salvage excavation, triggers for stages investigation, approach to methodology and reporting. The CHAR also

addressed the relationship between Aboriginal archaeological and non-Aboriginal archaeological management. The CHAR would be implemented in accordance with REMM AH2.

5.1.2 Excavation Director

The nominated Aboriginal Archaeology Excavation Director is Dr Iain Stuart of Artefact Heritage. Iain has twenty-five years' experience in heritage management and archaeology across South-Eastern Australia.

5.1.3 Archaeological Method Statement

An AMS in accordance with the excavation methodology outlined in the CHAR has been prepared for the following areas:

- Early Works- Piling and Excavation, May 2018
- Metro Box and Sydney Yard August 2018
- Project Wide Aboriginal AMS, September 2018
- Central Walk, September 2019
- Project Wide CSR, September 2019
- Eddy Avenue Fire Booster, September 2020.

No works have commenced prior to approval of the appropriate AMS.

Each AMS would include specific excavation requirements in regard to Aboriginal archaeology such as RAP participation, required plant and sieving strategy as required. The methodology would be in adherence to the approved overarching methodology outlined in the CHAR.

5.1.4 Archaeological excavations

Required test or salvage excavation would be completed under the direction of the Aboriginal archaeological Excavation Director in accordance with E24, REMM AH3 and the approved CHAR.

Where there is a notification by the Primary Excavation Director that potential intact soil profiles, or Aboriginal objects, have been identified during historical archaeological investigations, and where this is confirmed by the Aboriginal archaeological Excavation Director, or in the case on an unexpected find of an Aboriginal object, Stage 1 archaeological salvage excavation (testing) will be required (CHAR pg. 44).

Stage 2 (salvage) excavation may be required if there is:

- Identification of Aboriginal artefact(s) during Stage 1 excavation.
- Identification of rare or significant artefacts, features or site type.
- Identification by the Aboriginal archaeological ED of Aboriginal artefacts in contexts that may provide significant information on site formation, including the potential extracting samples suitable for dating.

Where Aboriginal objects are located in historical archaeological contexts, Stage 1 excavation would form part of the historical archaeology program, and the excavation methodology would be guided by the AMS prepared for that worksite.

Where historical archaeological contexts are encountered during controlled Stage 1 excavation, the Primary Excavation Director would be consulted on any requirements for an alteration to methodology to account for impacts to historical archaeological remains.

It is assumed that Aboriginal archaeological testing would occur within known natural sand deposits within the Metro station box and that archaeological excavation in any other areas, such as the Sydney Yard or the former Metro Goldwyn Mayer building would be triggered by the above process.

Aboriginal archaeological test and salvage excavation would be undertaken in consultation with the RAPs.

5.1.5 Artefact analysis and storage

Any recovered artefacts would be analysed in accordance with standard Artefact Heritage methodology for assemblages within the Greater Sydney region.

Aboriginal objects would be stored either on site or at the Sydney Metro storage facility at Rosebery. In any instance, the artefacts would be stored in a lockable cupboard or safe with all labelling and bags intact.

RAPs would be consulted regarding the storage and final management of Aboriginal objects. This may include reburial, use in interpretation or a control agreement through OEH for a permanent keeping place, for example with one of the RAP groups.

5.1.6 Human remains

If suspected human remains are identified, the Sydney Metro Exhumation Management Plan would be implemented in accordance with E26 and E27.

The Sydney Metro Exhumation Management Plan has been prepared in consultation with NSW Heritage Division and the NSW Health Department in accordance with NAH3. The plan is in accordance with the *Guidelines for Management of Human Skeletal Remains* (NSW Heritage Office, 1998b) and NSW Health Policy Directive – Exhumation of human remains (December 2013). A project specific Exhumation Management Plan is not required to be developed.

Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, principal contractor, project archaeologist and Sydney Metro Environmental Representative. The Sydney Metro Exhumation Management Plan will be enacted. Preliminary notification to the NSW Police will be undertaken by the Environmental Representative.

Once confirmation is received from the technical specialist that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan.

No works to recommence until clearance is provided by OEH and/or the NSW Police as per the Sydney Metro Exhumation Management Plan

5.1.7 Unexpected finds

Following the discovery of new finds of Aboriginal objects – works will cease in the immediate area and the area secured. In accordance with E23 avoidance would be considered.

Assessment of the site/object and subsequent management of the site will be carried out in accordance with the Sydney Metro Unexpected Finds Procedure. The use of the Sydney Metro Unexpected Finds Procedure would satisfy the requirement in E25 to include measures to manage an unexpected find in the CHMP.

All new sites will be recorded on standard AHIMS site cards and lodged with OEH in accordance with E25.

5.1.8 Clearance

A written clearance confirmation would be provided by the Aboriginal Archaeological Excavation Director to LORA once Aboriginal archaeological management has been completed in an area. This would be signed off by Metro before works commenced. Construction would continue under the Unexpected Finds Procedure.

5.1.9 Reporting

Upon completion of any unexpected finds reporting and required mitigation measures, post excavation reporting in accordance with the OEH Aboriginal requirements will be undertaken within two years of the completion of the project. The post-excavation report to be prepared by the Aboriginal archaeologist in consultation with the RAPs. RAPs would review the draft report prior to finalisation.

5.2 Built Heritage Management

5.2.1 General

A key aspect of heritage management at this site is the understanding of its historical development in stages, broadly described as:

- the original Sydney Station 1855 (known as Redfern) in the area south of Devonshire Street and with the Cleveland Street overbridge originally built as part of the single track Main Suburban Line
- the second station 1874 designed by Whitton in the same location as the first, with northern frontage to Devonshire Street
- original construction of the present Central Station in 1906 comprising the Main Concourse and associated platforms, Booking Hall, Waiting Rooms, Dining and Refreshment Rooms, Cloak Room and Barbers Saloon and by 1921 including the western wing and clock tower
- Central Electric Station completed in 1926, including Central Electric Building, suburban platforms, Chalmers Street entrance and Elizabeth Street viaduct and extension of the Devonshire Street tunnel.

The first three phases described above represent the steam era, with the electric era introduced through Bradfield's design in the 1920s. The Metro Project is a major infrastructure project representing the next stage of development at Central.

OCP Architects are nominated heritage specialists for the Project and will provide advice on management and mitigation strategies to the project team throughout the course of the work. Measures will be applied both within the CSMW site, and also to adjacent areas that have the potential to be affected by the work.

The management of built heritage at Central Station will in the first instance be guided by the requirements of the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter)*, 2013, which provides a best practice standard for managing places of cultural heritage. In conjunction with this, the assessments and policies of the Central Station CMP (June 2013) will be followed, including for preparation of Heritage Impact Assessments as required.

Detailed site investigations will be undertaken in relevant areas affected by the Project Works and heritage advice will be developed via a series of Conservation Actions Schedules (CAS) to address specific actions and elements, including demolition/deconstruction, junctures and edges and interfaces with heritage fabric to be retained. Refer sample / template CAS provided at Appendix D.

Conservation Actions Schedules will be prepared in accordance with the contractor's program for works as shown below:

- The contractor's program will be developed to identify when impacts within the approved scope will occur.
- The contractor will notify OCP Architects within an adequate timeframe prior to programmed impacts to enable preparation of CAS.
- OCP Architects will prepare CAS for review by Sydney Metro and other authorities as required.
- CAS will be issued to the contractor prior to works proceeding.
- Relevant witness points will be established to monitor implementation of recommendations that will be identified in the CAS.

OCP Architects will be involved with coordination with relevant stakeholders, including via attendance at regular meetings to contribute to the detailed resolution of matters relating to significant heritage fabric. Part of this process will be attendance at meetings with the Heritage Working Group, comprising various stakeholders, to review and comment on heritage components of the design and construction at monthly intervals throughout Design Stages 1 to 3. Such coordination meetings will provide a forum for identifying current heritage issues that will be required to guide works.

5.2.2 Design Requirements

Design requirements are outside the scope of this CHMP but should follow conditions E10 for avoidance of impacts and E100 and E101 in regard to the Design Review Panel as well as requirements of the SWTC.

OCP Architects and John McAslan Architects as nominated heritage specialists will work with the design team throughout each stage of the Project regarding placement and design of new buildings and structures in proximity to significant buildings and other structures to be retained, or within significant spaces or vistas and provide advice and guidance to minimise heritage impact.

5.2.3 Heritage Specialist

Work at Central Station will be carried out with the oversight of heritage specialists in accordance with REMM NAH18. OCP Architects will manage requirements of the CoA and this CHMP in regard to built heritage.

5.2.4 Management of vibration impacts to elements of Central Station Railway Group

Indirect impacts, including vibration impacts, to elements not approved for impact under the SSI must be avoided (E10).

A detailed Construction Noise and Vibration Management Plan has been prepared by ERM. Where potential vibration impacts are identified via testing by the specialist consultants, vibration monitoring would be undertaken in accordance with the plan to minimise impacts. In relation to heritage fabric, the nominated heritage specialist will provide advice on methods and location for installing vibration monitoring equipment. Avoidance of indirect impacts will be dealt with in the project's heritage induction (refer Section 5.4).

5.2.5 Demolition and Deconstruction

In accordance with NAH4 a demolition methodology would be prepared by Laing O'Rourke in consultation with OCP Architects to minimise impacts to adjacent heritage items. All demolition and deconstruction works will be carried out under the guidance and instruction of the heritage specialist and structural engineer and in accordance with a methodology developed via Conservation Action Schedule to:

- outline methodology of conducting demolition and deconstruction activities consistent with the principles of the Burra Charter
- ensure that demolition and deconstruction works do not result in irreversible damage to adjacent fabric to be retained
- ensure retention, preservation and conservation of nominated removed elements and materials for salvage and storage for future reinstatement or reuse.

5.2.6 Adaptive Reuse

Development and implementation of a strategy for appropriate adaptive reuse of retained heritage buildings and elements will be prepared prior to commencement of construction on these elements. The strategy would be prepared in accordance with the SWTC Appendix B6 Heritage Conservation Works Specification found in Appendix E. John McAslan Architects as the nominated heritage specialist will provide heritage advice and guidance in developing appropriate adaptive reuse proposals for retained heritage buildings and elements in consultation with OCP Architects and the Design Team.

5.2.7 Retention and Protection of Significant Fabric & Management of Incidental Impacts

All items and elements not approved for impacts under the SSI will be protected (E10). This protection applies to incidental direct impacts and extends to items beyond the SHR curtilage that are in the vicinity of works and have the potential to be affected by it. At minimum all structure and fabric to be retained in the vicinity of works would be physically protected by appropriate wrapping, hoarding and/or barriers and would be made known to contactors in their induction (refer Section 5.4). The nominated heritage specialist will provide advice on protection methodologies with consideration for mitigating and minimising impact on the retained significant fabric, which is described further below.

A key measure to guide the protection of retained heritage items, fabric and elements will be the development of a series of Conservation Actions Schedules (CAS) to detail appropriate conservation actions for individual elements with consideration for the assessment of cultural significance and conservation policies as contained in the *Central Station CMP*, June 2013 (refer to Appendix D for an

example CAS). The CAS process is being adopted for this project and will address all requirements for protection of significant elements of the site prior to works commencing (temporary protection). This process is described below.

In the first instance, a CAS for temporary protection of elements will be prepared to provide the early framework for protection of heritage elements within and around the project footprint. This framework, to be implemented by all contractors involved, will provide a basis for such factors as protection equipment and methodologies according to structure and/or material type with consideration for their location in relation to works, the nature of works that will occur and the potential impacts. Supplementary CAS will enhance conservation and protection outcomes and will be prepared to address such elements as canopy junctures and platform edges, as well as wall, roof and floor/paving junctures.

It is noted that all fabric of significance, ranging from Little to Exceptional as assessed in the *Central Station CMP*, June 2013 and supplemented by further assessment as relevant, that has not been identified for removal under the SSI approval must be protected from potential damage, regardless of its individual significance level, to protect all components that form the integrity of significant elements, buildings, structures and features of the site within the SHR listed curtilage.

For heritage elements to be retained generally, including buildings, structures, fabric, spaces and vistas, a detailed inventory will be prepared in accordance with SWTC Appendix B06 by the heritage specialist that identifies its assessed significance and its consequent tolerance for change and recommendations for conservation relevant to this heritage significance. A scope of conservation and repair work based on best practice conservation techniques, traditional materials and appropriate cleaning methodologies will be developed for implementation subsequently.

5.2.8 Salvage of Significant Fabric

Salvage and recycling of significant fabric is required in accordance with E15 and the Sydney Metro Heritage Salvage and Storage Policy. A preliminary Salvage Register for Central Station has been prepared as attached to the SWTC Appendix B06. Metro has undertaken consultation with the Heritage Division in regard to the Salvage Register in accordance with E15.

There may be opportunities to refine inclusions on the Salvage Register based on the reasons for salvage and likely opportunities for reuse. The Salvage Register will be updated as works progress in consultation with Sydney Metro and Sydney Trains Heritage; and will include consultation with the Heritage Division for state significant items as relevant (as per E15). Updated versions of the Salvage Register will be issued to the ER and Sydney Metro for endorsement.

All items salvaged will be safely transported and stored with appropriate protection and catalogued in accordance with the Heritage Salvage and Storage Policy. Elements may be retained for use in repairs of remaining canopies wherever possible. The final repository for storage of salvaged material will be determined by Sydney Metro in consultation with the City of Sydney Council in accordance with E15.

