

Waterloo Integrated Station Development

Heritage Management Plan

SMCSWSWL-JHG-SWL-EM-PLN-000004

Document and Revision History

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Glossary

Term	Explanation
AHD	Australian Heritage Database
AHIMS	Aboriginal Heritage Information Management System
AMS	Archaeological Method Statement
ARMP	Archaeological Relic Management Plan
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSSI	Critical State Significance Infrastructure
DPIE	Department of Planning, Industry & Environment
ECM	Environmental Control Map
EIS	Environmental Impact Statement
ER	Environmental Representative
HIA	Heritage Impact Assessment
HMP	Heritage Management Plan
ISD	Integrated Station Development
Minister, the	NSW Minister for Planning
OEH	Office of Environment and Heritage
RAPs	Registered Aboriginal Parties
REMMs	Revised Environmental Mitigation Measures
SDPP	Station Design and Precinct Plans
SMCSW	Sydney Metro City and Southwest
SWTC	Scope of Work and Technical Criteria
TSE	Sydney Metro Tunnel and Station Excavation Contractor

1 Introduction

1.1 Purpose

John Holland has prepared this Heritage Management Plan (HMP) to describe how heritage will be managed during the construction of the Waterloo Integrated Station Development (ISD).

This HMP forms part of the Construction Environmental Management Plan (CEMP) for Waterloo ISD. It has been prepared to address the relevant requirements of Sydney Metro's Construction Environmental Management Framework (CEMF), the Revised Environmental Mitigation Measures (REMMs), the Project Planning Approval, applicable legislation, and contractual requirements, including the Project Deed and Scope of Work and Technical Criteria (SWTC).

This Plan will be submitted for approval to the Secretary of the Department of Planning, Industry and Environment (DPIE) no later than one (1) month before commencement of Construction of the Waterloo ISD. Construction will not commence until the CEMP and sub-plans (including this Plan) have been approved.

1.2 Background

The Waterloo ISD is located within South Sydney local area in the suburb of Waterloo. The site is situated approximately 3 kilometres from the CBD on one city block bounded by Botany Road to the west, Raglan Street to the north, Cope Street to the east, and Wellington Street to the south.

This Plan builds on the Aboriginal and non-Aboriginal heritage assessments undertaken in the Environmental Impact Statement (EIS) and Submissions, Preferred Infrastructure Report and Archaeological Method Statements and Preliminary Archaeological Investigation Reports produced by the Sydney Metro Tunnel and Station Excavation (TSE) Contractor.

1.3 Overview of the Waterloo ISD

The Waterloo ISD works under the Project Planning Approval include the design and construction of the Waterloo Metro Station and associated infrastructure. Section 2 of the CEMP provides a detailed description of the works to be completed. In addition to the station works the following will be completed:

- Local area works involving resurfacing or reconstruction of affected roads, footpaths, cycle ways etc
- Utility service works, including the undergrounding of low voltage powerlines, installation of new services to connect to the new facilities
- Property works to existing buildings that are affected by the project
- Retail works to the spaces in the Waterloo Station and precinct
- Enabling works for the over-station development.



The Waterloo ISD will include future over-station development, however the over-station development component is not subject to this Project Planning Approval and therefore does not form part of the scope for the Waterloo ISD as outlined in the CEMP or the Sydney Metro Staging Report.

1.3.1 Temporary works

The proposed temporary works include:

- Site compound, amenities and services establishment, use and demobilisation
- Hoarding, security fencing, handrails and gantry
- Vehicular accesses and diversions
- Piling and crane platforms
- Construction signage
- Traffic and pedestrian management devices
- Lighting
- Existing services protection
- Lay-down and storage areas
- Stockpile areas
- Scaffolding and access platforms
- Formwork and falsework systems and
- All other temporary works and measures required for the construction of the Works.

1.4 Objectives

The following heritage management objectives will be applied to the Waterloo ISD works:

- Implement measures to appropriately manage all known Aboriginal and historic heritage items that may be impacted by the works
- Implement Sydney Metro's Unexpected Heritage Finds Procedure (SM-18-00105232) to avoid accidental impacts on heritage items, places or value.
- Carry out training to maximise awareness of Aboriginal and historic heritage relevant to the works (including unexpected finds)
- Identify, investigate, record and assess the significance of any discovered Aboriginal and historic heritage items including any cultural features
- Avoid harm, destruction and defacement of human remains, including Aboriginal burials in accordance with the Sydney Metro Exhumation Management Pan (CoA E27).

1.5 Consultation

The Project Planning Approval requires the HMP be prepared in consultation with the Heritage Council (or its delegate) and relevant Council(s) which is City of Sydney for Waterloo ISD.



The key stakeholders related to heritage who have been consulted with during the development of this HMP include:

- Heritage Council
- City of Sydney Council

The likelihood of encountering Aboriginal artefacts has been assessed and determined to be 'low' for the Waterloo ISD. This is based on the previous investigations undertaken during the TSE works. As such consultation with the Registered Aboriginal Parties (RAPs) has not been included as part of this plan. Note, consultation with the RAPs will occur during the preparation of the site specific heritage interpretation plan.

Comments received from the stakeholders (along with John Holland's response) are detailed in Table 1 and Appendix B. Where appropriate, this Plan has been updated to address these comments.

Table 1: Consultation Summary

Condition	Agency Consultation	Requirements and date submitted	Key Issues Raised	HMP Section Reference
C3	City of Sydney	Response received 09/06/2020	Refer Appendix B	Section 6.1
C3	Heritage Council (or delegate)	Consultation on plan requested 18/05/2020; Follow-up emails on 01/06/2020; 15/06/2020	No response	n/a
C3	OEH (Aboriginal)	Response received 18/06/2020	No comments	n/a

Consultation records will be maintained for the project to detail any correspondence or ongoing consultation undertaken as part of the requirements of this HMP. These logs will be kept separately to this HMP and provided to DPIE for information.

1.6 Interactions with other Management Plans

This Plan has the following interrelationships with other management plans and documents:

- Construction Environmental Management Plan: overarching environmental management plan.
- Construction Noise and Vibration Management Plan and associated Construction Noise & Vibration Impact Statement: details predicted vibration impacts and site specific mitigation measures the Waterloo ISD including monitoring requirements for the Congregational Church and other locally sensitive buildings.
- Waterloo ISD Community Communication Strategy
- Environmental Control Maps (ECMs) will be prepared progressively for the site and include relevant heritage management measures.



1.7 Approval of this Plan

This plan will be reviewed by Sydney Metro, endorsed by the Environmental Representative (ER) and submitted to the Secretary of DPIE for approval in accordance with Project Planning Approval Condition C8.

2 Legal and Other Requirements

2.1 Legal Requirements

As the Project is Critical State Significant Infrastructure (CSSI), the requirements of the *Heritage Act 1977* and the *National Parks and Wildlife Act 1974* are being assessed under Part 5.1 of the *Environmental Planning and Assessment Act 1979*. This is addressed in the Project Planning Approval and no separate permits will be required.

The key planning requirements from the Project Planning Approval (Chatswood to Sydenham) and Revised Environmental Management Measures (REMMs) and the Construction Environmental Management Framework (CEMF) are summarised in the Compliance Matrix (Appendix A).

The Plan addresses applicable requirements within the following documents:

- The Sydney Metro City and Southwest Project Approval Determination, dated 9th January 2017 and associated modifications
 - 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)
 - o 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 5 Blues Point Acoustic Shed (determined 2 November 2018)
 - CSSI 7400 MOD6 Administrative Changes (determined 21 February 2019)
- The Sydney Metro City and Southwest Environmental Impact Statement, dated 3rd May 2016;
- Sydney Metro City & Southwest Chatswood to Sydenham Staging Report, Rev 6, dated 2nd July 2019;
- Sydney Metro City & Southwest Sustainability Strategy
- John Holland Waterloo ISD Sustainability Management Plan
- Construction Environmental Framework, Chatswood to Sydenham, Feb 2017

2.2 Guidelines

Additional relevant guidelines and standards relating to the management of Aboriginal and historic 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)
- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)



- Assessing Significance for Historical Archaeological Sites and Relics (NSW Heritage Branch, Department of Planning, 2009)
- NSW Heritage Manual 1996 (Heritage Office and Department of Urban Affairs and Planning, 1996)
- Assessing Heritage Significance (NSW Heritage Office, 2001)
- Levels of Heritage Significance (NSW Heritage Office, 2008)
- Statements of Heritage Impact (Heritage Office, 2002)
- NSW Government's Aboriginal Participation in Construction Guidelines (2007)
- How to Prepare Archival Recording of Heritage Items (Heritage Branch 1998)
- The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (Australia ICOMOS, 2013)
- Heritage Platforms Conservation Management Strategy, (Sydney Trains, 2015)
- Canopies and Shelters, Design Guide for Heritage Stations, Sydney Trains (December 2016)
- Design in Context Guidelines for Infill Development in the Historic Environment (NSW Heritage Office, 2006)
- NSW Heritage Council's Criteria for Assessment of Excavation Directors (2011)
- NSW Heritage Council's Assessing Significance for Historical Archaeological Sites and Relics (2009)
- NSW Heritage Office Archaeological Assessments (1996)
- Office of Environment and Heritage's Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (2011)
- Office of Environment and Heritage's Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW 2010)
- NSW Heritage Council's Photographic Recording of Heritage Items Using Film or Digital Capture (2006) guidelines
- NSW Heritage Office Guidelines for Management of Human Skeletal Remains (1998)



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3 Existing Environment

The impacts on heritage items within the vicinity of the Waterloo ISD were assessed as part of the EIS and later during the construction activities completed by the Sydney Metro TSE Contractor. The EIS identified a number of heritage items located within the study area, refer to Table 2 for an overview of the heritage items and Figure 1 for details of the study area.

The EIS (2016) describes the Waterloo ISD site as being located across the north western portion of a large quaternary sand sheet. The majority of the Eastern Suburbs from Waterloo east to the ocean coastline and south to Botany Bay was originally an undulating series of sand dunes. A review of the Aboriginal Heritage Information Management System (AHIMS) was completed during the preparation of the EIS (2016) which confirmed there are no recorded Aboriginal sites located within 100 metres of the Waterloo ISD. The closest recorded site is AHIMS site 45-6-2597, an artefact and shell midden site located approximately 275 metres to the north.

