



Sydenham to Bankstown – Southwest Metro Conversion and Station Works Package 3 Heritage Management Plan

Sydney Metro Integrated Management System (IMS)

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NOTE - This Construction Heritage Management Plan was prepared by Sydney Metro for the purposes of a previous planned procurement for the Southwest Metro project in the first instance. In the second instance JHLORJV have updated this Construction Heritage Management Plan to be specific to the SWM3 scope of works and implemented by the Interface Contractors.

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Revision	Date	Description
00	04/06/2024	Submitted to Sydney Metro and ER
01	21/06/2024	Updated with Sydney Metro and ER comments
02	20/08/2024	SWM3 transferred to new template, Updated with comments following Consultation with IWC, CBCC, Heritage NSW
03	16/09/2024	Updated with comments from DPPI
04	15/06/2025	Update to include additional assessment (Appendix H & I)
05	28/03/2026	Update to include heritage review into design process
06		

Terms and Definitions

Terms	Definitions
AARD	Archaeological Assessment and Research Design
AMS	Archaeological Method Statement
AMZ	Archaeological Management Zone
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSR	Combined Services Route
CSSI	Critical State Significant Infrastructure
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DECC	NSW Department of Environment and Climate Change (now DCCEEW)
DPIE	Department of Planning, Industry and Environment (now DPPI)
DPHI	Department of Planning, Housing and Infrastructure
ECM	Environmental Control Map
ED	Excavation Director
EIS	Environmental Impact Statement
EP&A Act	Environment Planning and Assessment Act 1979 (NSW)
EPA	NSW Environment Protection Authority
ER	Environmental Representative
GST	Galvanised Steel Troughing
HIA	Heritage Impact Assessment
HMP	Heritage Management Plan
IMS	Sydney Metro Integrated Management System
LEP	Local Environmental Plan
Minister, the	The Minister of New South Wales (NSW) Planning
NSW	New South Wales
NVMP	Construction Noise and Vibration Management Plan
OEH	NSW Office of Environment and Heritage
PAD	Potential Archaeological Deposit
Proponent	The person or organisation identified as the proponent in Schedule 1 of the planning approval. In this case Transport for NSW
RAPs	Registered Aboriginal Parties. As defined in the Aboriginal cultural heritage consultation requirements for proponents 2010
REMM	Revised Environmental Mitigation Measure
Secretary	The Secretary of the Department of Planning, Industry and Environment
SMA	Sydney Metro Authority
SPIR	Submissions and Preferred Infrastructure Report
SSI	State Significant Infrastructure
TfNSW	Transport for New South Wales



1. Introduction

1.1. Context and scope of this Sub-Plan

This Heritage Management Plan (HMP or Plan) forms part of the Construction Environmental Management Plan for Southwest Metro – Conversion and Station Works Package 3 (SWM3 the Project).

This HMP has been prepared to address the requirements of the Conditions of Approval (CoA), the Revised Environmental Mitigation Measures (REMM) and the Sydney Metro Construction Environmental Management Framework (CEMF).

This HMP describes how JHLORJV propose to manage and protect Aboriginal and non-Aboriginal heritage during the construction of the Project. The HMP describes how JHLORJV will ensure risks associated with heritage management are considered and managed effectively during the construction of the Project. It has been prepared to support, and should be read in conjunction with the Sydney Metro CEMF as well as a number of Sydney Metro and JHLORJV prepared heritage related plans and procedures.

1.2. Project background

The Sydney Metro City and Southwest – Sydenham to Bankstown Environmental Impact Statement (EIS) (GHD/AECOM September 2017) assessed the impacts of construction and operation on non-Aboriginal heritage and Aboriginal heritage within Chapter 14 (Non-Aboriginal heritage) and Chapter 15 (Aboriginal heritage) respectively. The Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report (SPIR) (GHD/AECOM June 2018) was prepared in response to the submissions received during the EIS exhibition period. The SPIR revised the scope of the Sydenham to Bankstown Upgrade project, resulting in an overall reduction of potential heritage impacts during construction and the updated Non-Aboriginal Heritage Assessment was included in SPIR Appendix F. On 22 October 2020 a modification to the project (CSSI-8256-Mod-1) was approved for a revised station design for Bankstown Station.