Salvaged fabric will be considered for use in heritage interpretation installations or design under E21 and may be used in the final design of stations under E101. It is also anticipated that there will be opportunities to reuse surplus salvaged fabric in other railway stations.

If additional impacts are proposed outside the area surveyed for the salvage schedule, advice should be sought from the heritage specialist on the necessity to salvage additional items in consultation with Metro subsequent to further heritage impact assessment and subject to relevant approvals.

5.2.9 Items of Moveable and Industrial Heritage

There are a number of items of moveable and industrial heritage located within the Project area. Many of these items are presently located in the Cleaners' Amenities Building, however there are also items within the former Rolling Stock Officer's Building, on Platforms and within the Eastern Suburbs Concourse. Items of moveable and industrial heritage within the Project area are identified below.

Present Location	Item
------------------	------

Cleaners' Amenities Building	<ul style="list-style-type: none"> early 20th Century specialised vacuum and steam cleaning equipment used for the cleaning of carriages workshop items (lockers, tools etc.) mirrors Bundy clocks notice boards old carriage seats, bench seat and station seats
Rolling Stock Officer's Building	<ul style="list-style-type: none"> light fittings canvas stretcher
Platforms	<ul style="list-style-type: none"> original station signage station clocks and brackets
Eastern Suburbs Concourse	<ul style="list-style-type: none"> war memorial honour boards

The approved scope of works to demolish the buildings within the Sydney Yards and modify platforms means that some items of moveable and industrial heritage will be permanently relocated. The items in these areas have already been recorded in the preliminary salvage schedule as attached to the SWTC Appendix B06 and have been tagged for salvage. Any additional items noted during detailed site inspections will be managed similarly, noting that a comprehensive survey for movable heritage, fixtures and fittings at Central Station generally has not been undertaken to date.

Affected items of moveable and industrial heritage will be salvaged in accordance with the Sydney Metro Heritage Salvage and Storage Policy, with items to be safely transported, stored with appropriate protection and catalogued at Metro's offsite facility at locations to be determined by Sydney Metro in consultation with the City of Sydney Council. Opportunities will be sought for reuse of items within the Central Station site, including potential use of items as part of interpretation as required by E21.

The war memorial honour boards in the Eastern Suburbs Concourse are not located within the Project works area, however, are located in the vicinity of the new Eastern Concourse, which will require significant excavation and construction activities. To avoid impact to these, the boards will be protected. If removal is required, it will be limited to the boards that are located immediately adjacent to the works. Sydney Metro will consult with Sydney Trains and stakeholders to arrange for the alternative temporary display or storage locations prior to removal. All boards will be returned to their current location on completion of the works.

5.2.10 Building Condition Surveys and Archival Photographic Recording

In accordance with E59, before commencement of construction, all property owners of buildings identified as being at risk of damage will be offered a building condition survey. Where an offer is accepted a structural engineer will be engaged to undertake the survey. The results of the surveys must be documented in a Building Condition Survey Report for each building surveyed. Copies of Building Condition Survey Reports must be provided to the owners of the buildings surveyed, and if agreed by the owner, the Relevant Council within three (3) weeks of completing the Survey Report and no later than one (1) month before the commencement of construction. While this condition is not limited to properties of heritage significance, this opportunity will be offered to owners of the following neighbouring properties at minimum:

- Railway Institute Building
- Dental Hospital
- Former RC Henderson Ltd Factory

In accordance with E13 and NAH1 a Heritage Archival Recording Report must be prepared. E13 states in relation to CSMW that recording of the following elements at Central Station is required:

E13 (d) the Rolling Stock Officers' Garden, Rolling Stock Officers' Building and Cleaners' Amenities Building in Sydney Yard and any other component of Sydney Terminal and Central Railway Stations group to be removed or altered.

E13 (f) former Metro Goldwyn Mayer building including interior, 22-28 Chalmers Street, Surry Hills.

Archival photographic recording would be undertaken according to the methodologies of the following documents as specified in E13:

- NSW Heritage Council guideline “Photographic Recording of Heritage Items Using Film or Digital Capture” (2006); and
- NSW Heritage Office publication “How to Prepare Archival Records of Heritage Items” (1998).

Archival recording required for the project area included but is not limited to:

- Intercity Platforms and canopies 12-15, to be removed for the Metro Station box
- Sections of the canopies to Intercity Platforms 11-14 to be removed and replaced with new canopies
- Sections of the canopies to Suburban Platforms 16-23 to be altered to accommodate new vertical transportation and other services
- Suburban Platforms 16-23, to be regraded and new finishes and services installed
- The existing canopy over the Intercity Concourse, to be removed and replaced
- Sections of subway passage tunnels to be removed for the Metro Station box
- Sydney Yard Garden (as defined in the CMP), to be removed
- Rolling Stock Officers’ Building and Garden, to be removed
- Cleaners’ Amenities Building, to be removed
- Original connecting stairs from the Grand Concourse to the North Concourse
- ‘Entrance to City Railway’ signage, if required to be relocated
- Former MGM Building located at 20-28 Chalmers St (interior and exterior), to be removed.

Sydney Metro have prepared the archival photographic recording for Central Station. Any remaining archival photographic recording, including any archival recording required for additional impacts as a result of detailed design requirements or changes in scope, will be undertaken by heritage specialists from OCP Architects.

The Heritage Archival Recording Report for CSMW will be prepared and submitted to relevant parties as nominated in the conditions of consent within two years of completing the archival recording (E13).

An external photographic record of all structures or buildings to be demolished within the CSMW project area that are not included in the formal archival recording above will be undertaken in accordance with E14. This would include structures that do not have heritage significance in their own right as the condition related to Council standards for recording of demolished items in the City of Sydney.

The Environmental Manager and ER will review the archival recording as complete and record this in the Compliance Tracking Report.

5.2.11 Archival Measured Drawings

Measured drawings will be prepared by OCP Architects for all significant buildings and elements to be removed (including buildings listed on the Sydney LEP 2012 as items of Local significance), including:

- Former MGM Building located at 20-28 Chalmers St
- Rolling Stock Officers’ Building; and
- Cleaners’ Amenities Building.

Drawings will be prepared in accordance with the NSW Heritage Division of the Department of Environment and Heritage guidelines *How to Prepare Archival Records of Heritage Items*.

The Environmental Manager, the Sydney Metro and ER will review the archival recording as complete and record this in the Compliance Tracking Report.

5.2.12 Recording of Views and Visual Relationships

The major works for the Project, specifically the Metro Station Works and Central Walk Works, occur primarily underground, with localised connections to the existing station infrastructure above via such measures as vertical transport connections. Nevertheless, there will be areas within the site and surrounding areas where visual relationships will be altered as a result of the works. This includes the following areas:

- approach to northern entrance from Eddy Avenue
- remodelling of Intercity Platforms 8/9 and 10/11
- removal of Platforms 13 to 15
- subsequent reinstatement of Platforms 13 and 14 and new canopies, including over Platform 12
- internal views within the site associated with new work e.g. new canopy between Central Electric and north end of nominated platforms, new void in north concourse, general visual relationships with the Grand Concourse and surrounds
- demolition of nominated buildings in Sydney Yards (Rolling Stock Officers' & Cleaners' Amenities)
- demolition of the former MGM Building and construction of new Eastern Entry
- temporary visual impacts during construction.

The Metro Project is a major infrastructure project representing the next stage of development at Central. As such, it is important that the site be recorded in its current arrangement before these major changes occur, which will occur via archival photographic recording.

The majority of views nominated above would be recorded as part of recording the context for the items and elements identified in Section 5.2.10. Once Metro have confirmed the extent of recording undertaken to date, any remaining recording of views and vistas will be undertaken by OCP Architects prior to any works proceeding in the nominated areas. Temporary visual impacts can be managed in the design of hoardings via inclusion of temporary interpretation and Project information (E21).

5.2.13 Heritage Interpretation

A broad Heritage Interpretation Strategy has been prepared for Sydney Metro City & Southwest by Metro (February 2018). This document provides an overarching framework to guide preparation of a Heritage Interpretation Plan (HIP) for Central Station in accordance with E21 which would include measures for consulting with the design team and reviewing appropriate Aboriginal and historical interpretive themes. The HIP to be prepared for Central Station will also be consistent with the Central Station Conservation Management Plan (Rappoport and Government Architects Office 2013) in accordance with REMM NAH9 and will be developed in accordance with Heritage Division and Heritage Council guidelines *Interpreting Heritage Places and Items: Guidelines* (August 2005) *Heritage Interpretation Policy* (August 2005).

It is noted that development of the interpretation for the whole of Central Station is a major exercise that would involve research, identification of a wide range of historic themes and heritage values, identification of potential options for interpretation, preliminary consideration for the location and type of interpretive media and extensive liaison with a large number of stakeholders who would need to agree to the strategy to facilitate development of the Heritage Interpretation Plan. It is therefore proposed that interpretation be developed in a staged manner. This approach is complementary to the design process, which is ongoing, and allows for heritage interpretation to be incorporated in the design in accordance with the Heritage Division and Heritage Council guidelines referred to above.

A site-specific Heritage Interpretation Strategy for Central Station and surrounds will be prepared based on historic research, development of themes, identifying potential audiences and possible media formats for use in conjunction with a future Heritage Interpretation Plan. This strategy will be prepared by OCP Architects with input for Aboriginal heritage interpretation provided by Artefact in consultation with the RAPs

and in accordance with REMM AH4. Woods Bagot would be involved in the preparation of the strategy as it must inform the Station Design and Precinct Plan referred to in E101. Consultation with the NSW Heritage Council, City of Sydney Council, Sydney Trains Heritage and the RAPs would be undertaken before finalisation of the Heritage Interpretation Plan and its ultimate implementation in accordance with condition E21.

5.2.14 SHR listing update

Prior to completion of the Project, an updated listing nomination form for the *Sydney Terminal and Central Railway Stations Group* will be prepared in consultation with all relevant stakeholders including the Heritage Division under the authority of the Heritage Council of NSW. The updated listing will address the following at minimum:

- Identification of new use of the site for Sydney Metro in conjunction with historic use.
- Update statements of significance for the existing identified precincts within Central Station that are affected by the Sydney Metro, Central Station Main Works, namely Precinct 3 – Sydney Terminal, Precinct 4 – Sydney Yards and Precinct 5 – Central Electric.
- Update individual sub-statements of significance for SHR criteria (a) to (g) based on changes to the site that have occurred in association with the Sydney Metro, Central Station Main Works.
- Update physical descriptions in the areas where changes associated with the new work for the Sydney Metro, Central Station Main Works have occurred only within Precinct 3 – Sydney Terminal, Precinct 4 – Sydney Yards and Precinct 5 – Central Electric.
- Revise gradings of significance for individual elements that are altered as a result of the Sydney Metro, Central Station Main Works.
- Update archaeological potential of the site based on archaeological program implemented in association with the Sydney Metro, Central Station Main Works.
- Update recent history based on changes to the site that have occurred in association with the Sydney Metro, Central Station Main Works.
- Update historic themes as relevant.
- Archaeology would be included in the listing update

5.3 Non-Aboriginal Archaeological Management

5.3.1 Archaeological Zoning

The AARD and addendum Central Walk AARD divided the project into archaeological management zones based on archaeological potential and construction impacts. These management zones are the high-level framework on which site specific archaeological management documents are based.

Archaeological management zone mapping in Figure 5.1 is based on a 'traffic light' coding:

- **Red (Zone 1):** Direct impact to significant archaeology. Archaeological investigation required prior to any construction impacts (bulk excavation etc.).
- **Amber (Zone 2):** Potential impact to significant archaeology. Prepare Work Stage Specific Archaeological Method Statement (AMS) once construction methodology and impacts are known. Archaeological investigation is likely required.
- **Green (Zone 3):** Unlikely to contain significant archaeology. Construction to proceed with unexpected finds procedure as nil-low potential for significant archaeological remains.

Table 5-1 Archaeological Management zoning relating to the Project (Artefact Heritage 2016c).

Site Code	Potential archaeology	Impact	Management zone	Mitigation
CS 2 and CS 10	Nil-Low potential for State significant archaeological remains associated with the Devonshire Street Cemetery	Direct impact –bulk excavation	2	<ul style="list-style-type: none"> AMS Monitoring Test/salvage Exhumation Policy applies
CS 3	Nil-Low potential for State significant archaeological remains associated with the Devonshire Street Cemetery	Direct impact –bulk excavation	1	<ul style="list-style-type: none"> AMS Monitoring Test/salvage Exhumation Policy applies
CS 4 and CS 11	Moderate-High potential for rail-related remains from 1850s-1900s Local / State	Direct impact –bulk excavation northern CS 4 Potential direct impacts – ground works, piling	1 / 2	<ul style="list-style-type: none"> AMS Test/Salvage CS 4 north Monitoring / Salvage if required CS 4
CS 6	Moderate-High potential for remains of the Wesleyan chapel and school constructed in 1847	Potential direct impact – ground works, footing excavation, piling	2	<ul style="list-style-type: none"> AMS Monitoring / Salvage if required
CS 5	Low potential for isolated rail remains, early mid-20 th century remains. Unlikely to meet significance threshold	Potential direct impact – ground works, excavation, piling etc	3	<ul style="list-style-type: none"> Unexpected Finds Procedure
CS 9	Moderate – high potential for locally significant remains associated with the former railway residences	Excavation for the eastern entry	1	<ul style="list-style-type: none"> AMS Monitoring Test/salvage



Figure 3-1 Archaeological Management zoning for Central Station (Artefact Heritage 2016c) for the Approved Project as modified.