Table 2: Heritage listed items identified in the Heritage Impact Assessment (EIS 2016)

Ref No.	Heritage Item	Registered listings	Significance	Relationship to the study area
12069	Congregational church including interior	Sydney LEP 2012	Local	Within construction area
15	Former CBC Bank including interior	Sydney LEP 2012	Local	Partially within buffer zone
12070	Cauliflower Hotel including interior	Sydney LEP 2012	Local	Partially within buffer zone
	Alignment Pin, Waterloo (SE corner Wellington Street and Botany Road)	RMS s170	Local	Within buffer zone

Based on the archaeology identified during the station box excavation, Table 3 identifies the heritage potential that could be uncovered during excavation of the area to the west of the station box, located in the yellow shaded section of Figure 2. Excavation of this section of the site is not expected to be required for the Waterloo ISD as it is not currently included in the scope of the project.

Table 3: Potential heritage find (AMBS)

Site	AMBS Archaeological Potential & Strategy	AARD Archaeological Potential & Strategy
Waterloo ISD	1893 Sydney Water plan indicates possible early cottages	Evidence of c.1880s residential, commercial and light industrial development
	Monitor, test, assess, salvage	Monitor, test, salvage if significant

Figure 1: Location of heritage listed buildings



The existing environment and heritage context of the Waterloo ISD has been broadly assessed in the following Technical Reports included in the EIS

- Chatswood to Sydenham Environmental Impact Statement (May 2016) Technical Paper 4:
 Non-Aboriginal Heritage Impact Assessment, prepared by Artefact Heritage
- Chatswood to Sydenham Environmental Impact Statement (May 2016) Technical Paper 5:
 Aboriginal Heritage Archaeological Assessment, prepared by Artefact Heritage

Additional reports prepared are listed in Table 4.

Table 4: Heritage Reports for Waterloo

Source	Date	Title	File name
Artefact	1/10/2016	Historical Archaeological Assessment & Research Design	09a Sydney Metro C2S SPIR Appendix H Historical Archaeological Assessment
Artefact	2/10/2016	Historical Archaeological Assessment & Research Design	09b Sydney Metro C2S SPIR Appendix H Historical Archaeological Assessment
Artefact	1/10/2016	Aboriginal Cultural Heritage Assessment	10 Sydney Metro C2S SPIR Appendix I Aboriginal Cultural Heritage
AMBS Ecology and Heritage	1/11/2017	Sydney Metro, City & Southwest Archaeological Method Statement for Waterloo Station	SMCSWTSE-JCG-SWL-EM-REP- 002072.00.REV.00.01
AMBS Ecology and Heritage	11/07/2018	Summary report on the historical archaeological Investigations at the Waterloo Station Site	Waterloo Preliminary Archaeological Assessment Report
Urbis (Urban Growth)	22/10/2018	Heritage Impact Statement	Waterloo Metro Quarter State Significant Precinct Study Attachment 10 heritage study
SDD Schedule C2		Heritage Strategy for Waterloo	NWRLSRT-MET-SWS-HE-REP- 000001
SDD Schedule C4		MQD Indigenous Cultural Heritage	MQD Indigenous Cultural Heritage



4 Key Personnel

John Holland will engage a Heritage Consultant to carry out key heritage works for the Waterloo ISD. The roles and responsibilities for key personnel, including this consultant are outlined in Table 5.

Table 5: Roles and responsibilities of key personnel

Role		Responsibility for heritage management
Project Director	٠	Managing the delivery of the Waterloo ISD including overseeing implementation of heritage management measures
	•	Act as Contractor's Representative
Environment & Sustainability Manager	•	Oversee the implementation of all heritage management initiatives Responsible for managing ongoing compliance with the CoA and environmental document requirements
Engineering Manager	•	Ensure heritage requirements are considered throughout the design phase
Construction Managers Site Superintendent	•	Manage the delivery of the construction process, in relation to heritage management across the site in conjunction with the Environment & Sustainability Manager
Sustainability Manager	•	Track and report heritage elements against sustainability targets
Environment & Sustainability Coordinator	•	Manage the on-ground application of heritage management measures during construction
Project Engineer	•	Implement heritage management requirements during construction works
Environmental Representative	•	Receive and respond to communications from the Secretary in relation to the environmental performance of the Critical State Significant Infrastructure (CSSI);
	•	Consider and inform the Secretary on matters specified in the terms of the planning approval;
	•	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;
	•	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);
	•	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;
		Review the Proponent's notification of incidents in accordance with Condition A41 of this approval;
	•	As may be requested by the Secretary, help plan, attend or undertake Department audits of the CSSI, briefings, and site visits;
	•	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 amendment is necessary, approve the amendment. This does not include any modifications to the terms of the planning approval;
	•	Perform the roles under CoA A24



Role		Responsibility for heritage management
	•	Must complete project induction covering John Holland environmental management system
Archaeological Excavation Director (will be engaged if excavation required that may result in impacts to heritage)	•	The Excavation Director must be suitably qualified and 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 Heritage Council of NSW (or its delegate).
	•	Advise Sydney Metro of any relic of state significance if identified to allow Sydney Metro to inform the Secretary as required by E20.
	•	The Excavation Director must be present to oversee excavation and advise on archaeological issues.
	•	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.
	•	Implement the Aboriginal Cultural Heritage assessment in the event excavation is required that is likely to impact on Aboriginal heritage.
Heritage specialist	•	Responsible for providing advice to minimise potential impacts to any built heritage values during the construction activities
All project personnel	•	All project personnel to undertake toolbox talks in relation to the reporting process for unexpected finds.
	•	Undertake relevant training to implement the requirements of this HMP

5 Heritage Context

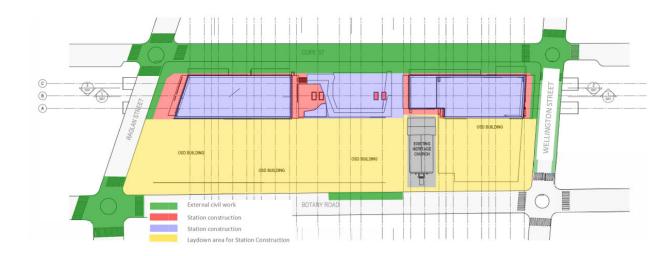
5.1 Non-Aboriginal Heritage assessment

The scope of the Waterloo ISD is unlikely to have a direct impact on non-aboriginal heritage items. The TSE Contractor has previously managed heritage aspects in accordance with the TSE Construction Heritage Management Plan.

Archaeological investigations have been previously carried out within the station box footprint, represented as red and purple in Figure 2.

Excavation of the extended site footprint (refer Figure 2 yellow shading) has potential to expose evidence of early occupation and settlement. The excavation of this area will be completed at a later stage, by others, and is not part of the scope of this Plan.

Figure 2: Waterloo ISD location and extent of work



The EIS (2016) included a detailed heritage impact assessment (HIA) for the known heritage items in the Waterloo study area as described in Figure 1. The findings are summarised in Table 6.

Table 6: Heritage Impact assessment outcome

Item	Significance	Relationship to the study area	HIA
Congregational Church (including interior)	Local	Within construction area	As the bulk of the new station would be located to the rear of the heritage item, and the heritage item is oriented to the west and away from the station site, demolition of existing buildings and construction of new station entrances would have a minor impact on the setting of the heritage item. Indirect impact: Minor
CBC Bank (including interior)	Local	Partially within buffer zone	Proposed station buildings to the east of the heritage item would result in minor visual impacts through the



Item	Significance	Relationship to the study area	HIA
			demolition of existing buildings and the introduction of new station entrances.
			Indirect impact: Minor
Cauliflower Hotel (including interior)	Local	Partially within buffer zone	Demolition of existing structures to the north-east of the heritage item would result in minor visual impacts through alteration of the existing streetscape. The existing buildings do not contribute to the heritage significance of the hotel.
			Indirect impact: Minor
Alignment pin	Local	Within buffer zone	No impacts

All archaeology associated with station box has been completed by the TSE Contractor, however, minor excavation work within the study area will be required for Waterloo ISD during utility work. The impact associated with the utility work is expected to be low with potential impacts managed in accordance with the Sydney Metro Unexpected Heritage Finds Procedure.

5.2 Aboriginal Heritage Assessment

The EIS (2016) assessed the potential for Aboriginal Heritage at the Waterloo Metro Site. The outcome of the assessment determined no identified Aboriginal sites would be impacted by the proposed Waterloo Station works. There is potential for Aboriginal objects to occur in the subsurface archaeological deposits where there are surviving portions of A horizon sands.

The TSE Contractor has previously completed the excavation and ground disturbance required for construction of the Station. This was managed in accordance with the TSE Construction Heritage Management Plan.

Excavation of the extended site footprint (refer Figure 2 yellow shading) has potential to expose evidence of Aboriginal Heritage. The excavation of this area will be completed at a later stage and is not part of the scope of this Plan. Refer to Figure 2 for details of the area of impact.



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6 Construction Impacts and Management

As identified in Section 5, direct impacts to Aboriginal or non-Aboriginal heritage is unlikely as a result of construction. However, where the risk of construction is determined to have an impact through further assessment of the construction method (e.g. location and depth of excavation), advice from the Waterloo ISD heritage specialist would be obtained and may include the following:

- 1. Archival recording and salvage of any heritage items to be demolished or modified
- 2. Delineating (fencing off) to protect any heritage items and installation of protection measures required to mitigate potential impacts on directly adjacent heritage items
- 3. Monitoring as required by the Noise and Vibration Management Plan to minimise impacts on heritage items that are to be retained.

6.1 Specific Management Requirements

As the Congregational Church at 103–105 Botany Road, Waterloo, is located within the site boundary, specific management measures will be in place to prevent direct impacts. The characteristics of the church structure include the following:

- The church is constructed of rendered brick set in a lime mortar on sandstone block foundations. The foundations are sitting on dense sand and lime mortar, which is quite flexible, but there is a relatively high water table.
- To the rear of the church is a two-storey painted brick building, the Church Hall, built in 1886 to accommodate 400 students and to replace the earlier school associated with the 1863 chapel. To each side of the church is a path approximately 1.5m wide leading to the church hall, which extends to the northern and southern property boundaries.

John Holland's management approach to avoid impact to this heritage building is to limit settlement through adopting appropriate design and construction methodologies as required by CoA E58. The Construction Groundwater Management Plan (Section 6 and Section 8) includes details on how settlement will be managed to prevent impacts during construction. The ECM includes the construction management requirements that relate to settlement.

Monitoring of impacts includes completing a building condition survey prior to the commencement of Construction as required by CoA E59. A condition survey will be completed following construction as required by CoA E60. A comparison of the two records will determine if any impact has occurred and if rectification works are required.

During construction, John Holland will monitor the Church for potential effects as a result of generating vibration, refer to the Construction Noise and Vibration Management Plan. Where required mitigation measures within the worksite maybe be installed in the event that impacts are observed. These measures will be installed from the worksite and not require any direct impact on the curtilage of the Church which is in keeping with the requirements of CoA E58.

The boundary of the construction worksite will be fenced to prevent construction personnel entering the Congregational Church grounds, unless authorised to do so.



The Environmental Control Map (ECM) will document the location of heritage buildings and monitoring equipment.

6.2 Salvage

In accordance with Conditions E15 and E16, salvage of architectural and decorative elements and furnishings from buildings to be demolished provides an opportunity for making available elements for re-use in buildings of the same era and architectural style or relevant interpretive displays. The scope of the Waterloo ISD works does not currently include demolition of heritage-listed buildings and as such, salvage of architectural elements or items is not included in the current scope of works.

In the event of an unexpected find, salvage of items will be undertaken in accordance with advice from the Heritage specialist.

6.3 General Measures

This Section describes the overall approach and principles associated with managing and mitigating risks across Aboriginal and non-Aboriginal heritage during Construction. It is noted that John Holland must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in Project Planning Approval Condition A1.

6.3.1 Competence, Training and Awareness

Prior to the start of work on-site staff will be given a site specific induction including the heritage requirements for the site. Regular toolbox talks will be presented when site conditions change and/or new staff join the team. Each induction/toolbox will include:

- Understanding the Unexpected Finds Protocol and the requirements of this plan
- Repercussions of any breaches to the procedures detailed in this plan
- Maps showing location of any known archaeological potential and anticipated archaeological features
- Photographs of the types of anticipated archaeological features

6.3.2 Site Establishment

Prior to the commencement of Construction the following will be installed or reviewed, if included as part of the handover from the TSE Contractor, to ensure appropriate for the Waterloo ISD work.

- Appropriate hoarding, protection, barriers, exclusion zones
- Signs on all protection works should be marked. The protection works should be inspected on a bi-monthly basis during the environmental and sustainability inspection process.

6.3.3 Structural Monitoring/Vibration Monitoring

To ensure heritage buildings are sufficiently protected during the Waterloo ISD work structural and vibration monitoring maybe required in accordance with the Construction Noise and



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Vibration Management Plan (CNVMP) as vibration from construction work has the potential to impact on the fabric of heritage items. Specific details of the management requirements for the Congregational Church are provided in CNVMP Section 6.1. Where activities may result in impacts to the other known heritage buildings outside the construction footprint, a review of the construction activities will be undertaken by the environmental team to determine the appropriate monitoring. Input from the heritage specialist and vibration consultant may be required. The location of monitoring equipment will be documented on the ECM.



7 Unexpected Heritage Finds

Sydney Metro have prepared an Unexpected Heritage Finds Procedure (refer Appendix C) to provide a method for managing unexpected heritage items (both Aboriginal and non-Aboriginal) that are discovered during preconstruction (pre-Construction Heritage Manage Plan approval) and construction phases (post Construction Heritage Manage Plan approval). The Procedure meets the requirements of the Project Planning Approval Condition E19 and E25 and is provided in Appendix C.

As required by Project Planning Approval Condition E20, in the event that a potential relic/s is/are discovered, relevant construction will cease in the affected area and an Excavation Director notified to assess the significance level of the find/s. The Excavation Director will provide mitigation advice according to the significance level and the impact proposed. Based on the find and advice from the Excavation Director, an Archaeological Relics Management Plan (ARMP) will be produced in the event unexpected relics of State significance are discovered during construction. The ARMP will be prepared in consultation with the Heritage Council of NSW (or its delegate) to outline measures to be implemented to avoid and/or minimise harm to and/or salvage the relic of State significance. Construction in the vicinity of the discovery will not recommence until the requirements of the ARMP have been implemented, in consultation with the Excavation Director.

Sydney Metro will notify the Secretary in accordance with Condition E20 in the event of any relic of State significance being identified and also detail the outcome of consultation on the ARMP with the Heritage Council of NSW. John Holland will notify the Heritage Council of NSW (or its delegate) of any relic of State significance.

7.1 Unexpected Finds Procedure

The Project Planning Approval defines an 'Unexpected heritage find' as:

A potential heritage item discovered unexpectedly (usually during construction) but not identified in the EIS or PIR, or Archaeological Method Statements prepared under Condition E17 or E24 where assessment is required to determine if the item is a relic, or is an Aboriginal object. Unexpected heritage finds does not include human remains.

If unexpected finds (Aboriginal or non-Aboriginal), archaeological features or unidentified Aboriginal objects are exposed, work will stop in the affected area and the Sydney Metro Unexpected Heritage Finds Procedure (SM-18-00105232) implemented.

Human remains are not expected to be unearthed in delivering the Waterloo ISD Works. As such, in accordance with the note for Project Planning Approval Condition E27, it is highly likely that any human remains uncovered as part of the work would be under the jurisdiction of the NSW State Coroner and must be reported to NSW Police immediately. If any human remains are located NSW Police will be immediately notified. If required, Sydney Metro's Exhumation Management Plan, which incorporates the Exhumation Policy and Guideline referred to in REMM NAH3, will be implemented.



8 Heritage Interpretation and Reporting

8.1 Photographic and Archival Recording

In accordance with Project Planning Approval Condition E13, Sydney Metro will produce a Heritage Archival Recording Report, within two years of the completion of archival recordings.

Archival recording will be undertaken by a suitably qualified heritage specialist and prepared in accordance with NSW Heritage Office's "How to Prepare Archival Records of Heritage items (1998) and Photographic Recording of Heritage items Using Film or Digital Capture (2006) and will include directly impacted parts of the Congregational Church at Waterloo.

Where Aboriginal or non-Aboriginal heritage is identified during the Waterloo ISD works, details will be provided to Sydney Metro for reporting purposes.

In addition to the archival recording as required by Project Planning Approval Condition E13, Sydney Metro has completed external photography of all buildings and structures prior to demolition by others as required by Project Planning Approval Condition E14.

8.2 Archaeological Method Statements

In accordance with Project Planning Approval Condition E17, an Archaeological Method Statement (AMS) will be produced in consultation with the Heritage Council (or its delegate) where excavation works are likely to have an impact on the potential heritage items. Currently all planned excavations are within previously cleared areas or within the existing road/utility network which will not require an AMS.

Should excavation be required to the west of the station box, refer Figure 2 (yellow shading) an AMS would be required prior to excavation commencing.

If required, the AMS would be prepared prior to archaeological investigations for each site in consultation with the Heritage Council (or its delegate).

The Statements would include:

- An appropriate site specific strategy for managing the archaeological resources and artefacts at each site, in accordance with the likely significance, integrity and research potential.
- Additional historical research to remove risk associated with inadequate historical research to date and assist with understanding the nature of the archaeology to be found on the site.
- Research questions to guide the archaeological methodology
- An appropriate methodology that provides for a detailed analysis of any heritage items discovered during the investigations, including a sieving strategy (if applicable).

Detailed management strategy for potential archaeological remains and relics based on significance and integrity of exposed archaeological resources to ensure that all potential archaeological features, structures, deposits and relics that are exposed during archaeological investigations will be managed appropriately. This may include:



- Archaeological testing and monitoring strategy
- Open-area salvage excavation methodology in accordance with Heritage Council guidelines
 Historical archaeological test and salvage excavations will be undertaken where significant
 physical remains of early occupation have been identified in the Archaeological Method
 Statement.

8.3 Reporting

8.3.1 Historical Archaeological Excavation Report

Where an Excavation permit has been issued by the Heritage Council (or where archaeological excavations have been carried out under another approval) a Historical Archaeological Excavation Report will be prepared. This report will include the following:

- Site historical research
- 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;
- Nominated repository for the items;
- A reassessment of the site's heritage significance

Each report will be submitted to Sydney Metro, and the Heritage Council within two years following completion of all archaeological investigations for the Project, in its entirety.

8.3.2 Artefact storage

A repository for artefacts recovered during archaeological investigations will be provided by Sydney Metro. If artefacts are encountered during Waterloo ISD construction activities, the artefacts will be cleaned, bagged, tagged and boxed ready for analysis by the Waterloo Heritage consultant. Artefacts will be labelled in accordance with the archaeological context. Should any significant heritage items be encountered during the works, a suitable long term repository will be agreed with Sydney Metro.

8.4 Heritage Interpretation Plan

A Heritage Interpretation Plan has been prepared by Sydney Metro to identify the key Aboriginal and Non-Aboriginal heritage values and stories of heritage items and heritage conservation areas affected by the CSSI. The Heritage Interpretation Plan must inform the Station Design and Precinct Plan referred to in Condition E101. The Heritage Interpretation Plan has been prepared in accordance with the NSW Heritage Manual, the NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines (August 2005), and the NSW Heritage Council's Heritage Interpretation Policy and includes, but is not limited to:

(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:

- (b) Identification and confirmation of interpretive initiatives implemented to mitigate impacts to archaeological Relics, heritage items and conservation areas affected by the CSSI including; i. use of interpretative hoardings during construction
- ii. community open days
- iii. community updates
- iv. station and precinct design; and
- (c) Aboriginal cultural and heritage values of the project area including the results of any archaeological investigations undertaken.

The Heritage Interpretation Plan has been 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.

The Sydney Metro Heritage Interpretation Plan Section 4.3 outlines the process for the preparation of a site specific Heritage Interpretation Plan. Section 5 outlines the site specific scope. The requirements for the Waterloo ISD are outlined in Section 5.11 and include the following:

- Impact
 - Minor/temporary effect on local heritage items. Depending on the degree of disturbance (which is presently unknown) there is moderate to high potential for Aboriginal objects that could inform interpretation.
- Interpretation response
 - Themes that could be explored:
 - Development of the City
 - o Industry.

The Heritage Interpretation Plan for the Waterloo ISD will be developed throughout the design process. The plan will identify and address an audience for the interpretation and will include research, identification of historic themes and heritage values, identification of potential options for interpretation, preliminary consideration for the location and type of interpretive media and consultation with 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.



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9 Auditing and Inspections

9.1 Auditing

Auditing will be completed in accordance with Section 7 of the CEMP.

9.2 Inspections

The Environment and Sustainability Team will undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the Project Planning Approval Conditions and this plan. Items that require action will be documented on the site environmental inspection form. 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.