5.3.2 Archaeological Management

Archaeological management would be undertaken in accordance with the works specific AMS documents and in accordance with the archaeological zoning plan and AARD (Figure 5-1)

5.3.3 Archaeological Method Statement

An AMS would be prepared for each phase of works, including but not limited to enabling works, station box excavation and the excavation of the eastern entry. The AMS would include detail on archaeological potential and significance based on the AARD with additional information related to the subject site as required. It would also include a methodology for archaeological management such as archaeological monitoring or test/salvage excavation in accordance with the AARD approved methodology. In accordance with E17 the AMS would also include a methodology for analysis of heritage items, archaeological and artefact management strategies and a sieving strategy

All AMS documents would be prepared in consultation with the Heritage Council of NSW (or its delegate).

5.3.4 Excavation Directors

Before excavation of archaeological management sites, the Proponent must nominate a suitably qualified Excavation Director who complies with the Heritage Council of NSW's Criteria for Assessment of Excavation Directors (July 2011) to oversee and advise on matters associated with historic archaeology and advise the Department of Planning Industry and Environment and the Heritage Division of the Office of Environment and Heritage.

The nominated Primary Excavation Director is Dr Iain Stuart, Secondary Excavation Director is Jenny Winnett, with Julia McLachlan as Project Manager. The Excavation Director will have input into any AMS for areas where local or State significant archaeology are to be impacted.

CVs for the nominated historical Excavation Directors have been provided to the NSW Heritage Council as per condition E18.

Roles and responsibilities are discussed in table 6-1.

5.3.5 Unexpected finds

Unexpected non-Aboriginal archaeological finds would be managed under the Sydney Metro Unexpected Heritage Finds Procedure.

An archaeological find would be unexpected if it was not identified in the AARD or the AMS as a class or type of possible remain, or if it was identified as locally significant but was assessed, after identification, as being of State significance. This is in adherence to condition E20.

The Sydney Metro Unexpected Heritage Finds Procedure complies with Section 146 of the Heritage Act 1977, Notification of discovery of relic:

A person who is aware or believes that he or she has discovered or located a relic (in any circumstances, and whether or not the person has been issued with a permit) must: (a) within a reasonable time after he or she first becomes aware or believes that he or she has discovered or located that relic, notify the Heritage Council of the location of the relic, unless he or she believes on reasonable grounds that the Heritage Council is aware of the location of the relic, and (b) within the period required by the Heritage Council, furnish the Heritage Council with such information concerning the relic as the Heritage Council may reasonably require.

In the event of an unexpected find the Excavation Director must attend site in accordance with E18 to assess the nature and significance of the find, to ascertain whether an Archaeological Relics Management Plan is required and if notification under s146 of the NSW Heritage Act is necessary.

Notification under s146 would only be required if the relic was unexpected and would apply to relics of local and State significance.

The Archaeological Relics Management Plan would only be required if the unexpected relics were assessed to be of State significance.

5.3.6 Archaeological Relics Management Plan

An Archaeological Relics Management Plan would be prepared if unexpected State significant archaeological remains were located in accordance with E20. The Archaeological Relics Management Plan would provide detail on proposed management of the find. The NSW Heritage Council (with Heritage Division as delegate) would be consulted on the ARMP before the find was impacted. The ARMP may consider in situ conservation depending on the intactness and significance of the find.

5.3.7 Clearance

A written clearance confirmation would be provided by the Primary Excavation Director to LORA once archaeological management has been completed in an area. This would be signed off by Metro before works commenced. Construction would continue under the Unexpected Finds Procedure.

5.3.8 Human Remains

If suspected human remains are identified, the Sydney Metro Exhumation Management Plan would be implemented in accordance with E26 and E27.

The Sydney Metro Exhumation Management Plan has been prepared in consultation with NSW Heritage Division and the NSW Health Department in accordance with NAH3. The plan is in accordance with the *Guidelines for Management of Human Skeletal Remains* (NSW Heritage Office, 1998b) and NSW Health Policy Directive – Exhumation of human remains (December 2013).

Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, principal contractor, project archaeologist and Sydney Metro Environmental Representative. This requirement will form part of the site induction. The Sydney Metro Exhumation Management Plan will be enacted. Preliminary notification to the NSW Police will be undertaken by the Environmental Representative.

Once confirmation is received from the technical specialist that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan.

No works to recommence until clearance is provided by OEH and/or the NSW Police as per the Sydney Metro Exhumation Management Plan

Dr Denise Donlon is the nominated forensic anthropologist for the Project. She would be consulted in the event of a discovery of expected human remains.

5.3.9 Storage of archaeological remains

Where possible artefact cleaning and preliminary cataloguing would occur on site, otherwise artefacts would be catalogued and stored off site at the Metro facility at Rosebery. Details on proposed sampling, a sampling strategy and analysis would be provided in the AMS document in accordance with the AARD. Artefact's cataloguing database would be used along with a sampling procedure outlined in the AMS and approved by the Primary Excavation Director.

5.3.10 Analysis and reporting

A preliminary results report will be prepared within two months of completion of archaeological work. This would be prepared under the direction of the Primary Excavation Director.

An excavation report will be prepared within two years of completion of archaeological excavations in accordance with condition E18.

The Historical Archaeological Excavation Report will be prepared in accordance with the standard requirements of an Excavation permit issued by the Heritage Council:

- a. An executive summary of the archaeological programme
- b. Due credit to the client paying for the excavation, on the title page
- c. An accurate site location and site plan (with scale and north arrow)

- d. Historical research, references and bibliography
- e. Detailed information on the excavation, including the aim, the context for the excavation, procedures, treatment of artefacts (cleaning, conserving, sorting, cataloguing, labelling, scale photographs and/or drawings, location of repository) and analysis of the information retrieved
- f. Nominated repository for the items
- g. Detailed response to research questions (at minimum those stated in the approved Research Design)
- h. Conclusions from the archaeological programme. The information must include a reassessment of the site's heritage significance, statement(s) on how archaeological investigations at this site have contributed to the community's understanding of the site and other comparable archaeological sites in the local area and any relevant recommendations for the future management of the site information and artefacts
- i. Details of how this information about this excavation has been publicly disseminated (for example provide details about Public Open Days and include copies of press releases, public brochures and/or information signs produced to explain the archaeological significance of the site).

Table 5-2 Construction, Management Action and Responsibilities, Aboriginal Heritage

Action	Trigger/Timing	Responsibility	Description of Action
Monitoring			
The Environment Manager will undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoA and this plan.	Weekly during construction	Environmental Manager	<ul style="list-style-type: none"> Undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoAs and this plan.
Daily inspections of controls will be undertaken by Supervisors during works.	Daily during construction	Site Supervisors	<ul style="list-style-type: none"> Complete daily inspections of the general heritage controls during works (i.e. working in accordance with HIA, AMS, CHMP)
Management			
Preparation of AMS	Construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Prepare a works specific AMS in accordance with the excavation methodology outlined in the CHAR and E17
Nomination of an Excavation Director	Pre-Construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Nominate an Aboriginal Archaeological Excavation Director in accordance with E24, but the ED will have oversight of Aboriginal archaeological management and Aboriginal consultation. The nominated ED is Dr Iain Stuart of Artefact.
Stage 1 (test) and Stage 2 (salvage) excavations	Construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Archaeological excavation would be undertaken in accordance with the AMS, CHAR, E24 and REMM AH3. Where there is a notification by the Historical Excavation Director (Historical ED) that potential intact soil profiles, or Aboriginal objects, have been identified during historical archaeological investigations, and where this is confirmed by the Aboriginal archaeological Excavation Director (Aboriginal archaeological ED), or in the case on an unexpected find of an Aboriginal object, Stage 1 archaeological salvage excavation (testing) will be required (CHAR pg. 44). Stage 2 (salvage) excavation may be required if there is: <ul style="list-style-type: none"> - Identification of Aboriginal artefact(s) during Stage 1 excavation. - Identification of rare or significant artefacts, features or site type. - Identification by the Aboriginal archaeological ED of Aboriginal artefacts in contexts that may provide significant information on site formation, including the potential extracting samples suitable for dating.

Action	Trigger/Timing	Responsibility	Description of Action
			<ul style="list-style-type: none"> Follow the methodology outlined in the AMS including reporting obligations and management of finds. Where Aboriginal objects are located in historical archaeological contexts, Stage 1 excavation would form part of the historical archaeology program, and the excavation methodology would be guided by the AMS prepared for that worksite. RAPs would be involved in excavation of identified Aboriginal objects within historical archaeological contexts. Where historical archaeological contexts are encountered during controlled Stage 1 excavation, the Historical ED would be consulted on any requirements for an alteration to methodology to account for impacts to historical archaeological remains.
Site clearance after archaeological management completed	Construction	Environmental Manager Aboriginal archaeological Excavation Director	<ul style="list-style-type: none"> Site clearance would be required from the Aboriginal archaeological ED prior to construction commencing in accordance with E25. This clearance would be in the form of a memo or email and would apply to a work specific area or the project sites as a whole, depending on stage of works.
All relevant personnel and contractors involved in the design and construction of the Project must be advised of the relevant heritage considerations, legislative requirements and commitments.	Pre-construction Construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Ensure all personnel involved in earthworks or any type of disturbance are appropriately trained / inducted and made aware of the cultural significance of the area, including site identification and materials likely to be uncovered. Personnel will be instructed to notify the Environmental Manager in the event they identify any object which they believe to be of archaeological or cultural origin.
Aboriginal stakeholder identification (RAP) and contact details in case of unexpected finds.	Pre-construction	Environmental Manager	<ul style="list-style-type: none"> Identify RAPs (Appendix B) Contact RAPs in accordance with the Unexpected Finds Protocol (Section 5.1.7 of this CHMP) in the case of unexpected finds of an Aboriginal object or potential Aboriginal human skeletal remains and/or Aboriginal burials. RAPs should be consulted prior to test or salvage excavation commencing in accordance with the project CHAR and should be given the opportunity to participate in any excavation works in accordance with E24. This consultation would be facilitated by the Aboriginal archaeological Excavation Director.
Notification and consultation records	Construction	Environmental Manager	<ul style="list-style-type: none"> All notification and consultation records will be kept by Laing O'Rourke and its relevant consultants on the project's document management system TeamBinder
Incident Response			

Action	Trigger/Timing	Responsibility	Description of Action
Unexpected finds procedures for Aboriginal objects.	Identification of potential Aboriginal heritage artefacts or other sensitive cultural values.	Environmental Manager	<ul style="list-style-type: none"> Following the discovery of new finds of Aboriginal objects – works will cease in the immediate area and the area secured in accordance with the Unexpected finds Procedure which would satisfy E24. Assessment of the site/object and subsequent management of the site will be carried out in accordance with the Sydney Metro Unexpected Finds Protocol. Works would not recommence until authorised by the Excavation Director (Aboriginal Archaeology). In addition, the site will be recorded on standard AHIMS site cards and lodged with OEH. Upon completion of any unexpected finds reporting and required mitigation measures, post excavation reporting in accordance with the OEH Aboriginal requirements will be undertaken within 12 months of the completion of the Project. Post-excavation report to be prepared by the Aboriginal archaeologist in consultation with the RAPs.
Unexpected finds procedures for human skeletal remains.	Identification of a potential burial or discovery of skeletal remains.	Environmental Manager	<ul style="list-style-type: none"> Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, principal contractor, project archaeologist and Sydney Metro Environmental Representative (E26). The Sydney Metro Exhumation Management Plan (E27) will be enacted. Preliminary notification to the NSW Police will be undertaken by the Environmental Representative. Once confirmation is received from the technical specialist that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan. No works to recommence until clearance is provided by OEH and/or the NSW Police as per the protocol outlined in Section 5.3.8 of this CHMP and the Sydney Metro Exhumation Management Plan.
Where impacts are identified outside the project area	New impact areas not previously surveyed	Environmental Manager	<ul style="list-style-type: none"> Non-conformance procedures outlined in the CEMP Where practicable avoid additional impacts or confirm appropriate mitigation measures (E26). Ensure that consistency assessments are undertaken for any new impact areas and approval sought from Sydney Metro. Further consultation with RAPs would be required where a consistency assessment identifies additional impacts to Aboriginal heritage. The consistency assessment would outline appropriate mitigation measures.

Table 5-3 Construction, Management Action and Responsibilities, Built Heritage

Action	Trigger/Timing	Responsibility	Description of Action
Monitoring			
The Environment Manager will undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoA and this plan.	Weekly during construction	Environmental Manager	<ul style="list-style-type: none"> Undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of CoAs and this plan
Daily inspections of controls will be undertaken by Supervisors during works.	Daily during Construction	Site Supervisors	<ul style="list-style-type: none"> Complete daily inspections of the controls during works
Vibration monitoring	Construction	Environmental Manager	<ul style="list-style-type: none"> Vibration monitoring will be undertaken in accordance with the Construction Noise and Vibration Management sub-plan.
Management			
General	Pre-construction and construction	Coordinated by Metro and Head Contractor	<ul style="list-style-type: none"> All Project designs, heritage issues arising during design development and throughout the construction period will be raised for discussion at monthly Heritage Working Group meetings attended by relevant authorities and stakeholders.
Design requirements	Pre-construction and construction	Environmental Manager Heritage Specialist	<ul style="list-style-type: none"> All Project designs will be reviewed by an appropriately qualified heritage architect (OCP and McAslan Architects) in conjunction with Sydney Metro. The independent Design Review Panel (DRP) will periodically review the designs and provide advice in accordance with REMM NAH6 and NAH7. Refer to Table 6-1 for DRP responsibilities. A detailed Heritage Impact Assessment (HIA) will be provided with each design stage so that the overall trend of heritage impacts is clearly identified. Measures to protect against damage of all heritage buildings, elements, fabric and moveable heritage items to be retained will be contained in the HIA included in the Design Stage 3 Documentation. Design would consider the requirements of the Central Station CMP in accordance with REMM NAH13. Should the impact to any historic heritage item or element change during detailed design, further assessment of impacts will be undertaken.

Action	Trigger/Timing	Responsibility	Description of Action
Management of indirect impacts to elements of Central Station Railway Group	Pre-construction and construction	Environmental Manager	<ul style="list-style-type: none"> Indirect impact to significant elements of Central Station would be avoided where not approved by the project (REMM NAH11 and E10) Provide mapping that shows significant elements of Central Station that have not been approved for impact. Where necessary an exclusion zone will be set up. Monitor vibration impacts as required
Adaptive reuse	Pre-construction and construction	Design Architects Heritage Specialist	<ul style="list-style-type: none"> Development and implementation of a strategy for appropriate adaptive reuse of retained heritage buildings and elements must be prepared prior to commencement of the Project. The strategy will be prepared in accordance with the SWTC Appendix B6 document.
Demolition methodology	Pre-construction and construction	Environmental Manager Heritage Specialist Structural Engineer	<ul style="list-style-type: none"> In accordance with NAH4 a demolition methodology would be prepared by Laing O'Rourke in consultation with OCP Architects to minimise impacts to adjacent heritage items.
Retention of significant fabric	Pre-construction	Heritage Specialist Environmental Manager	<ul style="list-style-type: none"> Prior to the commencement of construction, a detailed inventory will be prepared of all buildings, structures, fabric, spaces and vistas of heritage significance that are to be retained and methods for their protection and recommendations for their conservation provided. Retention and conservation of significant fabric would be undertaken in accordance with SWTC Appendix B6 document. Refer Section 5.2.7. Hoarding, fencing and other temporary protective measures will be installed for fabric to be retained adjacent to or in the vicinity of works as informed by action schedules. Protective measures will remain in place until completion of work.
Salvage of significant fabric	Pre-construction and construction	Environmental Manager Heritage Specialist	<ul style="list-style-type: none"> Salvage and recycling of significant heritage elements and fabric will be undertaken in accordance with E15, the Sydney Metro Chatswood to Central Metro Heritage Salvage and Storage Policy and the existing salvage register which has been prepared by Metro and consultation undertaken with the Heritage Division. All fabric to be salvaged would be managed according to the policy and the SWTC Appendix B6 document. Where specified in the salvage register items would be delivered to the Sydney Metro storage facility. It is noted that salvage of significant elements of the former Metro Goldwyn Mayer building is specifically required under E16(h) and OCP Architects have identified relevant items. A Salvage Register has been prepared by Sydney Metro for all significant elements to be displaced prior to removal. The Salvage Register will be updated as works progress in consultation with Sydney Metro and Sydney Trains Heritage; and will include consultation with the Heritage Division for state significant items as relevant (E15).

Action	Trigger/Timing	Responsibility	Description of Action
Archival recording	Pre-construction	Heritage Specialist where not completed by Metro	<ul style="list-style-type: none"> Periodic site inspection will be undertaken by OCP Architects to review the progress of salvage and recycling works. Metro will confirm the extent of archival recording that has already been completed for the Project. Any additional archival recording required would be conducted by heritage specialists from OCP Architects in accordance with E13 and REMM NAH1. An archival photographic report will be prepared and submitted to relevant parties as nominated in the conditions of consent including any additional archival recording completed within two years of completion of recording in adherence to E13. The Environmental Manager and Sydney Metro will review the archival recording as complete.
Photographic recording of demolished items	Pre-construction	Heritage Specialist where not completed by Metro	<ul style="list-style-type: none"> E14 requires the photographic recording of all structures to be demolished by the Project. It is assumed this would generally be covered by the archival recording for E13 but any additional recording to fulfil this condition should be undertaken prior to impacts and provided to City of Sydney for their records.
Measured Drawings	Pre-construction	Heritage Specialist	<ul style="list-style-type: none"> Archival measured drawings will be prepared for the following items: <ul style="list-style-type: none"> Former MGM Building located at 20-28 Chalmers St Rolling Stock Officers' Building; and Cleaners' Amenities Building. <p>Drawings will be included as an appendix in the final design report</p>
Heritage Interpretation	Pre-construction	Environmental Manager Heritage Specialist / Artefact	<ul style="list-style-type: none"> A broad overarching Heritage Interpretation Strategy has been prepared for Sydney Metro City & Southwest by Metro (February 2018). A site-specific Heritage Interpretation Strategy for Central Station will be prepared under E21 and REMMs NAH8 and NAH9, with the overarching document providing a framework for its development. Aboriginal themes would be included in the interpretation in consultation with the RAPs and in accordance with REMM AH4 Consultation with the NSW Heritage Council, City of Sydney Council, Sydney Trains Heritage and the RAPs would be undertaken before developing a Heritage Interpretation Plan in accordance with condition E21. Consultation with RAPs in accordance with REMM AH4 would be undertaken during detailed design,
Heritage Inductions	Pre-construction and Ongoing	Environmental Manager	<ul style="list-style-type: none"> Contractors will be given awareness training on Aboriginal and non-Aboriginal historic heritage prior to commencement of their work on site. All site personnel shall undergo such site-specific induction training, which will include environmental awareness training in addition to heritage management training. Toolbox meetings will also be undertaken as and when required; covering specific environmental issues and heritage control measures as identified in this CHMP.

Action	Trigger/Timing	Responsibility	Description of Action
			<ul style="list-style-type: none"> Personnel directly involved in implementing heritage control measures on site will be given specific training in the various measures to be implemented. Records of all training are to be filed in accordance with the project filing system.
SHR listing update	Construction	Environmental Manager Heritage Specialist	<ul style="list-style-type: none"> Prior to completion of the Project, an updated Central Station listing nomination form will be prepared in consultation with all relevant stakeholders (including the Heritage Division under the authority of the Heritage Council of NSW).
Notification and consultation records	Construction	Environmental Manager	<ul style="list-style-type: none"> All notification and consultation records will be kept by Laing O'Rourke and its relevant consultants on the project's document management system TeamBinder

Table 5-4 CSMW Construction, Management Action and Responsibilities, Non-Aboriginal archaeology

Action	Trigger/Timing	Responsibility	Description of Action
Monitoring			
The Environment Manager will undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoA and this plan.	Weekly during construction	Environmental Manager	<ul style="list-style-type: none"> Undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of CoAs and this plan
Daily inspections of controls will be undertaken by Supervisors during works.	Daily during Construction	Site Supervisors	<ul style="list-style-type: none"> Complete daily inspections of the controls during works
Vibration monitoring	Construction	Environmental Manager	<ul style="list-style-type: none"> Vibration monitoring will be undertaken in accordance with the Construction Noise and Vibration Management sub-plan.
Management			
Nomination of an Excavation Director	Pre-construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Before excavation of archaeological management sites, a qualified Excavation Director (ED) would be nominated who complies with the Heritage Council of NSW's Criteria for Assessment of Excavation Directors (July 2011) in accordance with E18. DPIE and OEH shall be advised of the nominated ED. Dr Iain Stuart has been nominated as the Primary Excavation Director and Jenny Winnett as the Secondary Excavation Director

Action	Trigger/Timing	Responsibility	Description of Action
Preparation of AMS	Construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Prepare a works specific AMS in accordance with the excavation methodology outlined in the AARD and E17. This would be signed off by the Primary Excavation Director and would be prepared consultation with NSW Heritage Council (or its delegate).
Archaeological management	Construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Non-Aboriginal archaeological management is to be undertaken in accordance with the AARD and AMS (E17). The AARD includes management zoning for all Sydney Metro South and Southwest construction sites. Archaeological testing would be undertaken within portions of the station box where natural sand has been identified by geotech, in order to further assess archaeological potential. Archaeological monitoring or salvage may be required depending on the results of the testing. An ED who fulfills the criteria for excavations of State significant archaeology has been nominated for these works (E18). Depending on impacts, archaeological monitoring or archaeological excavation would be required for the section of the Project that has been identified as having moderate-high potential for remains of the first station. These remains may be of local or State significance. Archaeological management would be detailed in the AMS. In areas identified by the AARD as being managed under the unexpected finds procedure. No archaeological management is required unless unexpected finds are identified during construction or an AMS recommends further work.
Notification and management of relics	Construction	Sydney Metro Archaeologist	<ul style="list-style-type: none"> If any potential relics are located the ED would assess significance of the find and provide advice (E18 and E19). If relics are of State significance and are not identified in the AARD or AMS an Archaeological Relic Management Plan (ARMP) would be prepared and provided to Heritage Division (E20). Construction in the location of the relics cannot commence until the recommendations of the ARMP have been implemented (E20). The Secretary and Heritage Council would be notified if relics of State significance are found.
Site clearance after archaeological management completed	Construction	Environmental Manager Excavation Director	<ul style="list-style-type: none"> Site clearance would be required from the Primary ED prior to construction commencing in accordance with E18. This clearance would be in the form of a memo or email and would apply to a work specific area or the project sites as a whole, depending on stage of works.
Archaeological reporting	Construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Archaeological reporting and find management would be undertaken in accordance with the AARD. A final excavation report must be submitted to the Heritage Council within two years of the completion of excavation (E18). The Excavation Director would oversee preparation of the report.

Action	Trigger/Timing	Responsibility	Description of Action
Heritage Inductions	Ongoing	Environmental Manager	<ul style="list-style-type: none"> All site personnel shall undergo site specific induction training, which will include environmental awareness and heritage management training. Toolbox meetings will also be undertaken as and when required; covering specific environmental issues and heritage control measures as identified in this CHMP. Personnel directly involved in implementing heritage control measures on site will be given specific training in the various measures to be implemented. Records of all training are to be filed in accordance with the project filing system.
SHR listing update	Construction	Environmental Manager Heritage Specialist Excavation Director	<ul style="list-style-type: none"> Prior to completion of the Project, an updated Central Station listing nomination form must be prepared in consultation with all relevant stakeholders including the Heritage Division under the authority of the Heritage Council of NSW. Archaeology would be included in the listing update
Inclusion of significant archaeology in heritage interpretation	Construction	Environmental Manager Excavation Director	<ul style="list-style-type: none"> Significant archaeological remains would be considered for inclusion in heritage interpretation for the project and be developed in consultation with Sydney Metro, the Design Team and the relevant local council.
Notification and consultation records	Construction	Environmental Manager	<ul style="list-style-type: none"> All notification and consultation records will be kept by Laing O'Rourke and its relevant consultants on the project's document management system TeamBinder
Incident Response			
Unexpected finds procedure for non-Aboriginal artefacts and relics.	During construction	Environmental Manager	<ul style="list-style-type: none"> If unexpected finds are located during works the Unexpected Finds Procedure would be followed in accordance with the Sydney Metro Unexpected Finds Procedure and E19. Further archaeological work or recording may be recommended.
Unexpected finds procedures for human skeletal remains.	Identification of a potential burial or discovery of skeletal remains.	Environmental Manager	<ul style="list-style-type: none"> Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, principal contractor, project archaeologist and Sydney Metro Environmental Representative (E26). The Sydney Metro Exhumation Management Plan (E27) will be enacted. Preliminary notification to the NSW Police will be undertaken by the Environmental Manager. Once confirmation is received from the technical specialist that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan. No works to recommence until clearance is provided by OEH and/or the NSW Police as per the protocol outlined in Section 5.3.8 of this CHMP and the Sydney Metro Exhumation Management Plan.

5.4 Heritage Awareness Training (Induction)

All relevant personnel and contractors involved in the Project will be provided training on heritage considerations, legislative requirements and cultural awareness of which will include the following as relevant:

- information on the heritage significance of Central Station and its listing on the SHR
- information on protection and salvage of significant elements and requirements in regard to process for retention and storage
- information on the Aboriginal archaeological and cultural heritage values of the Project
- outline the location and type of archaeological sites within the Project and give instructions not to disturb these sites
- provide clear information about statutory obligations for heritage in accordance with the *NSW National Parks and Wildlife Act 1974* (NP&W Act). It is important to note that failure to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the NP&W Act (as amended)
- how to identify stone artefacts and other Aboriginal heritage sites
- Implementation of the Unexpected Finds Procedure when previously unknown heritage and archaeological items are uncovered
- all relevant personnel and contractors involved in the Project will be advised of the relevant heritage considerations, legislative requirements and recommendations in the Non-Aboriginal Heritage Impact Assessment (Artefact Heritage 2012; 2015)
- all personnel involved with ground disturbing activities are made aware of their obligations to avoid any impacts to non-Aboriginal heritage under the *Heritage Act 1977*:
 - this will include information on historic heritage sites and 'relics' and information about statutory obligations under the *NSW Heritage Act 1977*; and
 - this will also include information on the potential for human skeletal remains and the requirements of the Sydney Metro Exhumation Management Procedure
- provision of information relating to the nature of works and potential impacts prior to the start of a new activity
- information about appropriate storage of materials, for example within designated laydown zones and only brought in when ready to install.