Compliance records would be maintained on the project database and include:

- Inspections undertaken in relation to heritage management measures;
- Archival recordings undertaken of any heritage item;
- Unexpected heritage finds
- Records of any impacts avoided or minimised through design or construction method
- Vibration monitoring data
- All plans, strategies and reports required under the project planning approval.

The above records will be made available to Sydney Metro.



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10 Review and Improvement

The aspects and impacts will be reviewed in accordance with Section 6.2 of the CEMP. This includes reviewing risks based on the construction activity and implementing appropriate management measures as outlined in Section 6 of this plan.

This Plan will be reviewed at least annually. John Holland will undertake the ongoing development, amendment and updating of this Plan to ensure it remains consistent with Project priorities, risk management, client requirements and Project objectives, taking into account:

- The status and progress of Waterloo ISD activities
- Changes in the design, delivery and operations processes and conditions
- Lessons learnt during delivery and operations
- Changes in other related Project plans
- Requirements and matters not covered by the existing Project Plans
- Changes to Project Plans as directed by TfNSWs Representative under the Deed.
- Where deemed appropriate in relation to items raised within inspections or audits.

A copy of the updated plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure.



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11 Enquires, 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 the CEMP, including those related to Aboriginal and non-Aboriginal cultural heritage.



Appendix A– Compliance Matrix

Clause	Detail	Reference	
Construct	on Environmental Management Framework		
	The following heritage management objectives will apply to construction:		
10.1 a	a) Embed significant heritage values through any architectural design, education or physical interpretation;		
	b) Minimise impacts on items or places of heritage value;		
	c) Avoid accidental impacts on heritage items; andd) Maximise worker's awareness of Aboriginal and non-Aboriginal (historic) heritage.		
	Principal Contractors will develop and implement a Heritage Management Plan which will include as a minimum:		
	i) Evidence of consultation with Registered Aboriginal Parties and the NSW Heritage Council;	Section 1.5	
	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 6 Section 8	
	iii) The heritage mitigation measures as detailed in the environmental approval documentation;		
	iv) The responsibilities of key project personnel with respect to the implementation of the plan;		
	v) Procedures for interpretation of heritage values uncovered through salvage or excavation during detailed design;	Section 8	
10.2 a	vi) Procedures for undertaking salvage or excavation of heritage relics or sites (where relevant), consistent with and any recordings of heritage relics prior to works commencing that would affect them;	Section 6.2	
	vii) Details for the short and/or long term management of artefacts or movable heritage;	Section 8.3	
	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 6	
	ix) Procedures for unexpected heritage finds, including procedures for dealing with human remains		
	x) Heritage monitoring requirements ; and	Section 6	
	xi) Compliance record generation and management	Section 9	
10.2 b	The Contractor's regular inspections will include checking of heritage mitigation measures.	Section 9	



Clause		Detail	Reference	
	Compliance records will be retained	by the Contractor. These will include:		
10.2 c	i) Inspections undertaken in relation to heritage management measures;			
	ii) Archival recordings undertaken of any heritage item			
	iii) Unexpected heritage find	s and stop work orders; and	_	
	iv) Records of any impacts a	avoided or minimised through design or construction methods		
	, , , , , , , , , , , , , , , , , , , ,			
	Examples of heritage mitigation measures include:			
	i. Any heritage item not affec	ted by the works will be retained and protected throughout construction;		
		ake professional archaeological investigation, excavation, and reporting of any		
10.3		ge sites of state significance which will be affected. Reporting may be completed as	Section 8	
	construction progresses;			
	iii. Undertake archival recordings of all non-Indigenous heritage items affected by the works prior to			
	commencement of works; and			
	iv. Implement unexpected heritage find procedures for Indigenous and non-Indigenous heritage items.			
Project Pla	nning Approval Conditions			
	The following CEMP sub-plans mus	st be prepared in consultation with the relevant government agencies identified for		
	each CEMP sub-plan and be consistent with the CEMF and CEMP referred to in Condition C1.			
	Required CEMP sub-plan	Relevant government agencies to be consulted for each CEMP sub-plan		
	(a) Noise and vibration	Relevant Council(s)		
	(b) Biodiversity	OEH and Relevant Council(s)	Section 1.5	
C3	(c) Air quality	N/A	Section 1.5	
	(d) Soil and Water	DPI Water, Relevant Council(s), OEH, SES, NSW Fire and Rescue		
	(e) Groundwater	DPI Water		
	(f) Blasting	N/A		
	(g) Heritage	Heritage Council (or its delegate) and Relevant Council(s)		
	(h) Construction Traffic	Relevant Road Authorities, RMS, Sydney Coordination Office		
	The CEMP sub-plans must state ho	, , ,		
	(a) the environmental performance outcomes identified in the EIS as amended by the documents listed in A1will be			
C4	achieved;			
	(b) the mitigation measures identifie	ed in the EIS as amended by documents listed in A1 will be implemented;		

Clause	Detail	Reference
	(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.	
C5	The CEMP sub-plans must be developed in consultation with relevant government agencies. Where an agency(ies) 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 1.5 Appendix B
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 1.7
E10	The Proponent must not destroy, modify or otherwise physically affect any Heritage item not identified in documents referred to in Condition A1.	Section 6.3
E13	The Proponent must prepare a Heritage Archival Recording Report, including photographic recording of the heritage items identified in documents referred to in Condition A1	Section 8.1
E17	The Archaeological Assessment Research Design Report (AARD) in the PIR 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.	Section 8.0
	Before excavation of archaeological management sites, the Proponent must nominate a suitable 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 and OEH.	
E18	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.	Section 4
	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.	
	An Unexpected Heritage Finds Procedure must be prepared:	Section 7.1
E19	 (a) To manage unexpected heritage finds in accordance with any guidelines and standards prepared by the Heritage Council of NSW or OEH; and 	and Appendix B



Clause	Detail	
	(b) By a suitably qualified and experienced heritage specialist	
	The procedure must be included in the AARD and must be implemented for the life of the project.	
	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. 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.	
E20	An Archaeological Relic Management Plan specific to the relic of State Significance must be prepared in consultation with the Heritage Council of NSW (or its delegate) to outline measures to be implemented to avoid and/or minimise harm to and/or salvage the relic of State significance.	and Section 7
	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.	
	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 NSW Heritage Manual, the NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines (August 2005), and the NSW Heritage Council's Heritage Interpretation Policy and include, but not be limited to:	
	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 Central Station and Martin Place Station Precincts;	
E21	b. identification and confirmation of interpretive initiatives implemented to mitigate impacts to mitigate impacts to archaeological Relics, heritage items and conservation areas affected by the CSSI including;	Section 8.4
	i.use of interpretative hoardings during construction	
	i.community open days	
	i.community updates	
	v.station and precinct design; and	
	c. Aboriginal cultural and heritage values of the project area including the results of any archaeological investigations undertaken.	

Clause	Detail	Reference
	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.	
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 6.0
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.	
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 suitable 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)	Section 7.1
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	
Revised E	nvironmental Management Measures	
NAH1	Archival recording and reporting of the following heritage items would be carried out in accordance with the NSW Heritage Office's How to Prepare Archival Records of Heritage Items, and Photographic Recording of Heritage Items Using Film or Digital Capture	Section 8.1
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.	Section 8.2
	An Exhumation Policy and Guideline would be prepared and implemented.	
NAH3	It would be developed 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). It would be prepared in consultation with NSW Heritage Office and NSW Health.	Section 7
NAH4	The method for demolition of existing buildings and or structures at CDS, VC, MPS, PSS, CS and Waterloo Station would be developed to minimise direct and indirect impacts to adjacent and/or adjoining heritage items.	Section 6
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 MPS and CS would be developed with the input from a heritage architect	Section 8.4



Clause	Detail	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 Interpreting Heritage Places and Items: Guidelines, and the NSW Heritage Council's Heritage Interpretation Policy.	Section 8.4
NAH19	Subject to outcomes of consultation with the church, temporary and permanent works at the Congregational Church would: • Minimise impacts to heritage fabric Be sympathetic to the heritage values and architectural form of the building.	Section 6.1
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.	
AH2	The cultural heritage assessment report would be implemented.	Section 5.2
АНЗ	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 5.2
AH4	Appropriate Aboriginal heritage interpretation would be incorporated into the design for the project in consultation with Aboriginal stakeholders.	Section 8.4

Appendix B Stakeholder consultation

The Project Planning Approval requires the CHMP be prepared in consultation with government agencies. Table B1 outlines the requirement and the outcome of the consultation.

Table B1 Consultation requirements

Condition	Document	Agency	Comment	Response
C3		City of Sydney	The City agrees with the Plan that the most impact, physical and visual, is likely to be on the Church building due to its proximity to the construction zone whereas the impacts on the other two heritage items are more likely to be visual. The City concurs that the visual impacts will be minor due to the distance between the site and the items. Due to the proximity of the church, it is	A building condition survey required by CoA E59 will be offered to the owner of the Church, if the offer is accepted, the survey will be completed prior to the commencement of construction. If agreed by the owner a copy of the report will be provided to
			proposed to undertake a 'before and after' building condition survey for the Church to later compare and determine if any impact has occurred and whether any rectification is required. This is considered essential given the scale and duration of the proposed building works.	the City of Sydney. A follow up survey will be completed in accordance with CoA E60.
			The City requests that a copy of the 'before and after' Church building condition survey be provided to us for our records. We also recommend that the heritage interpretation plan be devised in collaboration with the developers of the buildings/sites to the west of the station which we understand are all in their own design stages.	
			It is essential that the heritage interpretation of the site takes a holistic rather than a piecemeal approach due to the various stages of development and the different designers and architects involved.	
submitted heritage mar includes all the necessa avoid, mitigate and/or r	Overall, the City is satisfied that the submitted heritage management plan includes all the necessary measures to avoid, mitigate and/or remedy the construction impacts on the heritage items.			
C3	CHMP	Heritage Council (or delegate)	No response received	
C3	CHMP	OEH (Aboriginal)	Please be advised that EES will not be providing comments.	no action required



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Appendix C Sydney Metro Unexpected Heritage Finds Procedure



Sydney Metro Unexpected Heritage Finds Procedure

[SM-18-00105232]

Sydney Metro Integrated Management System (IMS)

Applicable to:	Sydney Metro	
Document Owner:	Author/Document owner	
System Owner:	IMS element owner (generally a member of the Executive)	
Status:	Draft/Final	
Version:	2.0	
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1. Purpose

This procedure is applicable to the Sydney Metro program of works including major projects delivered under Critical State Significant Infrastructure Planning Approvals (CSSI), early CSSI minor and enabling works and works that are subject to the NSW Heritage Act (1977) including s57/139 and s60/140 exemptions and permit approvals.

This procedure has been prepared for Sydney Metro programs to provide a method for managing unexpected heritage items (both Aboriginal and non-Aboriginal) that are discovered during preconstruction (pre-Construction Heritage Manage Plan approval), construction phases (post Construction Heritage Manage Plan approval) and for works subject to the NSW Heritage Act (1977).

An 'unexpected heritage find' can be defined as any unanticipated archaeological discovery, that has not been previously assessed or is not covered by an existing approval under the Heritage Act 1977 (Heritage Act) or National Parks and Wildlife Act 1974 (NPW Act).

In NSW, there are strict laws to protect and manage heritage objects and relics. As a result, appropriate heritage management measures need to be implemented to minimise impacts on heritage values; ensure compliance with relevant heritage notification and other obligations; and to minimise the risk of penalties to individuals, Sydney Metro and its contractors. This procedure includes Sydney Metro's heritage notification obligations under the Heritage Act, NPW Act and the Coroner's Act 2009 and the requirements of the conditions of approval(CoA) issued by NSW Department of Planning and Environment.

Note that a Contractor must not amend the Sydney Metro Unexpected Finds Procedure without the prior approval of Sydney Metro.

It should be noted that this procedure must be read in conjunction with the relevant CCSI conditionals of approval (if applicable), the contract documents and other plans including the Sydney Metro Exhumation Management Plan and procedures developed by the contractor during the delivery of the Sydney Metro works.

1.1. Legislation that does not apply

The following authorisations are not required for Sydney Metro approved Critical State Significant Infrastructure (and accordingly the provisions of any Act that prohibits an activity without such an authority do not apply):

- Division 8 of Part 6 of the Heritage Act 1977 does not apply to prevent or interfere with the carrying out of approved State significant infrastructure.
- An approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977,
- An Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974,

This document provides relevant background information in Section 4, followed by the technical procedure in Sections 6 and 7. Associated guidance referred to in the procedure can be found in Appendices 1-6.



2. Scope

Despite earlier investigation, unexpected heritage items may still be discovered during works on a Sydney Metro site. When this happens, this procedure must be followed. This procedure provides direction on when to stop work, where to seek technical advice and how to notify the regulator, if required.

This procedure applies to:

 the discovery of any unexpected heritage item, relic or object, where the find is not anticipated in an approved Archaeological Assessment Design Report (AARD) or Archaeological Method Statements (AMS) that are prepared as part of the planning approval for that project.

This procedure must be followed by all Sydney Metro staff, contractors, subcontractors or any person undertaking works for Sydney Metro. It includes references to some of the relevant legislative and regulatory requirements, but is not intended to replace them. This procedure **does not apply** to:

- The discovery and disturbance of heritage items as a result of investigations being undertaken in accordance with the Office of Environment and Heritage's (OEH) Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW 2010¹; an Aboriginal Heritage Impact Permit (AHIP) issued under the NPW Act; or a permit approval issued under the Heritage Act.
- the discovery and disturbance of heritage items as a result of construction related activities, where the disturbance is permissible in accordance with an AHIP; or an approval issued under the Heritage Act or CSSI /CSSD planning approval;

3. Definitions

All terminology in this procedure is taken to mean the generally accepted or dictionary definition with the exception of the following terms which have a specifically defined meaning:

	Definitions
AHIP	Aboriginal Heritage Impact Permit
Aboriginal object	An Aboriginal object is any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains. An Aboriginal object may include a shell midden, stone tools, bones, rock art, Aboriginal-built fences and stockyards, scarred trees and the remains of fringe camps.
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSSD	Critical State Significant Development
CSSI	Critical State Significant Infrastructure
EP&A Act	NSW Environmental Planning and Assessment Act 1979
Excavation	A person that complies with the Heritage Council of NSW's Criteria for Assessment of

¹ An act carried out in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* as published by the Department in the Gazette on 24 September 2010 is excluded from the definition of *harm* an object or place in section 5 (1) of the NPW Act.

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Director	Excavation Directors (July 2011) to oversee and advise on matters associated with historic archaeology. Note this applies to a specific project/program and requires consultation and/or approval by OEH.
Heritage Act NSW Heritage Act 1977	
NPW Act	NSW National Parks and Wildlife Act 1974
OEH	Office of Environment and Heritage
SM	Sydney Metro
Relic (non- Aboriginal heritage)	A relic means any deposit, artefact, object or material evidence that: a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and b) is of State or local significance. A relic may include items such as bottles, utensils, remnants of clothing, crockery, personal effects, tools, machinery and domestic or industrial refuse.
TfNSW	Transport for New South Wales
Work (non- Aboriginal heritage)	Archaeological features such as historic utilities or buried infrastructure that provide evidence of prior occupations such as former rail or tram tracks, timber sleepers, kerbing, historic road pavement, fences, culverts, historic pavement, buried retaining walls, cisterns, conduits, sheds or building foundations, but are also subject to assessment by the Excavation Director to determine its classification

4. Types of unexpected heritage items and corresponding statutory protections

The roles of project, field and environmental personnel (including construction contractors) are critical to the early identification and protection of unexpected heritage items.

Appendix 1 illustrates the wide range of heritage discoveries found on Sydney Metro projects and provides a useful photographic guide. Subsequent to confirmation of a heritage discovery it must then be identified and assessed by Excavation Director. An 'unexpected heritage item' means any unanticipated discovery of an actual or potential heritage item, for which Sydney Metro does not have approval to disturb² and/or have an existing management process in place.

These discoveries are categorised as either:

- (a) Aboriginal objects
- (b) Historic (non-Aboriginal) heritage items
- (c) Human skeletal remains.

The relevant legislation that applies to each of these categories is described below and is also addressed in the Sydney Metro Exhumation Management Plan).

4.1. Aboriginal objects

The NPW Act protects Aboriginal objects which are defined as:

² Disturbance is considered to be any physical interference with the item that results in it being destroyed, defaced, damaged, harmed, impacted or altered in any way (this includes archaeological investigation activities).

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

Examples of Aboriginal objects include stone tool artefacts, shell middens, axe grinding grooves, pigment or engraved rock art, burials and scarred trees.

IMPORTANT!

<u>All</u> Aboriginal objects, regardless of significance, are protected under law.

If any impact is expected to an Aboriginal object, an AHIP is usually required from OEH Also, when a person becomes aware of an Aboriginal object they must notify the Director-General of OEH about its location⁴. Assistance on how to do this is provided in Section 7 (Step 5).

4.2. Historic heritage items

Historic (non-Aboriginal) heritage items may include:

- Archaeological 'relics'
- Other historic items (i.e. works, structures, buildings or movable objects).

4.2.1. Archaeological relics

The Heritage Act protects relics which are defined as:

"any deposit, artefact, object or material evidence that relates to the settlement of the area that comprises NSW, not being Aboriginal settlement; and is of State or local heritage significance" 5.

Relics are archaeological items of local or state significance which may relate to past domestic, industrial or agricultural activities in NSW, and can include bottles, remnants of clothing, pottery, building materials and general refuse.

IMPORTANT!

All relics are subject to statutory controls and protections.

If a relic is likely to be disturbed, a heritage approval is usually required from the NSW Heritage Council⁶. Also, when a person discovers a relic they must notify the NSW Heritage Council of its location⁷.

4.2.2. Other historic items

Some historic heritage items are not considered to be 'relics', but are instead referred to as works, buildings, structures or movable objects. Examples of these items that may be encountered include culverts, historic pavements, retaining walls, tramlines, rail tracks, timber sleepers, cisterns, fences, sheds, buildings and conduits. Although an approval under the Heritage Act may not be required to disturb these items, their discovery must be managed in accordance with this procedure.

³ Section 5(1) NPW Act.

⁴ This is required under section 89(A) of the NPW Act and applies to all Sydney Metro projects.

⁵ Section 4(1) Heritage Act.

⁷ This is required under section 146 of the Heritage Act and applies to all Sydney Metro projects.

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As a general rule, an archaeological relic requires discovery or examination through the act of excavation. For an unexpected find an archaeological excavation permit under section 140 of the Heritage Act may be required to do this. In contrast, 'other historic items' either exist above the ground surface (e.g. a shed), or they are designed to operate and exist beneath the ground surface (e.g. a culvert).

4.3. Human skeletal remains

Also refer to Sydney Metro Exhumation Management Plan for a more detailed explanation of the approval processes.

Human skeletal remains can be identified as either an Aboriginal object or non-Aboriginal relic depending on ancestry of the individual (Aboriginal or non-Aboriginal) and burial context (archaeological or non-archaeological). Remains are considered to be archaeological when the time elapsed since death is suspected of being 100 years or more. Depending on ancestry and context, different legislation applies.

As a simple example, a pre-European settlement archaeological Aboriginal burial would be protected under the NPW Act, while a historic (non-Aboriginal) archaeological burial within a cemetery would be protected under the Heritage Act. For a non-Aboriginal archaeological burial, the relevant heritage approval and notification requirement described in Section 3.1 would apply. In addition to the NPW Act, finding Aboriginal human remains also triggers notification requirements to the Commonwealth Minister for the Environment under section 20(1) of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth).

IMPORTANT!

All human skeletal remains are subject to statutory controls and protections.

All bones must be treated as potential human skeletal remains and work around them must stop while they are protected and investigated urgently.

However, where it is suspected that less than 100 years has elapsed since death, the human skeletal remains come under the jurisdiction of the State Coroner and the Coroners Act 2009 (NSW). Such a case would be considered a 'reportable death' and under legal notification obligations set out in section 35(2); a person must report the death to a police officer, a coroner or an assistant coroner as soon as possible. This applies to all human remains less than 100 years old8 regardless of ancestry (i.e. both Aboriginal and non-Aboriginal remains). Public health controls may also apply.

Guidance on what to do when suspected human remains are found is provided in Appendix 5.

5. Legislative Requirements

Table 1 identifies some of the relevant legislation/regulations for the protection of heritage and the management of unexpected heritage finds in NSW. It should be noted that significant

⁸ Under section 19 of the *Coroners Act 2009*, the coroner has no jurisdiction to conduct an inquest into reportable death unless it appears to the coroner that (or that there is reasonable cause to suspect that) the death or suspected death occurred within the last 100 years.

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penalties exist for breaches of the listed legislation as a result of actions that relate to unauthorised impacts on heritage items. Further, it is noted that heritage that has been assessed and is being managed in accordance with relevant statutory approvals(s) is exempt from these offences.