All training and toolbox meetings will be recorded by Laing O'Rourke. All project documentation, including environmental compliance and training records, will be kept as objective evidence of compliance with environmental requirements.

5.5 Unexpected Finds Procedure

If any potential significant archaeological remains or Aboriginal heritage objects, as protected under NSW legislation, are uncovered during the works, then the Sydney Metro Unexpected Finds procedure would be followed in accordance with condition E19.

5.6 Ongoing Notifications – Unexpected Finds

The following protocol will be followed with respect to ongoing notifications.

- For all unexpected heritage finds the project Environmental Manager shall notify the Sydney Metro Environmental Manager and Sydney Metro Heritage Program Manager in accordance with the Sydney Metro Unexpected Finds Procedure.
- The Secretary and Heritage Council (or Heritage Division as delegate) would be notified if relics of State significance are found.

- In accordance with E20 in the event that a Relic is discovered, relevant construction must cease in the affected area and the Excavation Director must be notified and assess the finds, identify their significance level and provide mitigation advice according to the significance level and the impact proposed. Depending on the significance of the find, the Excavation Director must attend the site. The Secretary must be notified at the same time as the Heritage Council of NSW (or its delegate) of any Relic found.
- For unexpected Aboriginal archaeological finds, RAPs will be notified immediately.
- Notification to the RAPs will occur within 1 week where changes to the Project are identified that may have implications for Aboriginal heritage management (such as changes in design).
- Feedback requested from the RAPs should be received within two weeks and no later than four weeks from the date correspondence is issued.
- The appropriate address and format for responses shall be provided as part of the request. Where no response is issued within this timeframe, a follow-up phone call will be made by the Environmental Manager (or project Heritage Specialist) to close out the outstanding request.
- All notification and consultation records will be kept by Laing O'Rourke and its relevant consultants on the project's document management system and TeamBinder.

6. Roles and Responsibilities

Relevant roles and responsibilities associated with this CHMP are presented in **Table 6-1**. All personnel are responsible for ensuring that heritage items are protected.

It is important to note that failure to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the NP&W Act (as amended).

Table 6-1 Roles and Responsibilities

ROLES	RESPONSIBILITIES
Department of Planning Industry and Environment	Approval of the Heritage Management Plan Monitor LOR compliance with the Heritage Management Plan
Project Director	Ensure that sufficient resources are allocated for the implementation of this CHMP Ensure that the CEMP covers the management and mitigation measures presented in this CHMP Ensure that the outcomes of the visual checks/ compliance construction monitoring/ incident reporting are systematically evaluated as part of ongoing management of construction activities Ensure audits of construction site records/ monitoring records/ incident reports are undertaken and findings are shared with relevant site personnel and corrective actions are implemented Authorise all monitoring reports and any revisions to this CHMP
Environment Manager	Oversee the overall implementation of this CHMP Site Inductions

ROLES	RESPONSIBILITIES
	<p>Ensure all relevant personnel have access to and understand the most up-to-date copy of this CHMP</p> <p>Ensure that any required actions arising from the detection of unexpected heritage items or if works are required outside of the approved development footprint are reported to the relevant personnel for further action and ensure that the actions are effectively implemented</p> <p>Ensure all monitoring reporting requirements are met and maintained on site</p>
Construction supervisors Subcontractors	<p>Understand and implement mitigation protocols as required in the CHMP and any other required measures during construction</p> <p>Undertake relevant training to implement the requirements of this CHMP</p> <p>All personnel are responsible for ensuring that heritage items are protected</p> <p>All site personnel to undertake toolbox talks in relation to the reporting process for unexpected finds.</p> <p>Informing the Environmental Manager of any heritage issues as they arise.</p>
Environmental Representative	<p>Receive and respond to communications from the Secretary in relation to the environmental performance of the Project</p> <p>Consider and inform the Secretary on matters specified in the terms of the planning approval</p> <p>Consider and recommend any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community</p> <p>Review all documents required to be prepared under the terms of the planning approval, ensure they address any requirements in or under the planning approval and if so, endorse them before submission to the Secretary (if required to be submitted to the Secretary) or before implementation (if not required to be submitted to the Secretary). For documents requiring specialist review and/or endorsement the ER is not required to endorse the specialist content</p> <p>Regularly monitor the implementation of all documents required by the terms of the planning approval for implementation in accordance with what is stated in the document and the terms of the planning approval</p> <p>Review the Proponent's notification of incidents in accordance with Condition A41 of the planning approval</p> <p>As may be requested by the Secretary, help plan, attend or undertake Department audits of the Project, briefings, and site visits</p> <p>If conflict arises between the Proponent and the community in relation to the environmental performance of the CSSI, follow the procedure in the Community Communication Strategy approved under Condition B3 of the planning approval to attempt to resolve the conflict, and if it cannot be resolved, notify the Secretary</p> <p>Review any draft consistency assessment that may be carried out by the Proponent, and provide advice on any additional mitigation measures required to minimise the impact of the work</p> <p>Consider any minor amendments to be made to the CEMP, CEMP sub-plans and monitoring programs that comprise updating or are of an administrative nature, and are consistent with the terms of the planning approval and the CEMP, CEMP sub-plans and monitoring programs approved by the Secretary and, if satisfied such</p>

ROLES	RESPONSIBILITIES								
	<p>amendment is necessary, approve the amendment. This does not include any modifications to the terms of the planning approval</p> <p>Assess the impacts of minor ancillary facilities as required by Condition A18 of the planning approval; and prepare and submit to the Secretary and other relevant regulatory agencies, for information, a monthly Environmental Representative Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month (or other timeframe agreed with the Secretary). The Environmental Representative Report must be submitted within seven (7) days following the end of each month for the duration of works and construction of the CSSI, or as otherwise agreed with the Secretary</p>								
Primary Excavation Director	<p>The Primary Excavation Director must be suitably qualified and be someone who complies with the Heritage Council of NSW's <i>Criteria for Assessment of Excavation Directors</i> (July 2011) to oversee and advise on matters associated with historic archaeology and advise the DPIE and OEH</p> <p>The Excavation Director must be present to oversee excavation and advise on archaeological issues</p> <p>The Excavation Director has the authority to advise on the duration and extent of oversight required as informed by the provisions of the approved AARD and Excavation Methodology</p> <p>The nominated Primary Excavation Director is Dr Iain Stuart who is able to manage State significant archaeology under the NSW Heritage Council Excavation Directors Criteria</p>								
Secondary Excavation Director	<p>The secondary excavation director would support the Primary Excavation Director where needed.</p> <p>The nominated Secondary Excavation Director is Jenny Winnett who is able to manage locally significant archaeology under the NSW Heritage Council Excavation Directors Criteria</p>								
Aboriginal archaeology Excavation Director	<p>The Aboriginal archaeological excavation director would manage Aboriginal archaeological test and salvage in accordance with the CHAR including co-ordinating appropriate consultation with the RAPs.</p> <p>The nominated Aboriginal Archaeological Excavation Director is Dr Iain Stuart.</p>								
Heritage Specialist	<p>The Heritage Specialist will be responsible for providing advice and guidance to manage and minimise potential impacts to any built heritage values through a variety of means, prepare heritage impact assessment reports for built heritage and to undertake required archival recording of the heritage items in accordance with the approval and relevant documents.</p> <p>The nominated heritage specialist is OCP Architects and John McAslan Partners. Key personnel/roles are as follows:</p> <p>Advice on conservation, protection, salvage and recycling of significant fabric and Heritage Interpretation of Non-indigenous Heritage:</p> <table> <tr> <td>Otto Cserhalmi:</td> <td>Principal</td> </tr> <tr> <td>Karen Urquhart:</td> <td>Senior Architect & Heritage Specialist</td> </tr> <tr> <td>Csilla Cserhalmi:</td> <td>Heritage Consultant & Photographer</td> </tr> <tr> <td>Mariam Maghzal:</td> <td>Architectural Documentation</td> </tr> </table>	Otto Cserhalmi:	Principal	Karen Urquhart:	Senior Architect & Heritage Specialist	Csilla Cserhalmi:	Heritage Consultant & Photographer	Mariam Maghzal:	Architectural Documentation
Otto Cserhalmi:	Principal								
Karen Urquhart:	Senior Architect & Heritage Specialist								
Csilla Cserhalmi:	Heritage Consultant & Photographer								
Mariam Maghzal:	Architectural Documentation								

ROLES	RESPONSIBILITIES
	<p>Bianca Hollo: Planner & Heritage Consultant</p> <p>Reuse and adaption of significant heritage fabric:</p> <p>Colin Bennie Adaptive Reuse, John McAslan Partners</p> <p>Indigenous Heritage Interpretation:</p> <p>Carolyn Mac Lulich Indigenous Interpretation Specialist, Artefact</p>
Forensic Anthropologist	<p>The Forensic Anthropologist would respond to find of potential human remains in accordance with the Sydney Metro Exhumation Management Plan.</p> <p>The nominated Forensic Anthropologist is Dr Denise Donlon from Sydney University</p>
Design Review Panel	<p>The objectives of the Design Review Panel (DRP) are to:</p> <ul style="list-style-type: none"> • Provide independent, high level design review of the Sydney Metro Program. • Support the achievement of the Sydney Metro program objectives. • Ensure quality design outcomes. <p>The NSW Government Architect representative is the Chair of the DRP. If the Chair is absent or unavailable, then Yvonne von Hartel AM will be the Alternate Chair.</p> <p>The Director, Place Making and Precinct Activation will convene the meetings on behalf of Sydney Metro.</p> <p>The DRP membership comprises of the following:</p> <p>Peter Poulet NSW Government Architect (Chair)</p> <p>Yvonne von Hartel AM Architect (Alternate Chair)</p> <p>Kim Crestani Architect</p> <p>Tony Caro Architect</p> <p>Robert Nation AM Architect</p> <p>Peter Phillips Heritage Architect</p> <p>Jane Irwin Heritage Council Representative</p> <p>The Membership of the DRP is to be approved by the Program Director Sydney Metro. Experts in specialist fields such as sustainability, customer experience and transport integration may be invited to review proposals and provide advice to the DRP as required.</p>

7. Monitoring, Auditing and Reporting

Monitoring, auditing and reporting will be undertaken in accordance with the CEMP, as well as additional requirements listed below.

The Environment Manager and or Environmental Team will undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoA and this plan. The Weekly Environmental Inspection Checklist will be used to maintain compliance and effectiveness of controls.

Items that require action will be documented on the site environmental inspection. Items that require specific and detailed action will be recorded on the Project's Corrective Action Register. The Site Construction

Manager will be responsible for providing appropriate resources in terms of labour, plant and equipment to enable the items to be rectified in the nominated timeframes.

Daily inspections of controls will be made by Supervisors and maintenance will be undertaken during active site works.

8. Review and Improvement

The CEMP sub-plans must be developed in consultation with relevant government agencies. Where an agency(cies) request(s) is not included, the Proponent must provide the Secretary justification as to why they weren't included. Details of all information requested by an agency to be included in a CEMP sub-plan as a result of consultation and copies of all correspondence from those agencies, must be provided with the relevant CEMP sub-plan.

Continuous improvement of this plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement. These ongoing evaluations will be conducted by Laing O'Rourke.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance.
- Determine the cause or causes of non-conformances and deficiencies.
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies.
- Verify the effectiveness of the corrective and preventative actions.
- Document any changes in procedures resulting from process improvement.
- Make comparisons with objectives.

Any revisions to the CHMP will be in accordance with the process outlined in Section 2.1 of the CEMP. A copy of the updated plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure.

Any of the CEMP sub-plans may be submitted to the Secretary along with, or subsequent to, the submission of the CEMP but in any event, no later than one month before commencement of construction. Construction must not commence until the CEMP and all the CEMP sub-plans have been approved by the Secretary. The CEMP and CEMP sub-plans, as approved by the Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction. Where the CSSI is being staged, construction of that stage will not commence until the relevant CEMP and sub-plans have been approved by the Secretary.

9. Enquiries, Complaints and Incident Management

Environmental incidents and complaints are to be investigated, documented, actioned and closed out as per the details provided in the Community Consultation Strategy and Section 19 of the CEMP, including those related to Aboriginal and non-Aboriginal cultural heritage.

Appendix A – Government Stakeholder Correspondence

Document Ref	OEH comment details	Response
Section 1.6	Objectives and Targets – noted and considered appropriate to guide the CHMP. These targets and objectives should be promoted during the construction phase and indeed for the duration of the works.	Noted.
Section 3	Header incorrectly refers to SYAB project	Section 3 has been updated to correct header
Section 3 – Figure 3.1	The s170 curtilage mapped on Figure 3.1 is incorrect as it should include Belmore Park. Belmore Park would not be directly impacted by the project as scope for power supply works to Belmore Park substation would remain outside heritage curtilages (Section 1.4.5). Any unexpected impact on Belmore Park should involve consultation with Sydney Trains heritage.	This map has been updated.
Section 5.1	Aboriginal Archaeology. Some confusion in terminology eg use of 'Excavation Director' which is not a requirement of NPW Act approvals (when and if that Act applied) but noted that this is required under E24. No further comments as this section would need to be referred to Regional Operations Division of OEHL, not Heritage Division.	Noted. This plan will be sent to the Regional Operations Division of OEHL for consultation by DPIE as required.
Section 5.2.1	General – noted and agreed in principle. Suggest that a sample/template Conservation Action Schedule be provided as an appendix. Appropriate time and resources must be discussed early on and provided for adequate management via the CAS. A flowchart for CAS request/issue should be developed to ensure they are requested whenever required.	Included as Appendix D
Section 5.2.2	Design Requirements – Noted by OEHL	Noted
Section 5.2.3	Heritage Specialist – noted that OCP Architects are nominated. Further details on staff involved and individual credentials of heritage specialists may be relevant information here or in an appropriate reference table elsewhere in the CHMP e.g. Table 6.1.	Table 6.1 has been updated to include individual roles of heritage specialists. CVs will be available on request.
Section 5.2.4	Management of indirect impacts – noted and agreed in principle. There is a cross-over between this section and protection of significant fabric in 5.2.7. It	Headings for Section 5.2.4 and Section 5.2.7 have been updated and included with relevant information.

Document Ref	OEH comment details	Response
	would be appropriate to separate headings for management of potential vibration impact vs. protection of significant fabric/management of incidental impact, as these are two different risk types.	
Section 5.2.5	Demolition and Deconstruction – noted and agreed in principle.	Noted
Section 5.2.6	Adaptive Reuse – noted and agreed, in particular “will be prepared prior to commencement of construction on these elements” and “the nominated heritage specialist will provide heritage advice and guidance in developing appropriate adaptive reuse proposals for retained heritage buildings and elements”	Noted
Section 5.2.7	<p>Retention and Protection of Significant Fabric & Management of Incidental Impacts – noted and agreed in principle. It is suggested that a Temporary Protection Plan (TPP) may be more appropriate to protect significant elements of the site prior to works commencing. The aim of the document would be to provide a protection framework for the heritage elements within and around the project footprint, to be implemented by all contractors involved. The TPP framework would provide a basis for protection equipment and methodologies according to structure and/or material type, location/area in or in vicinity of precinct, work type occurring, potential impact type etc. The protection measures provided in the TPP would later be confirmed and supplemented by the individual Conservation Action Schedules to enhance protection outcomes as much as possible. This would offer an overarching and strategic approach to heritage protection which can be communicated to all contractors from the onset of the project and avoid gaps in communication. The TPP could form a protection approach for other heritage sites located within the Metro project footprint.</p> <p>It should also be clarified that all fabric of significance, ranging from little to exceptional, that has not been identified for removal in the approved project should be protected from potential damage, regardless of its individual significance level (that is even if of little or moderate significance). This is to protect all components that form the integrity of significant elements/buildings/structures/features of the site and are within an SHR Listed curtilage.</p>	Section 5.2.7 has been updated to include the relevant information

Document Ref	OEH comment details	Response
Section 5.2.8	<p>Salvage of significant fabric - noted and agreed, specifically “A key consideration will be developing a digital management system for salvaged items to facilitate their reuse.” This is an excellent initiative which we support and encourage as it will enhance re-use by project managers in the future at Central Station or elsewhere. It has happened that previously salvaged fabric could not be found and therefore could not be re-used.</p> <p>Of Note: “Metro has undertaken consultation with the Heritage Division in regard to the salvage schedule in accordance with E15.” Heritage Division can provide further comments separately if required.</p> <p>Section 5.2.8 prescribes that all items salvaged would be safely transported and stored with appropriate protection at Metro’s offsite facility at Rosebery. The preliminary Salvage Schedule (Artefact) contradicts this in places where it refers to the Sydney Trains store. Salvage location rationale should be provided. Ideally the salvage schedule should be finalised prior to works commencing.</p>	Noted. Salvaged fabric will be managed in accordance with Sydney Metro Salvage and Storage Policy.
Section 5.2.9	Items of Moveable and Industrial Heritage – Noted and Agreed	Noted.
Section 5.2.10	Building Condition Surveys and Archival Photographic Recording – noted and agreed	Noted
Section 5.2.11	Archival Measured Drawings – noted and agreed	Noted
Section 5.2.12	Views – noted and strongly supported. This should be carried out as soon as possible to record the site before early works occur. Suggest rewording heading such as ‘recording of views/visual relationships’ or similar.	Heading has been updated to ‘5.2.12 Recording of Views and Visual Relationships’
Section 5.2.13	Heritage Interpretation – noted	Noted
Section 5.2.14	SHR listing update – noted (again). This is considered a necessary step, and appropriate as part of these works/this contract. However, given the extensive introduction of new fabric it is likely there would need to be an updated CMP to	Noted. Sydney Metro will update the CMP in consultation with the future Metro operator.

Document Ref	OEH comment details	Response
	be prepared for Heritage Council endorsement in order that appropriate Site Specific Exemptions can be developed for Central to exclude modern Metro constructions from the requirement for Heritage Act approvals in future. (It is recognised that an updated CMP is beyond the scope of the contract with JH and LOR at this time).	
Section 5.3	Non-Aboriginal Archaeological Management (cross reference to Figure 5.1 is noted). It is noted that the hierarchy of required documents and management derives from prior documents (EIS, AARD) and the CoA. Requirement for AMS's are considered appropriate. Nominated Excavation Directors have been separately provided and Heritage Division has previously responded (email 07 May 2018).	Noted
Section 5.3.5	Unexpected Finds Procedure – noted. Considered appropriate but recent experience indicates that the S146 requirement has not always occurred. Agree with preparation of ARMP for 'unexpected' finds.	Noted
Section 5.3.8	Spelling should be Dr Denise Donlon. Same error repeated in Table 6.1.	Section 5.3.8 and Table 6.1 have been updated.
Section 5.3.9	Noted that sampling strategy is to be provided in the AMS.	Information included within with Section 5.3.9
Section 5.3.10	Analysis and Reporting (Archaeology) – appropriate, directly derived from Heritage Council Standard Conditions for Historical Archaeology Permits. Table 5.3 is considered to provide a comprehensive framework.	Noted

Document Ref	OEH comment details in response to revised plan	Response
	Thank you for sending a response to our comments. I note that they have been individually addressed in Appendix A and amendments made in the report to follow our recommendations. This is very much appreciated.	Noted.

Document Ref	OEH comment details in response to revised plan	Response
	Further to this, we would welcome the opportunity to comment on the initial Conservation Action Schedule (CAS) to be prepared under Section 5.2.7 in response to our recommendation for an overarching temporary protection plan.	The initial CAS will be issued to the Division for comment as requested.
	We have reviewed the template CAS prepared following our recommendation under Section 5.2.1 and assess it to be generally appropriate. We would be happy to provide further advice when the first individual CAS is implemented in order to better assess the adequacy of the template and refine it if required.	The initial CAS will be issued to the Division for comment as requested.
	To confirm I have reviewed the amended documentation against previous comments provided by Dr Lavelle in the email dated 28 May 2018 below. I can confirm there are no additional comments regarding the approach to managing historical archaeology within the CHMP document.	Noted.

Document Ref	City of Sydney comment details	Response
General	<p>The report incorrectly cites OPC heritage architects as nominated heritage specialists for the project in a number of places (e.g. at paragraph 5.2.2 on p27/61 of the report). This needs to be generally corrected in the report as it should be OCP (i.e. Otto Cserhalmi & Partners).</p> <p>Other than that, the CHMP document is acceptable given the current stage of project design and appears to satisfy consent condition C3 for heritage.</p>	Noted. Error corrected.
General	The report appears to put more emphasis and detail into archaeological issues rather than built heritage but offers guidance for the development of more detail on built heritage as the project progresses into the detailed design stage.	OCP Architects have updated relevant sections of the Heritage Management Plan as required.
Section 8	It is also noted that section 8 of the report covers continuous improvement of the report as the project progresses.	Noted

Document Ref	City of Sydney comment details in response to revised plan	Response
General	No comments received at the date of publication.	

Appendix B Registered Aboriginal Parties (RAPs)

The list of registered Aboriginal stakeholders/Registered Aboriginal Parties (RAPs) and associated contact details for the Project area included below:

Stakeholder	CONTACT
Darug Land Observations	Gordon Workman – 02 9831 8868 Jamie Workman – 0420 591 138
Darren Duncan	Darren Duncan – 0410 510 397
Murri Bidgee Mullangari Aboriginal Corporation	Ryan Johnson – 0497 983 332
Tocomwall	Danny Franks – 02 9542 7714
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham – 02 9410 3665
Kamilaroi-Yankuntjatjara Working Group	Pollowan Phillip Khan – 0434 545 982
Woronora Plateau Gundangarra Elders Council	Kayla Williamson – 0414 438 744
Aboriginal Archaeology Service Inc	Anthony Williams – 0456 399 687
Gandangara Local Aboriginal Land Council	Brad Maybury – 02 9602 5280
Metropolitan Local Aboriginal Land Council	Nathan Moran – 02 8394 9666
Gundungurra Tribal Technical Services	Chris Payne – 0466 975 437 Peter Foster – 0432 590 289 David Bell – 0450 124 891
Aboriginal Heritage Office (North Sydney Council)	David Watts – 02 9976 1685
Tony Williams	Tony Williams – 0490 126 040
Bilinga Cultural Heritage Technical Services	Wandai Kirkbright bilinga@mirramajah.com
Gunyyuu Cultural Heritage Technical Services	Darlene Hoskins-McKenzie – 0413 078 011
Munyunga Cultural Heritage Technical Services	Robert Brown munyunga@mirramajah.com
Murrumbul Cultural Heritage Technical Services	Levi McKenzie-Kirkbright murrumbul@mirramajah.com

Stakeholder	CONTACT
Wingikara Cultural Heritage Technical Services	Suzanne McKenzie wingikara@mirramajah.com

Appendix C - CHMP MCoA, CEMP, Environmental Performance Outcomes and REMM Compliance Matrix

The Project was assessed as a Critical State Significance Infrastructure (CSSI) by the Minister for Planning and Environment under Section 115ZB of the EP&A Act. The Minister's Conditions of Approval (CoA) were granted on 9 January 2017 with conditions. A heritage sub-plan is required as part of the Construction Environmental Management Plan (CEMP) for the project under CoA C3(g). The heritage conditions of approval are outlined in conditions E13 -27 and addressed in this plan as outlined below. Additionally, the Revised Environmental Mitigation Measures and requirements in the Construction Environmental Management Framework also provides guidance on required actions during construction works and have been referenced accordingly.

Table 9-1 Compliance Matrix - Minister's Conditions of Approval (CoA)

CoA	Requirement	Document Reference						
C3(g)	The following CEMP sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP sub-plan and be consistent with the CEMP and CEMP referred to in Condition C1.	Section 1.7.1 - Consultation Appendix A						
	<table border="1"> <thead> <tr> <th></th><th>Required CEMP sub-plan</th><th>Relevant government agencies to be consulted for each CEMP sub-plan</th></tr> </thead> <tbody> <tr> <td>(g)</td><td>Heritage</td><td>Heritage Council (or its delegate) and Relevant Council(s)</td></tr> </tbody> </table>		Required CEMP sub-plan	Relevant government agencies to be consulted for each CEMP sub-plan	(g)	Heritage	Heritage Council (or its delegate) and Relevant Council(s)	
	Required CEMP sub-plan	Relevant government agencies to be consulted for each CEMP sub-plan						
(g)	Heritage	Heritage Council (or its delegate) and Relevant Council(s)						
C4	The CEMP sub-plans must state how: <ul style="list-style-type: none"> (a) the environmental performance outcomes identified in the EIS as amended by the documents listed in A1 will be achieved (b) the mitigation measures identified in the EIS as amended by the documents listed in A1 will be implemented (c) the relevant terms of this approval will be complied with; and (d) issues requiring management during construction, as identified through ongoing environmental risk analysis, will be managed. 	<ul style="list-style-type: none"> (a) Refer Table 0-3 below (b) Refer Table 0-2 below (c) Refer Table 0-1 (this table) (d) Refer Table 0-5 below 						
E10	The Proponent must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in Condition A1	Sections 5.2.2, 5.2.5, and 5.2.7 Section 5.4						
C5	The CEMP sub-plans must be developed in consultation with relevant government agencies. Where an agency(cies) request(s) is not included, the Proponent must provide the Secretary justification as to why. Details of all information requested by an agency to be included in a CEMP sub-plan as a result of consultation and copies of all correspondence from those agencies, must be provided with the relevant CEMP sub-plan.	Section 8 Appendix E						
C6	Any of the CEMP sub-plans may be submitted to the Secretary along with, or subsequent to, the submission of the CEMP but in any event, no later than one month before commencement of construction.	Section 8						
C8	Construction must not commence until the CEMP and all CEMP sub-plans have been approved by the Secretary. The CEMP and CEMP sub-plans , as approved by the Secretary, including any minor amendments approved by the ER (or AA in regards to the Noise and Vibration sub-plan), must be implemented for the duration of construction. Where the CSSI is being staged, construction of that stage is not to commence until the relevant CEMP and sub-plans have been approved by the Secretary.	Section 8						