To avoid breaches of legislation, it is important that Sydney Metro and its contractors are aware of their statutory obligations under relevant legislation and that appropriate control measures are in place to ensure that unexpected heritage items are appropriately managed during construction. Contractors/Alliances will need to ensure that they undertake their own due diligence to identify any other legislative requirements that may apply for a given project.

Table 1 Legislation and guidelines for management of unexpected heritage finds

Relevant Requirement	Objectives and offences		
Environmental Planning and Assessment Act 1979 (EP&A Act)	Section 115ZB Giving of approval by Minister to carry out a project.		
Environmental Planning and Assessment Act 1979 (EP&A	Requires heritage to be considered within the environmental impact assessment of projects.		
Act)	This guideline is based on the premise that an appropriate level of Aboriginal and non-Aboriginal cultural heritage assessment and investigations and mitigation have already been undertaken under the relevant legislation, including the EP&A Act, during the assessment and determination process. It also assumes that appropriate mitigation measures have been included in the conditions of any approval.		
Heritage Act 1977 (Heritage Act)	The Heritage Act provides for the care, protection and management of heritage items in NSW.		
	Under section 139, it is an offence to disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed, unless the disturbance or excavation is carried out in accordance with an excavation permit issued by the Heritage Division of the OEH.		
	Under the Act, a relic is defined as: 'any deposit, artefact, object or material evidence that: (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) is of State or local heritage significance.'		
	A person must notify the Heritage Division of OEH, if a person is aware or believes that they have discovered or located a relic (section 146). Penalties for offences under the Heritage Act can include six months imprisonment and/or a fine of up to \$1.1million.		

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Relevant Requirement	Objectives and offences
National Parks and Wildlife Act 1974 (NPW Act)	The NPW Act provides the basis for the care, protection and management of Aboriginal objects and places in NSW.
	An Aboriginal object is defined as: 'any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains'.
	An 'Aboriginal place' is an area declared by the Minister administering the Act to be of special significance with respect to Aboriginal culture. An Aboriginal place does not have to contain physical evidence of occupation (such as Aboriginal objects).
	Under section 87 of the Act, it is an offence to harm or desecrate an Aboriginal object or place. There are strict liability offences. An offence cannot be upheld where the harm or desecration was authorised by an AHIP and the permit's conditions were not contravened. Defences and exemptions to the offence of harming an Aboriginal object or Aboriginal place are provided in section 87, 87A and 87B of the Act.
	A person must notify OEH if a person is aware of the location of an Aboriginal object.
	Penalties for some of the offences can include two years imprisonment and/or up to \$550,000 (for individuals), and a maximum penalty of \$1.1 million (for corporations).

6. Unexpected heritage finds protocol

6.1. What is an unexpected heritage find?

An 'unexpected heritage find' can be defined as any unanticipated archaeological discovery that has not been identified during a previous assessment or is not covered by an existing permit under the Heritage Act. The find may have potential cultural heritage value, which may require some type of statutory cultural heritage permit or notification if any interference of the heritage item is proposed or anticipated.

The range of potential archaeological discoveries can include but are not limited to:

- remains of rail infrastructure including buildings, footings, stations, signal boxes, rail lines, bridges and culverts
- remains of other infrastructure including sandstone or brick buildings, wells, cisterns, drainage services, conduits, old kerbing and pavement, former road surfaces, timber and stone culverts, bridge footings and retaining walls
- artefact scatters including clustering of broken and complete bottles, glass, ceramics, animal bones and clay pipes
- Archaeological human skeletal remains.

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6.2. Managing unexpected heritage finds

In the event that an unexpected heritage find (the find) is encountered on a Sydney Metro site, the flowchart in Figure 1 must be followed. There are eight steps in the procedure. These steps are summarised in Figure 1 and explained in detail in Table 2.

Figure 1 Overview of steps to be undertaken on the discovery of an unexpected heritage item

IMPORTANT!

Sydney Metro may have approval to impact on certain heritage items during construction. If you think that you may have discovered a heritage item and you are unsure whether an approval is in place or not, **STOP** works and follow this procedure.

Table 2 Specific tasks to be implemented following the discovery of an unexpected heritage item

Step	Task	Responsibility	Guidance and tools
1	Stop work, protect item and inform the Excavation Director		
1.1	Stop all work in the immediate area of the item and notify the Project Manager	Contractor/ Supervisor	Appendix 1 (Identifying Unexpected Heritage items)
1.2	Establish a 'no-go zone' around the item. Use high visibility fencing, where practical. No work is to be undertaken within this zone until further investigations are completed and, if required, appropriate approvals are obtained. Inform all site personnel about the no-go zone.	Project Manager/ Contractor/ Supervisor	
1.3	Inspect, document and photograph the item.	Archaeologist and or Excavation Director	Appendix 2 (Unexpected Heritage Item Recording Form) Appendix 3 (Photographing Unexpected Heritage items)
1.4	Is the item likely to be bone? If yes , follow the steps in Appendix 4 – 'Uncovering bones'. Where it is obvious that the bones are human remains, you must notify the local police by telephone immediately. They may take command of all or part of the site. Also refer to the Sydney Metro Exhumation Management Plan If no , proceed to next step.	Excavation Director	Appendix 4 (Uncovering Bones)

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Step	Task	Responsibility	Guidance and tools
1.5	Inform the Excavation Director of the item and provide as much information as possible, including photos and completed form (Appendix 2). Where the project has a Sydney Metro Environmental Manager, the Environmental Manager should be involved in the tasks/process.	Contractors Project Manager	
1.6	Can the works avoid further disturbance to the item? Project Manager to confirm with Sydney Metros Environment Manager. Complete the remaining tasks in Step 1.	Contractors Project Manager	
1.7	Excavation Director and Sydney Metro Environmental Manager to advise the Project Manager whether Sydney Metro has approval to impact on the 'item'. Does Sydney Metro have an approval or permit to impact on the item? If yes, work may recommence in accordance with	Contractors Project Manager	
	that approval or permit. There is no further requirement to follow this procedure. If no , continue to next step.		
1.8	Has the 'find' been damaged or harmed? If yes , record the incident in the Incident Management System Implement any additional reporting requirements related to the planning approval and CEMP, where relevant.	Contractors Project Manager, Excavation Director	
2	Contact and engage an archaeologist and/or an Aboriginal heritage consultant		
2.1	If an archaeologist and/or Aboriginal heritage consultant has been previously appointed for the project, contact them to discuss the location and extent of the item and arrange a site inspection, if required. The project CEMP may contain contact details of the archaeologist/Aboriginal heritage consultant.	Contractors Project Manager, Excavation Director	
	Where there is no project archaeologist engaged for the works engage a suitably qualified consultant to assess the find:		
	if the find is a non-Aboriginal deposit, engage a suitably qualified and experienced archaeological consultant		
	if the find is likely to be an Aboriginal object, engage an Aboriginal heritage consultant to assess the find.		
2.2	If requested, provide photographs of the item taken during Step 1.3 to the archaeologist or Aboriginal heritage consultant.	Contractors Project Manager, Excavation Director	Appendix 3 (Photographing Unexpected Heritage items)

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Step	Task	Responsibility	Guidance and tools
3	Preliminary assessment and recording of the find		
3.1	In a minority of cases, the archaeologist/Aboriginal heritage consultant may determine from the photographs that no site inspection is required because no heritage constraint exists for the project (e.g. the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'). Any such advice should be provided in writing (e.g. via email or letter with the consultant's name and company details clearly identifiable) to the Sydney Metro Project Manager.	Archaeologist/ Aboriginal heritage consultant/ , Excavation Director	Proceed to Step 8
3.2	Arrange site access for the archaeologist/Aboriginal heritage consultant to inspect the item as soon as practicable. In the majority of cases a site inspection is required to conduct a preliminary assessment.	Contractors Project Manager, Excavation Director	
3.3	Subject to the archaeologist/Aboriginal heritage consultant's assessment, work may recommence at a set distance from the item. This is to protect any other archaeological material that may exist in the vicinity, which may have not yet been uncovered. Existing protective fencing established in Step 1.2 may need to be adjusted to reflect the extent of the newly assessed protective area. No works are to take place within this area once established.	Archaeologist/ Aboriginal heritage consultant Contractors Project Manager, Excavation Director	
3.4	The archaeologist/Aboriginal heritage consultant may provide advice after the site inspection and preliminary assessment that no heritage constraint exists for the project (e.g. the item is not a 'relic' or a 'heritage item' or an 'aboriginal item'. Any such advice should be provided in writing (e.g. via email or letter with the consultant's name and company details clearly identifiable) to the Metro Project Manager.	Archaeologist/ Aboriginal heritage consultant/ Contractors Project Manager, Excavation Director	Proceed to Step 8 Refer to Appendix 1 (Identifying heritage items)
	Note that: a relic is evidence of past human activity which has local or State heritage significance. It may include		
	items such as bottles, utensils, remnants of clothing, crockery, personal effects, tools, machinery and domestic or industrial refuse		
	an Aboriginal object may include a shell midden, stone tools, bones, rock art or a scarred tree		
	a "work", building or standing structure may include tram or train tracks, kerbing, historic road pavement, fences, sheds or building foundations.		

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Step	Task	Responsibility	Guidance and tools
3.5	Where required, seek additional specialist technical advice (such as a forensic or physical anthropologist to identify skeletal remains). The archaeologist/Aboriginal heritage consultant can provide contacts for such specialist consultants.	Excavation Director Archaeologist	
3.6	Where the item has been identified as a 'relic' or 'heritage item' or an 'Aboriginal object' the archaeologist should formally record the item.	Archaeologist/ Aboriginal heritage consultant	
3.7	OEH (Heritage Division for non-Aboriginal relics and Planning and Aboriginal Heritage Section for Aboriginal objects) can be notified informally by telephone at this stage by the Sydney Metro Environmental Manager Any verbal conversations with regulators must be noted on the project file for future reference.	Contractors Project Manager, Excavation Director	
4	Section 4 not used		
5	Notify the regulator, if required.		
5.1	Based on the findings of the archaeological or heritage management plan and corresponding legislative requirements, is the find required to be notified to OEH and the Secretary? If no, proceed directly to Step 6 If yes, proceed to next step.	Sydney Metro Environmental Manager Excavation Director	
5.2	If notification is required, complete the template notification letter, including the archaeological/heritage management plan and other relevant supporting information and forward to the Sydney Metro Principal Manager Sustainability Environment and Planning (Program) for signature.	Sydney Metro Environmental Manager Excavation Director	Appendix 6 (Template Notification Letter)
5.3	Forward the signed notification letter to OEH and the Secretary. Informal notification (via a phone call or email) to OEH prior to sending the letter is appropriate. The archaeological or heritage management plan and the completed site recording form (Appendix 2) must be submitted with the notification letter (for both Aboriginal objects and non-Aboriginal relics). For Part 5.1 projects, the Department of Planning and Environment must also be notified.		

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Step	Task	Responsibility	Guidance and tools
5.4	A copy of the final signed notification letter, archaeological or heritage management plan and the site recording form is to be kept on file and a copy sent to the Sydney Metro Project Manager.	Contractors Project Manager, Excavation Director	
6	Implement archaeological or heritage management plan		
6.1	Modify the archaeological or heritage management plan to take into account any additional advice resulting from notification and discussions with OEH.	Contractors Project Manager, Excavation Director	
6.2	Implement the archaeological or heritage management plan. Where impact is expected, this may include a formal assessment of significance and heritage impact assessment, preparation of excavation or recording methodologies, consultation with Registered Aboriginal Parties, obtaining heritage approvals etc., if required.	Contractors Project Manager, Excavation Director	
6.3	Where heritage approval is required contact the Sydney Metro Environment Manager for further advice and support material. Please note there are time constraints associated with heritage approval preparation and processing.	Contractors Project Manager, Excavation Director	
6.4	Assess whether heritage impact is consistent with the project approval or if project approval modification is required from the Department of Planning and Environment.	, Excavation Director/Sydney Metro Environmental Manager	
6.5	Where statutory approvals (or project approval modification) are required, impact upon relics and/or Aboriginal objects must not occur until heritage approvals are issued by the appropriate regulator.	Contractors Project Manager, Excavation Director	
6.6	Where statutory approval is not required but where recording is recommended by the archaeologist/Aboriginal heritage consultant, sufficient time must be allowed for this to occur.	Contractors Project Manager, Excavation Director	
6.7	Ensure short term and permanent storage locations are identified for archaeological material or other heritage material removed from site, where required. Interested third parties (e.g. museums, local Aboriginal land councils, or local councils) should be consulted on this issue. Contact the archaeologist or Aboriginal heritage consultant for advice on this matter, if required.	Contractors Project Manager, Excavation Director	
7	Section 7 Not Used		

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Step	Task	Responsibility	Guidance and tools
8	Resume work		
8.1	Seek written clearance to resume project work from the project Excavation Director/Archaeologist/Aboriginal heritage consultant. Clearance would only be given once all archaeological excavation and/or heritage recommendations and approvals (where required) are complete. Resumption of project work must be in accordance with the all relevant project/heritage approvals/determinations.	Contractors Project Manager, Excavation Director	
8.2	If required, ensure archaeological excavation/heritage reporting and other heritage approval conditions are completed in the required timeframes. This includes artefact retention repositories, conservation and/or disposal strategies.	Contractors Project Manager, Excavation Director	
8.3	Deleted		
8.4	If additional unexpected items are discovered this procedure must begin again from Step 1.	All	

7. Responsibilities

Table 3 Roles and Responsibilities

Role	Responsibility or role under this guideline
Contractor / Supervisor	Stop work immediately when an unexpected heritage find is encountered. Cordon off area until Environmental Manager /Excavation Director advises that work can recommence.
Contractor or Environment Manager	Manage the process of identifying, protecting and mitigating impacts on the 'find'.
	Liaise with Sydney Metro Project Manager and Environment Manager and assist the archaeologist/Aboriginal heritage consultant with mitigation and regulatory requirements.
	Complete Incident Report and review CEMP for any changes required. Propose amendments to the CEMP if any changes are required.
Contractor's or Project Heritage Advisor or Consultant	Provide expert advice to the Sydney Metro Environment Manager on 'find' identification, significance, mitigation, legislative procedures and regulatory requirements.
Environmental Representative	Independent environmental advisor engaged by Sydney Metro Ensures compliance with relevant approvals (new and existing).
Heritage Division of OEH	Regulate the care, protection and management of relics (non-Aboriginal heritage).
	Delegated authority for Heritage Council Issue excavation permits.



Role	Responsibility or role under this guideline
Registered Aboriginal Parties (RAPs)	Aboriginal people who have registered with Sydney Metro to be consulted about a proposed project or activity in accordance with the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.
Sydney Metro Environment Manager	Notify the Sydney Metro Principal Manager, Environmental Management of 'find' and manage Incident Reporting once completed by Environmental Manager.
Contractors Project Manager	Ensures all aspects of this procedure are implemented. Advise Contractor / Supervisor to recommence work if all applicable requirements have been satisfied and the Excavation Director /Project Archaeologist has approved recommend of work.

8. Seeking Advice

Advice on this procedure should be sought from the Sydney Metro Environment a Manager in the first instance. Contractors and alliance partners should ensure their own project environment managers are aware of and understand this procedure.

Technical archaeological or heritage advice regarding an unexpected heritage item should be sought from a suitably qualified and experienced archaeologist/Aboriginal heritage consultant.

9. Related documents and references

- Environmental Incident Classification and Reporting 9TP-PR-105
- Guide to Environmental Control Map 3TP-SD-015
- NSW Heritage Office (1998), Skeletal remains: guidelines for the management of human skeletal remains.
- Roads and Maritime Services (2015), Standard Management Procedure Unexpected Heritage Items.
- Department of Environment and Conservation NSW (2006), Manual for the identification of Aboriginal remains.
- Sydney Metro Exhumation Management Plan

10. List of appendices

The following appendices are included to support this procedure:

Appendix 1: Examples of finds encountered during construction works

Appendix 2: Unexpected Heritage Item Recording Form Appendix 3: Photographing Unexpected Heritage Items

Appendix 4: Uncovering Bones

Appendix 5: Archaeological Advice Checklist Appendix 6: Template Notification Letter

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11. Document history

Version	Date of approval	Notes
1.1		Incorporates ER comments 21/06/17
1.2		Amends p13 step 8 reference to s146 added
1.3		Incorporates Planning Mods 1-4 including amended CoA E20
1.4		Incorporates ER comments 21/03/18
2.0		Removes SSI 15-7400 COA reference



Appendix 1: Examples of finds encountered during construction works



Photo 1 - Aboriginal artefacts found at the Wickham Transport Interchange, 2015



Photo 2 – Aboriginal artefacts (shell material) found at the Wickham Transport Interchange, 2015







Photo 3 1840s seawall and 1880s retaining wall uncovered at Balmain East, 2016



Photo 4 Sandstone pavers uncovered at Balmain East, 2016







Photo 5 - Platform structure at Hamilton Railway Station classified as a 'work' by the project archaeologist - Wickham Transport Interchange project, 2015





Photo 7 - Sandstone flagging and cesspit - Wynyard Walk project, 2014







Photo 8 - Chinese Ming Dynasty pottery and English porcelain/pottery dating back to early 19th century - Wynyard Walk project, 2014



Photo 9 - Pottery made by convict potter Thomas Ball during the early settlement - Wynyard Walk project, 2014





The following images, obtained from the Roads and Maritime Services' *Standard Management Procedure for Unexpected Heritage items 2015*, can be used to assist in the preliminary identification of potential unexpected items during construction and maintenance works.



Photo 10 - Top left hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from refuse pit associated with a Newcastle Hotel (Pacific Highway, Adamstown Heights, Newcastle area) (RMS, 2015).



















Photo 11 - Top left hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from refuse pit associated with a Newcastle Hotel (Pacific Highway, Adamstown Heights, Newcastle area) (RMS, 2015).



Appendix 2 - Unexpected heritage item recording form

Example of unexpected heritage item recording form:

This form is to be completed Excavation Director on the discovery of an archaeological heritage item during construction or maintenance works

Date:	Recorded by:	
	(include name and position)	
Project name:		
Description of works being undertaken:		
Description of exact location of item		
Description of item found		
(What type of item is it likely to be? Tick the relevant boxes).		
A. A relic	A 'relic' is evidence of a past human activity relating to the settlement of NSW with local or state heritage significance. A relic might include bottle, utensils, plates, cups, household items, tools, implements, and similar items	
B. A 'work', building or structure'	A 'work' can generally be defined as a form infrastructure such as track or rail tracks, timber sleepers, a culvert, road base, a bridge pier, kerbing, and similar items	
C. An Aboriginal object	An 'Aboriginal object' may include stone tools, stone flakes, shell middens, rock art, scarred trees and human bones	
D. Bone	Bones can either be human or animal remains. Remember that you must contact the local police immediately by telephone if you are certain that the bone(s) are human remains.	
E. Other		
Provide a short description of the item (E.g. metal rail tracks running parallel to the rail corridor. Good condition. Tracks set in concrete, approximately 10 cm below the current ground surface).		

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Sketch		
(Provide a sketch of the item's general location in relation to other road features so its approximate location can be mapped without having to reexcavate it. In addition, please include details of the location and direction of any photographs of the item taken)		
Action taken (Tick either A or B)		
A. Unexpected item would not be further impacts on by the works	Describe how works would avoid impact on the item. (E.g. the rail tracks would be left in situ and recovered with paving).	
B. Unexpected item would be further impacted by the works	Describe how works would impact on the item. (E.g. milling is required to be continued to a depth of 200 mm depth to ensure the pavement requirements are met. Rail tracks would need to be removed.)	
Excavation Director	Signature	
	Signature	

Important

It is a statutory offence to disturb Aboriginal objects and historic relics (including human remains) without an approval. All works affecting objects and relics must cease until an approval is sought.

Approvals may also be required to impact on certain works.

Appendix 3 - Photographing unexpected heritage items

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

Context and detailed photographs

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

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





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

Figure 1: Telford road uncovered on the Great Western Highway (Leura) in 2008 (RMS, 2015).

Photographing distinguishing features

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



Figure 3: Ceramic bottle artefact with stamp.



Figure 4: Detail of the stamp allows 'Tooth & Co Limited' to be made out. This is helpful to a specialist in gauging the artefact's origin, manufacturing date and likely significance.

Photographing bones

The majority of bones found on site will those of be recently deceased animal bones often requiring no further assessment (unless they are in archaeological context). However, if bones are human, the police must be contacted immediately (see Appendix 6 for detailed guidance). Taking quality photographs of the bones can often resolve this issue quickly. The project archaeologist can confirm if bones are human or non-human if provided with appropriate photographs.

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

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



Figure 5: Bone concealed by foliage.