CoA	Requirement	Document Reference
E13	<p>The Proponent must prepare a Heritage Archival Recording Report, including photographic recording of the heritage items identified in documents referred to in Condition A1.</p> <p>Archival recording must include but not be limited to the following heritage items:</p> <ul style="list-style-type: none"> a) any component of the Blues Point Waterfront Group and the McMahons Point South heritage conservation area to be directly affected or altered, including vegetation and significant landscape features b) Hickson Road wall in the vicinity of proposed ventilation risers and skylights for Barangaroo c) Station or any other project elements to be located in front of the Hickson Road wall; (c) Martin Place, between Elizabeth and Castlereagh Streets, Sydney d) the Rolling Stock Officers' Garden, Rolling Stock Officers' Building and Cleaners' Amenities Building in Sydney Yard and any other component of the Sydney Terminal and Central Railway Stations group to be removed or altered e) Any component of the Sydenham Station or Sydenham Pit and Pumping Station to be removed and altered; and f) Former "Metro Goldwyn Mayer" building including interior, 22-28 Chalmers Street, Surry Hills. <p>The archival recording must be undertaken by a suitably qualified heritage specialist and prepared in accordance with NSW Heritage Office's <i>How to Prepare Archival Records of Heritage Items</i> (1998) and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (2006).</p> <p>Within two (2) years of completing the archival recording, or any other later time agreed by the Secretary, the Proponent must submit the Heritage Archival Recording Report to the Department, the OEH, Heritage Council of NSW, Relevant Council(s), relevant local libraries and local historical societies in the respective local government area(s).</p>	<p>E13(d) and (f) are applicable to the Project</p> <p>Section 5.2.10 and 5.2.11</p> <p>Table 5-3 – Archival recording</p>
E14	In addition to the archival recording as required by Condition E13, the Proponent must, prior to demolition, undertake external photography of all buildings and structures to be demolished, in consultation with and to the standards of the relevant Council. The recordings must be made available to the relevant Council.	<p>Section 5.2.10</p> <p>Table 5.3 – Archival recording</p>
E15	The Proponent must salvage items of heritage value from heritage listed buildings and structures to be demolished before demolition and assess options for its sympathetic reuse (including integrated heritage displays) on the project or other options for repository, reuse and display. Suitable repository locations must be established in consultation with relevant councils. Any State listed items or elements suitable for salvage must be determined in consultation with the Heritage Division of the OEH.	<p>Section 5.2.8</p> <p>Section 5.2.13</p>
E16	<p>The Proponent must prepare a Salvage Report, including photographic recording of the heritage items identified for salvage in documents referred to in Condition A1. The salvage report must include:</p> <ul style="list-style-type: none"> (a) The internal heritage fabric removed from within the curtilage of Mowbray House, Chatswood (b) The interior, exterior and setting of the shop at 187 Miller Street, North Sydney (c) The fabric and setting of the North Sydney bus shelters (d) The Interior, exterior and setting of the 'flat building' at 7 Elizabeth Street, Sydney (e) The heritage fabric of the existing Martin Place Station affected by the project the heritage fabric of the existing Sydenham Station affected by the project 	<p>(g) is relevant to the Project</p> <p>Section 5.2.8</p> <p>Table 5-3 – Salvage Strategy</p>

CoA	Requirement	Document Reference
	<p>(f) The heritage fabric of the existing Sydenham Station affected by the project</p> <p>(g) Directly impacted parts of the Congregational Church at Waterloo; and</p> <p>(h) The former Metro Goldwyn Mayer building including interior, 22-28 Chalmers Street Surry Hills</p>	
E17	<p>The Archaeological Assessment Research Design Report (AARD) in the documents listed in A1 must be implemented. Final Archaeological Method Statements must be prepared in consultation with the Heritage Council of NSW (or its delegate) before commencement of archaeological excavation works. The final methodology must:</p> <p>(a) provide for the detailed analysis of any heritage items discovered during the investigations; (b) include detailed site-specific archaeological management and artefact management strategies</p> <p>(c) include cored soil samples for soil and pollen for the Pitt Street site within the Tank Stream Valley; and</p> <p>(d) provide for a sieving strategy.</p>	Requirements of the AARD are considered in Sections 5.3.3 and Table 5-4
E18	<p>Before excavation of archaeological management sites, the Proponent must nominate a suitably qualified Excavation Director who complies with the Heritage Council of NSW's <i>Criteria for Assessment of Excavation Directors</i> (July 2011) to oversee and advise on matters associated with historic archaeology and advise the Department and OEH.</p> <p>Where archaeological excavation is required, the Excavation Director must be present to oversee excavation and advise on archaeological issues. The Excavation Director must be given the authority to advise on the duration and extent of oversight required as informed by the provisions of the approved AARD and Excavation Methodology.</p> <p>A final archaeological report must be submitted to the Heritage Council of NSW within two (2) years of the completion of archaeological excavation on the project. The report must include information on the entire historical archaeological program relating to the CSSI.</p>	<p>Sections 5.3.4 and 5.3.10</p> <p>Table 5-2 Nomination of an Excavation Director</p> <p>Table 6-1 Roles</p>
E19	<p>An Unexpected Heritage Finds Procedure must be prepared:</p> <p>(a) to manage unexpected heritage finds in accordance with any guidelines and standards prepared by the Heritage Council of NSW or OEH; and</p> <p>(b) by a suitably qualified and experienced heritage specialist.</p> <p>The procedure must be included in the AARD and must be implemented for the life of the project.</p>	<p>Section 5.5</p> <p>Table 5-4 Unexpected finds</p>
E20	<p>In the event that a potential relic/s is/are discovered, relevant construction must cease in the affected area and the Excavation Director must be notified and assess the significance level of the find/s and provide mitigation advice according to the significance level and the impact proposed. The Excavation Director must attend the site in accordance with E18 to oversee the excavation where relics of State significance are found.</p> <p>The Secretary must be notified at the same time as the Heritage Council of NSW (or its delegate) of any relic of State Significance found.</p> <p>An Archaeological Relic Management Plan specific to the relic of State significance must be prepared in consultation with the Heritage Council of NSW (or</p>	<p>Section 5.3.5</p> <p>Section 5.3.6</p> <p>Section 5.6</p> <p>Table 5-4 Notification and management of relics</p>

CoA	Requirement	Document Reference
	<p>its delegate) to outline measures to be implemented to avoid and/or minimise harm to and/or salvage the relic of State significance.</p> <p>Construction in the vicinity of the discovery must not recommence until the requirements of the ARMP have been implemented, in consultation with the Excavation Director. The Proponent must notify the Secretary in writing of the outcome of consultation on the Archaeological Relic Management Plan with the Heritage Council of NSW</p>	
E21	<p>The Proponent must prepare a Heritage Interpretation Plan which identifies and interprets the key Aboriginal and Non-Aboriginal heritage values and stories of heritage items and heritage conservation areas impacted by the CSSI. The Heritage Interpretation Plan must inform the Station Design and Precinct Plan referred to in Condition E101. The Heritage Interpretation Plan must be prepared in accordance with the <i>NSW Heritage Manual</i>, the <i>NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines</i> (August 2005), and the <i>NSW Heritage Council's Heritage Interpretation Policy</i> and include, but not be limited to:</p> <p>(a) a discussion of key interpretive themes, stories and messages proposed to interpret the history and significance of the affected heritage items and sections of heritage conservation areas including, but not limited to the Sydney terminal and Central Railway Station Group, and Martin Place Station, Sydenham Station and Sydenham Pit and Drainage Pumping Station Precincts;</p> <p>(b) identification and confirmation of interpretive initiatives implemented to mitigate impacts to archaeological Relics, heritage items and conservation areas affected by the CSSI including</p> <ol style="list-style-type: none"> use of interpretative hoardings during construction community open days community updates station and precinct design; and <p>(c) Aboriginal cultural and heritage values of the project area including the results of any archaeological investigations undertaken.</p> <p>The Heritage Interpretation Plan must be prepared in consultation with the Heritage Council of NSW (or its delegate), Relevant Councils and Registered Aboriginal Parties, and must be submitted to the Secretary before commencement of construction.</p>	<p>Section 5.2.8</p> <p>Section 5.2.13</p> <p>Table 5-3 Heritage Interpretation</p>
E23	The Proponent must take all reasonable steps so as not to harm, modify or otherwise impact any Aboriginal object associated with the CSSI except as authorised by this approval.	Section 5.1.7
E24	Before excavation, the Proponent must implement the Aboriginal Cultural Heritage Assessment prepared for the CSSI and included in the PIR. Excavation and/or salvage must be undertaken by a qualified archaeologist in consultation with the Registered Aboriginal Parties for the CSSI.	<p>Section 5.1.1</p> <p>Section 5.1.4</p> <p>Table 5-2 Test and salvage excavation</p>
E25	Where previously unidentified Aboriginal objects are discovered during construction of the CSSI, construction must stop in the vicinity of the affected area and a suitably qualified and experienced Aboriginal heritage expert must be contacted to provide specialist heritage advice, before works recommence. The measures to consider and manage this process must be specified in the Heritage Management sub-plan required by Condition C3 and, where relevant, include registration in the OEH's Aboriginal Heritage Information Management System (AHIMS)	<p>Section 5.1.7</p> <p>Table 5-2 Unexpected Finds</p>
E26	This approval does not allow the Proponent to harm, modify, or otherwise impact human remains uncovered during the construction and operation of the CSSI, except in accordance with the Exhumation Management Plan (Condition E27)	<p>Section 5.1.6</p> <p>Section 5.3.8</p>

CoA	Requirement	Document Reference
		Table 5-2 and Table 5-4 Unexpected finds procedures for human skeletal remains
E27	<p>An Exhumation Management Plan must be prepared to guide the relocation of recovered human remains. The Exhumation Management Plan must be prepared:</p> <p>(a) in consultation with, and meeting the requirements of, the OEH and NSW Health; and</p> <p>(b) in accordance with the <i>Guidelines for Management of Human Skeletal Remains</i> (NSW Heritage Office, 1998b) and <i>NSW Health Policy Directive – Exhumation of human remains</i> (December 2013), and other relevant guidelines and standards prepared by the Heritage Council of NSW or OEH.</p> <p>The Exhumation Management Plan must be provided to the Secretary for information before the commencement of excavation works.</p> <p><i>Note: Human remains that are found unexpectedly during works are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.</i></p>	<p>Sydney Metro Exhumation Management Plan has been completed by Sydney Metro and outside the management of this CHMP. Sydney Metros Exhumation Plan would be implemented where required. Section 5.1.6 Section 5.3.8</p>

Table 9-2 Compliance Matrix – Revised Environmental Mitigation Measures (REMMS)

REMM	Requirement	Document Reference
NAH1	<p>Archival recording and reporting of the following heritage items would be carried out in accordance with the NSW Heritage Office's <i>How to Prepare Archival Records of Heritage Items</i> (1998a), and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (2006):</p> <ul style="list-style-type: none"> The internal heritage fabric and any non-original elements removed from within the curtilage of Mowbray House, Chatswood The interior, exterior and setting of the shop at 187 Miller Street, North Sydney The fabric and setting of the North Sydney bus shelters requiring removal and temporary relocation at Victoria Cross Station and Blues Point temporary site Any component of the Blues Point Waterfront Group and the McMahons Point South heritage conservation area to be directly affected or altered, including vegetation and significant landscape features Hickson Road wall in the vicinity of proposed ventilation risers and skylights for Barangaroo Station The interior, exterior and setting of the 'Flat Building' at 7 Elizabeth Street, Sydney Martin Place, between Elizabeth and Castlereagh streets, Sydney The heritage fabric of areas of the existing Martin Place Station affected by the project The Rolling Stock Officers' Garden, Rolling Stock Officers' Building and Cleaners' Amenities Building in Sydney Yard and any other component of the Sydney Terminal and Central Railway Stations group to be removed or altered Directly impacted parts of the Congregational Church at Waterloo 	<p>Dot point 9 is applicable to the Project Section 5.2.10, 5.2.11 Table 5-2 – Archival recording</p>

REMM	Requirement	Document Reference
NAH2	The archaeological research design would be implemented. Significant archaeological findings would be considered for inclusion in heritage interpretation (as per NAH8) for the project and be developed in consultation with the relevant local council.	The AARD has been completed and forms as part of the PIR. The HIP, yet to be prepared would include consideration of inclusion of significant archaeological finds Requirements of the AARD are considered in Sections 5.3.3 and Table 5-4
NAH3	An Exhumation Policy and Guideline would be prepared and implemented. It would be developed in accordance with the <i>Guidelines for Management of Human Skeletal Remains</i> (NSW Heritage Office, 1998b) and NSW Health Policy Directive – Exhumation of human remains (December 2013). It would be prepared in consultation with NSW Heritage Office and NSW Health	Tables 5-2 and 5-4 Incident Response Sections 5.1.6 and 5.3.8
NAH4	The method for the demolition of existing buildings and / or structures at Chatswood dive site, Victoria Cross Station, Martin Place Station, Pitt Street Station, Central Station and Waterloo Station would be developed to minimise direct and indirect impacts to adjacent and / or adjoining heritage items.	Demolition of existing buildings will be conducted in accordance with the Construction Noise and Vibration Management Plan and site-specific Demolition Management Plan. Action schedules will guide demolition of significant fabric for salvage. Site specific Demolition Management Plans will be reviewed and endorsed by the Project Heritage Architect prior to the commencement of demolition. Section 5.2.5 Table 5-3
NAH6	An appropriately qualified and experienced heritage architect would form part of the Sydney Metro Design Review Panel and would provide independent review periodically throughout detailed design.	Table 5-3 – Design Management
NAH7	The project design would be sympathetic to heritage items and, where reasonable and feasible, minimise impacts to the setting of heritage items. The detailed design for Martin Place Station and Central Station would be developed with input from a heritage architect.	Section 5.2.2 Table 5-3 – Design Management

REMM	Requirement	Document Reference
NAH8	Appropriate heritage interpretation would be incorporated into the design for the project in accordance with the NSW Heritage Manual, the NSW Heritage Office's <i>Interpreting Heritage Places and Items: Guidelines</i> (August 2005), and the NSW Heritage Council's <i>Heritage Interpretation Policy</i> .	Section 5.2.9 Section 5.2.13 Table 5-3 – Heritage Interpretation
NAH9	A Central Station heritage interpretation plan would be developed and implemented. It would be consistent with the Central Station Conservation Management Plan (Rappoport and Government Architects Office, 2013) and in accordance with the guidelines identified in NAH8.	Section 5.2.13 Table 5-3 – Heritage Interpretation
NAH11	Except for heritage significant elements affected by the project, direct impact on other heritage significant elements forming part of the following items would be avoided: <ul style="list-style-type: none"> The Blues Point Waterfront Group (including the former tram turning circle, stone retaining wall, bollards and steps) The Millers Point and Dawes Point Village Precinct The existing Martin Place Station Sydney Terminal and Central Railway Stations group Sydney Yard (including the Shunters Hut and Prince Alfred Sewer). 	Dot points 4 and 5 are relevant to the Project Section 3.2.1 Section 5.2.7 Table 5-3 – Indirect impacts
NAH13	The design and detailed construction planning of work at Central Station would consider the requirements of the <i>Central Station Conservation Management Plan</i> (Rappoport and Government Architects Office, 2013) and include consideration of opportunities for the retention, conservation and / or reuse of original and significant heritage fabric and movable heritage items. Consultation would be carried out with Sydney Trains and the Heritage Council of NSW during design development.	Table 5-3 – Design Management
NAH18	Works at Central Station would be carried out with the oversight of heritage specialists.	LORA have engaged OCP Architects to advise on built heritage and Artefact Heritage to manage archaeology for the project. Section 5.2.2
AH1	Aboriginal stakeholder consultation would be carried out in accordance with the NSW Office of Environment and Heritage's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.	Section 1.7.2
AH2	The cultural heritage assessment report would be implemented.	Section 5.1.1 Table 4-1
AH3	Archaeological test excavation (and salvage when required) would be carried out where intact natural soil profiles with the potential to contain significant archaeological deposits are encountered at the Blues Point temporary site, Barangaroo Station, Martin Place Station, Pitt Street Station, Central Station, Waterloo Station and Marrickville dive site. Excavations would be conducted in accordance with the methodology outlined in the Aboriginal cultural heritage assessment report	Section 5.1.4 Section 5.1.5 Table 5-2 Test and salvage excavation
AH4	Appropriate Aboriginal heritage interpretation would be incorporated into the design for the project in consultation with Aboriginal stakeholders.	Section 5.1.5 Section 5.2.13 Table 5-3 Heritage Interpretation

Table 9-3 Revised environmental performance outcomes

Revised environmental performance outcomes	Document Reference
Non-Aboriginal heritage	
The project would be sympathetic to heritage items and, where feasible and reasonable, avoid and minimise impacts to non-Aboriginal heritage items and archaeology ›	Section 1.4 and 1.6 Table 5-3 and Table 5-4
The design of the project would reflect the input of an independent heritage architect, relevant stakeholders and the design review panel.	Table 5-3 – Design requirements and indirect impacts
Aboriginal heritage	Table 5-2
The project would be sympathetic to heritage items and, where feasible and reasonable, avoid and minimise impacts to Aboriginal heritage items and archaeology	Table 5-3 – Design requirements and indirect impacts
The design of the project would reflect the input of an independent heritage architect, relevant stakeholders and the design review panel.	Table 5-3 – Design requirements and indirect impacts

Table 5 CEMF Compliance Matrix – Issues requiring management during construction

Heritage Management Objectives	Document Reference
a. The following heritage management objectives will apply to construction:	
i. Embed significant heritage values through any architectural design, education or physical interpretation.	LOR have engaged OCP Architects to advise on built heritage and Artefact Heritage to manage archaeology for the project. Section 5.2.2 and 5.2.8 Table 5-3 Heritage Interpretation
ii. Minimise impacts on items or places of heritage value.	Section 4 and Section 5.2.4 Table 5-3 – Design requirements and indirect impacts
iii. Avoid accidental impacts on heritage items.	Section 3.2.1 and Section 5.2.4 Table 5-3 – Design requirements and indirect impacts
iv. Maximise worker's awareness of indigenous and non-indigenous heritage	Section 5.4

Heritage Management Implementation	Document Reference
a. Principal Contractors will develop and implement a Heritage Management Plan which will include as a minimum:	The HMP
i. Evidence of consultation with Registered Aboriginal Parties (Indigenous Heritage only) and the NSW Heritage Council.	Section 1.7

Heritage Management Implementation	Document Reference
ii. Identify initiatives that will be implemented for the enhancement of heritage values and minimisation of heritage impacts, including procedures and processes that will be used to implement and document heritage management initiatives.	–Section 2.2.2 and Section 5
iii. The heritage mitigation measures as detailed in the environmental approval documentation.	–Section 5
iv. The responsibilities of key project personnel with respect to the implementation of the plan.	Table 6-1
v. Procedures for interpretation of heritage values uncovered through salvage or excavation during detailed design.	Section 5.2.8 Section 5.2.9 Section 5.2.13 Table 5-3 – Heritage Interpretation
vi. Procedures for undertaking salvage or excavation of heritage relics or sites (where relevant) and any recordings of heritage relics prior to works commencing that would affect them.	Sections 5.3.3 and Table 5-4
vii. Details for the short and / or long-term management of artefacts or movable heritage.	Section 5.1.5
viii. 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 5 Table 5-3 – Design requirements and indirect impacts
ix. Procedures for unexpected heritage finds, including procedures for dealing with human remains.	Sections 5.1.7, 5.3.5 and 5.5 Table 5-2 – Incident Response Table 5-4 – Incident Response Exhumation Management Plan
x. Heritage monitoring requirements.	–Figure 5.1 Section 5.3.3 Tables 5-2, 5-3 & 5-4 Section 7
xi. Compliance record generation and management.	–Table 5-2 & 5-3 Section 5.4 Section 7
b. The Contractor's regular inspection will include checking of heritage mitigation measures.	Table 5-2 & 5-3 Section 5.4 Section 7
c. Compliance records will be retained by the Contractor. These will include:	Table 4-1 - Monitoring Table 4-2 - Monitoring
i. Inspections undertaken in relation to heritage management measures.	Table 5-2 & 5-3 Section 5.4 Section 7

Heritage Management Implementation	Document Reference
ii. Archival recordings undertaken of any heritage item.	Section 5.2.10, 5.2.11 Table 5-3 – Archival recording
iii. Unexpected finds and stop work orders.	Table 5-2 – Incident Response Table 5-4 – Incident Response
iv. Records of any impacts avoided or minimised through design or construction methods.	Table 4-1 - Monitoring Table 4-2 - Monitoring
Heritage Mitigation	Document reference
a. Examples of heritage mitigation measures include:	
i. Any heritage item not affected by the works will be retained and protected throughout construction.	Section 5.2.7 Table 5-3 – Design requirements and indirect impacts
ii. During construction undertake professional archaeological investigation, excavation, and reporting of any historical Indigenous heritage sites of state significance which will be affected. Reporting may be completed as construction progresses.	Sections 5.1.1 and 5.14 and Figure 5.1 Table 5-3
iii. Undertake archival recordings of all non-Indigenous heritage items affected by the works prior to commencement of works.	Section 5.2.10, 5.2.11 Table 5-3 – Archival recording
iv. Implement unexpected heritage find procedures for Indigenous and non-Indigenous	Table 5-2 – Incident Response Table 5-4 – Incident Response Sections 5.1.7 and 5.3.5

Appendix D Sample / Template Conservation Actions Schedule

Appendix E - SWTC Appendix B6 Heritage Conservation Works Specification

Appendix F – Severe Environmental Risks addressed in this Management Plan

SER Addressed	Critical Control	Control Description	Location of addressed SER
SER 2 – European and Aboriginal Heritage	CC01	<i>Permit(s) and approvals are in place where known heritage areas to be disturbed or removed. Permit or approval mitigation measures incorporated into construction methodology.</i>	<p>Temporary Protection Plan for general works in the Northern Concourse has been endorsed, however a TPP for demolition still required development as required by Conservation Action Schedule C. Site delineated from heritage fabric in most areas.</p> <p>DST GLS monitoring works- a Heritage Impact Assessment was prepared for the installation of monitors.</p> <p>Archaeological Method Statement is in the process of being prepared for Central Walk and CSR works. Heritage Impact Assessment Complete for CSR works.</p>
SER 2 – European and Aboriginal Heritage	CC02	<i>Native title obligations have been assessed and requirements addressed</i>	No native titles identified.
SER 2 – European and Aboriginal Heritage	CC03	<i>Investigation, assessment and clearance surveys/activities have been undertaken in all project areas prior to disturbance or access for construction activities</i>	<p>Process set up prior to clearing- see Biodiversity SER.</p> <p>The Aboriginal and non-aboriginal AMS has been undertaken prior to any works</p>
SER 2 – European and Aboriginal Heritage	CC04	<i>Salvage operations, where required, have been completed and records documented</i>	<p>Salvage register set up, updated as required with appropriate assessment.</p> <p>Construction Heritage Management Plan: Section 1.7</p> <p>Section 4: Central station heritage conservation measures.</p> <p>Attachment A: Salvage Register has been developed.</p>
SER 2 – European and Aboriginal Heritage	CC05	<i>All known heritage sites/areas have physical delineation including physical barriers such as fencing, flagging tape</i>	<p>Salvage register set up, updated as required with appropriate assessment.</p> <p>Construction Heritage Management Plan:</p>

		<i>and sign-posted (where culturally appropriate)</i>	<p>Section: 5.2.7 - 5.2.9 - Retention and Protection of Significant Fabrics and Management.</p> <p>Section: 3.5 - Protection of retained heritage elements.</p> <p>Section 4. Central station heritage conservation measures.</p> <p>Section: 4.4. Protection of retained heritage elements.</p> <p>Attachment A: Salvage register.</p>
SER 2 – European and Aboriginal Heritage	CC06	<i>Vibration shall not exceed 3mm/sec at any heritage structure without approval from the State's heritage body (note: lower limits may be specified in the project-specific documentation)</i>	<p>Heritage structures of highest perceived impact is monitored using a real time logger at the Electrical Building (TCAC).</p> <p>Construction Heritage Management Plan:</p> <p>Section: 10.2.5: No heritage buildings in proximity to the CSM project is structurally unsound. Therefore, there are no separate vibration limits for heritage structures on the project.</p> <p>Table 5.6 lists the Vibration Management Levels.</p>
SER 2 – European and Aboriginal Heritage	CC07	<i>Pre-condition surveys have been undertaken for heritage structures to be retained and a vibration monitoring program has been developed, including vibration monitoring when vibration generating activities are undertaken within 30 metres of a heritage structure</i>	<p>Dilapidation surveys complete. CENA 68 Dilapidation complete as well as additional dilapidation for electric building projected cornice.</p> <p>Heritage Management Plan:</p> <p>Section: 5.2.10</p>

Ben Armstrong
Associate Director Environment
Environment Sustainability and Planning
Sydney Metro
Transport for NSW
PO Box K659
HAYMARKET NSW 1240

24 August 2021

Ref: CSMW CHMP

Dear Ben

**RE: Sydney Metro City & Southwest- Central Station Main Works (CSMW) –
Construction Heritage Management Plan**

Thank you for providing the following document for Environmental Representative (ER) review as required by the Condition of Approval A24 (j) of the Sydney Metro City & Southwest project (SSI – 15_7400 January 9 2017).


- Sydney Metro City & Southwest- Central Station Main Works – Construction Heritage Management Plan, SMCSWCSM-LOR-SMC-EM-PLN-000027 Revision 11, dated April 2021 (the Plan).

The Plan was developed to address the Condition C3(g) of the Project Approval. Rev 11 updates the Plan by:

1. Including minor updates identified as part of a review conducted by LOR in 2021.
2. Including reference to Eddy Ave Booster Station
3. Updating the references to Modifications 7 and 8 to SSI – 15_7400.

As an approved ER for the Sydney Metro City & Southwest project, I have reviewed the revised document and consider the amendments minor and consistent with the terms of the Infrastructure Approval. On this basis the Construction Heritage Management Plan Rev 11 is approved in accordance with Condition A24(j).

Yours sincerely



Michael Woolley
Environmental Representative – Sydney Metro – City and South West