Figure 6: Bone covered in sediment

Ensure that all close up photographs include the whole bone and then specific details of the bone (especially the ends of long bones, the *epiphysis*, which is critical for species identification). Figures 7 and 8 are examples of good photographs of bones that can easily

be identified from the photograph alone. They show sufficient detail of the complete bone and the epiphysis.



Figure 7: Photograph showing complete bone.



Figure 8: Close up of a long bone's epiphysis.



Appendix 4 - Uncovering bones

This appendix provides advice regarding:

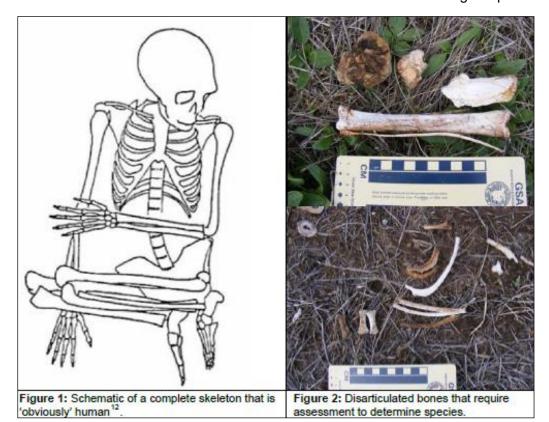
- what to do on first discovering bones
- the range of human skeletal notification pathways
- additional considerations and requirements when managing the discovery of human remains.

1. First uncovering bones

Refer to the Sydney Metro Exhumation Management Plan

Stop all work in the vicinity of the find. All bones uncovered during project works should be **treated with care and urgency** as they have the potential to be human remains. The bones must be identified as either human or non-human as soon as possible by a qualified forensic or physical anthropologist.

On the very rare occasion where it is immediately obvious from the remains that they are human, the Project Manager (or a delegate) should <u>inform the police by telephone</u> prior to seeking specialist advice. It will be obvious that it is human skeletal remains where there is no doubt, as demonstrated by the example in Figure 1⁹. Often skeletal elements in isolation (such as a skull) can also clearly be identified as human. Note it may also be obvious that human remains have been uncovered when soft tissue and/or clothing are present.



⁹ After Department of Environment and Conservation NSW (2006), *Manual for the identification of Aboriginal Remains:* 17

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This preliminary phone call is to let the police know that a specialist skeletal assessment to determine the approximate date of death which will inform legal jurisdiction. The police may wish to take control of the site at this stage. If not, a forensic or physical anthropologist must be requested to make an on-site assessment of the skeletal remains.

Where it is not immediately obvious that the bones are human (in the majority of cases, illustrated by Figure 2), specialist assessment is required to establish the species of the bones. Photographs of the bones can assist this assessment if they are clear and taken in accordance with guidance provided in Appendix 3. Good photographs often result in the bones being identified by a specialist without requiring a site visit; noting they are nearly always non-human. In these cases, non-human skeletal remains must be treated like any other unexpected archaeological find.

If the bones are identified as human (either by photographs or an on-site inspection) a technical specialist must determine the likely ancestry (Aboriginal or non-Aboriginal) and burial context (archaeological or forensic). This assessment is required to identify the legal regulator of the human remains so **urgent notification** (as below) can occur.

Preliminary telephone or verbal notification by the archaeologist to the Sydney Metro Principal Manager Sustainability Environment and Planning (Program) is appropriate. This must be followed up later by a formal letter notification to the relevant regulator when a management plan has been developed and agreed to by the relevant parties.

2. Range of human skeletal notification pathways

The following is a summary of the different notification pathways required for human skeletal remains depending on the preliminary skeletal assessment of ancestry and burial context.

A. Human bones are from a recently deceased person (less than 100 years old).

Action

A police officer must be notified immediately as per the obligations to report a death or suspected death under s35 of the *Coroners Act 2009* (NSW). It should be assumed the police will then take command of the site until otherwise directed.

B. Human bones are archaeological in nature (more than 100 years old) and are likely to be *Aboriginal* remains.

Action

The OEH (Planning and Aboriginal Heritage Section) must be notified immediately. The Aboriginal Cultural Heritage Advisor must contact and inform the relevant Aboriginal community stakeholders who may request to be present on site.

C. Human bones are archaeological in nature (more than 100 years old) and likely to be non-Aboriginal remains.

Action

The OEH (Heritage Division) must be notified immediately

Figure 3 summarises the notification pathways on finding bones.



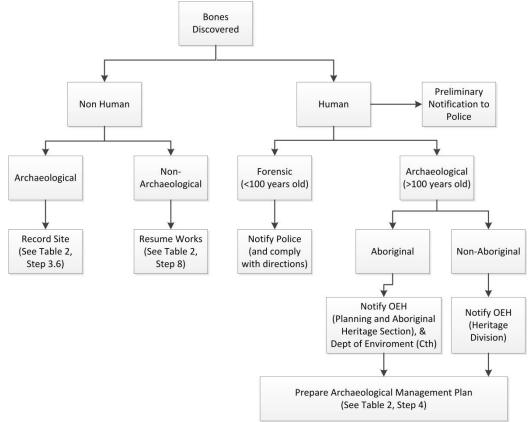


Figure 3 Overview of steps to be undertaken on the discovery of bones

After the appropriate verbal notifications (as described in 2B and 2C above), the Project Manager must proceed through the *Unexpected Heritage Items Exhumation Management Plan* (Step 4). It is noted that no *Exhumation Management Plan* is required for forensic cases (2A), as all future management is a police matter. Non-human skeletal remains must be treated like any other unexpected archaeological find and so must proceed to record the find as per Step 3.6.

3. Additional considerations and requirements

Uncovering archaeological human remains must be managed intensively and needs to consider a number of additional specific issues. These issues might include facilitating culturally appropriate processes when dealing with Aboriginal remains (such as repatriation and cultural ceremonies). Project Managers may need to consider overnight site security of any exposed remains and may need to manage the onsite attendance of a number of different external stakeholders during assessment and/or investigation of remains.

Project Managers may also be advised to liaise with local church/religious groups and the media to manage community issues arising from the find. Additional investigations may be required to identify living descendants, particularly if the remains are to be removed and relocated.

If exhumation of the remains (from a formal burial or a vault) is required, Project Managers should also be aware of additional approval requirements under the *Public Health Act 1991* (NSW). Specifically, Sydney Metro may be required to apply to the Director General of NSW

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Department of Health for approval to exhume human remains as per Clause 26 of the *Public Health (Disposal of Bodies) Regulation 2002* (NSW)¹⁰.

Further, the exhumation of such remains needs to consider health risks such as infectious disease control, exhumation procedures and reburial approval and registration. Further guidance on this matter can be found at the NSW Department of Health website.

In addition, due to the potential significant statutory and common law controls and prohibitions associated with interfering with a public cemetery, project teams are advised, when works uncover human remains adjacent to cemeteries, to confirm the cemetery's exact boundaries.

¹⁰ This requirement is in addition to heritage approvals under the *Heritage Act 1977*.



Appendix 5 - Archaeological/heritage advice checklist

The archaeologist/Aboriginal heritage consultant must advise the Sydney Metro Principal Manager Sustainability Environment and Planning (Program) of an appropriate archaeological or heritage management plan as soon as possible after an inspection of the site has been completed (see Step 4). An archaeological or heritage management plan can include a range of activities and processes, which differ depending on the find and its significance.

In discussions with the archaeologist/Aboriginal heritage consultant the following checklist can be used as a prompt to ensure all relevant heritage issues are considered when developing this plan. This will allow the project team to receive clear and full advice to move forward quickly. Archaeological and/or heritage advice on how to proceed can be received in a letter or email outlining all relevant archaeological and/or heritage issues.

	Required	Outcome/notes
Assessment and investigation		
Assessment of significance	Yes/No	
Assessment of heritage impact	Yes/No	
Archaeological excavation	Yes/No	
Archival photographic recording	Yes/No	
Heritage approvals and notifications		
AHIP, section 140, section 139 exceptions etc.	Yes/No	
Regulator relics/objects notification	Yes/No	
 Notification to Sydney Trains for s170 heritage conservation register 	Yes/No	
 Compliance with CEMP or other project heritage approvals 	Yes/No	
Stakeholder consultation		
Aboriginal stakeholder consultation	Yes/No	
Artefact/heritage item management		
 Retention or conservation strategy (e.g. items may be subject to long conservation and interpretation) 	Yes/No	
Disposal strategy	Yes/No	
Short term and permanent storage locations (interested third parties should be consulted on this issue).	Yes/No	
Control Agreement for Aboriginal objects	Yes/No	

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Appendix 6 - Template notification letter

Insert on TfNSW letterhead Select and type date] [Select and type reference number]

Manager, Conservation
Heritage Division, Office of Environment and Heritage
Locked Bag 5020
Parramatta NSW 2124

[Select and type salutation and name],

Re: Unexpected heritage item discovered during Sydney Metro activities.

I write to inform you of an unexpected [select: relic, heritage item or Aboriginal object] found during Sydney Infrastructure and Services construction works at [insert location] on [insert date] in accordance with the notification requirement under select: section 146 of the *Heritage Act 1977* (NSW). [Where the regulator has been informally notified at an earlier date by telephone, this should be referred to here].

NB: On finding Aboriginal human skeletal remains this letter must also be sent to the Commonwealth Minister for the Environment in accordance with notification requirements under section 20(1) of the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth).

[Provide a brief overview of the project background and project area. Provide a summary of the description and location of the item, including a map and image where possible. Also include how the project was assessed under the *Environmental Planning and Assessment Act 1979* (NSW) (e.g. Part 5). Also include any project approval number, if available].

Sydney Metro [or contractor] has sought professional archaeological advice regarding the item. A preliminary assessment indicates [provide a summary description and likely significance of the item]. Please find additional information on the site recording form attached.

Based on the preliminary findings, Sydney Metro [or contractor] is proposing [provide a summary of the proposed archaeological/heritage approach (e.g. develop archaeological research design (where relevant), seek heritage approvals, undertake archaeological investigation or conservation/interpretation strategy). Also include preliminary justification of such heritage impact with regard to project design constraints and delivery program].

The proposed approach will be further developed in consultation with a nominated Office of Environment and Heritage staff member.

Should you have any feedback on the proposed approach, or if you require any further information, please do not hesitate to contact [Environment and Planning Project Manager] on (02) XXXX XXXX.

Yours sincerely

[Sender name]

Sydney Metro Principal Manager Sustainability Environment and Planning (Program) [Attach the archaeological/heritage management plan and site recording form]