Impact to items in the Project’s study area as assessed in the SPIR and CSSI-8256-Mod-1 are listed in Table 1 and are shown in Table 2 and Table 3 .

Table 1 Impacts to heritage items (SPIR) relevant to this Project

Item	Significance level	Direct	Visual	Potential direct	Significance retained?
Marrickville Railway Station Group	State	Moderate	Moderate	Negligible	Yes
Sewage Pumping Station 271	State	Neutral	Neutral	Negligible	Yes
Stone house, including interiors	Local	Neutral	Neutral	Negligible	Yes
Dulwich Hill Railway Station Group	Local	Moderate	Moderate	Negligible	Yes
South Dulwich Hill Heritage Conservation Area	Local	Negligible	Negligible	Negligible	Yes
Hurlstone Park Railway Station Group	Local	Moderate	Moderate	Negligible	Yes
Hurlstone Park Railway Underbridge	Local	Negligible	Negligible	Negligible	Yes

Item	Significance level	Direct	Visual	Potential direct	Significance retained?
Canterbury Railway Station Group	State	Moderate	Moderate	Negligible	Yes
Canterbury (Cooks River) underbridge	Local	Neutral	Negligible	Negligible	Yes
Canterbury (Cooks River/Charles St) Underbridge – Main Line	Local	Minor	Minor	Negligible	Yes
Old Sugarmill	State	Neutral	Negligible	Negligible	Yes
Inter-War Hotel (former Hotel Canterbury)	Local	Neutral	Neutral	Negligible	Yes
Federation Post Office Building (former Canterbury Post Office)	Local	Neutral	Neutral	Negligible	Yes
Electricity substation no. 275	Local	Neutral	Negligible	Negligible	Yes
Campsie Railway Station Group	Local	Moderate	Moderate	Negligible	Yes
Belmore Railway Station Group	State	Moderate	Moderate	Negligible	Yes
Post-war bus shelter and public lavatories	Local	Neutral	Minor	Negligible	Yes
Federation House (former station master's cottage)	Local	Neutral	Negligible	Negligible	Yes
Lakemba Railway Station Group	Local	Moderate	Moderate	Negligible	Yes
Wiley Park Railway Station Group	Local	Moderate	Moderate	Negligible	Yes
Inter-War water pumping station – Lakemba Pumping Station (WP0003)	Local	Neutral	Negligible	Negligible	Yes
Punchbowl Railway Station Group	Local	Moderate	Moderate	Moderate	Yes
Bankstown Railway Station Group	Local	Moderate	Moderate	Negligible	Yes
Bankstown Parcels Office (former)	Local	Major	Major	N/a	No
Shop	Local	Neutral	Negligible	Negligible	Yes

Please refer to Section 1 of the CEMP for the Project Description.

1.2.1. Relationship of City with Southwest Project Area

Sydney Metro have prepared a Consistency Assessment in the lead up to the transition from the construction phase to the operational phase of the S2B project titled: Sydenham to Bankstown - Final track configuration works to complete the connection between Marrickville Station and Sydenham Station.

The purpose of the Planning and Consistency Assessment (PACA) is to conduct works outside of the CSSI 8256 Project Area and to present a more detailed understanding of the final track configuration/corridor works between Marrickville Station and Sydenham Station and demonstrate how this scope of works is consistent with the works undertaken under CSSI_8256 Planning Approval.

Both the Chatswood to Sydenham and Sydenham to Bankstown projects include corridor works to connect the two projects at a location near Meeks Road (Figure 2b of this CEMP). Given that the final track configuration/corridor works must be completed in a consistent manner across the C&SW alignment and do not clearly start and stop at the construction boundaries identified in the planning approvals, Sydney Metro is proposing for the S2B contractor to deliver the Corridor works under one planning approval (CSSI_8256) – delivering all the necessary corridor works between Marrickville and Sydenham stations to connect the projects, including works in project areas across both the CSSI_7400 and CSSI_8256.

This CHMP has included assessment context around CSSI 7400 built heritage, Aboriginal and non-Aboriginal archaeology from the Sydenham Station Upgrade Project (SMu).

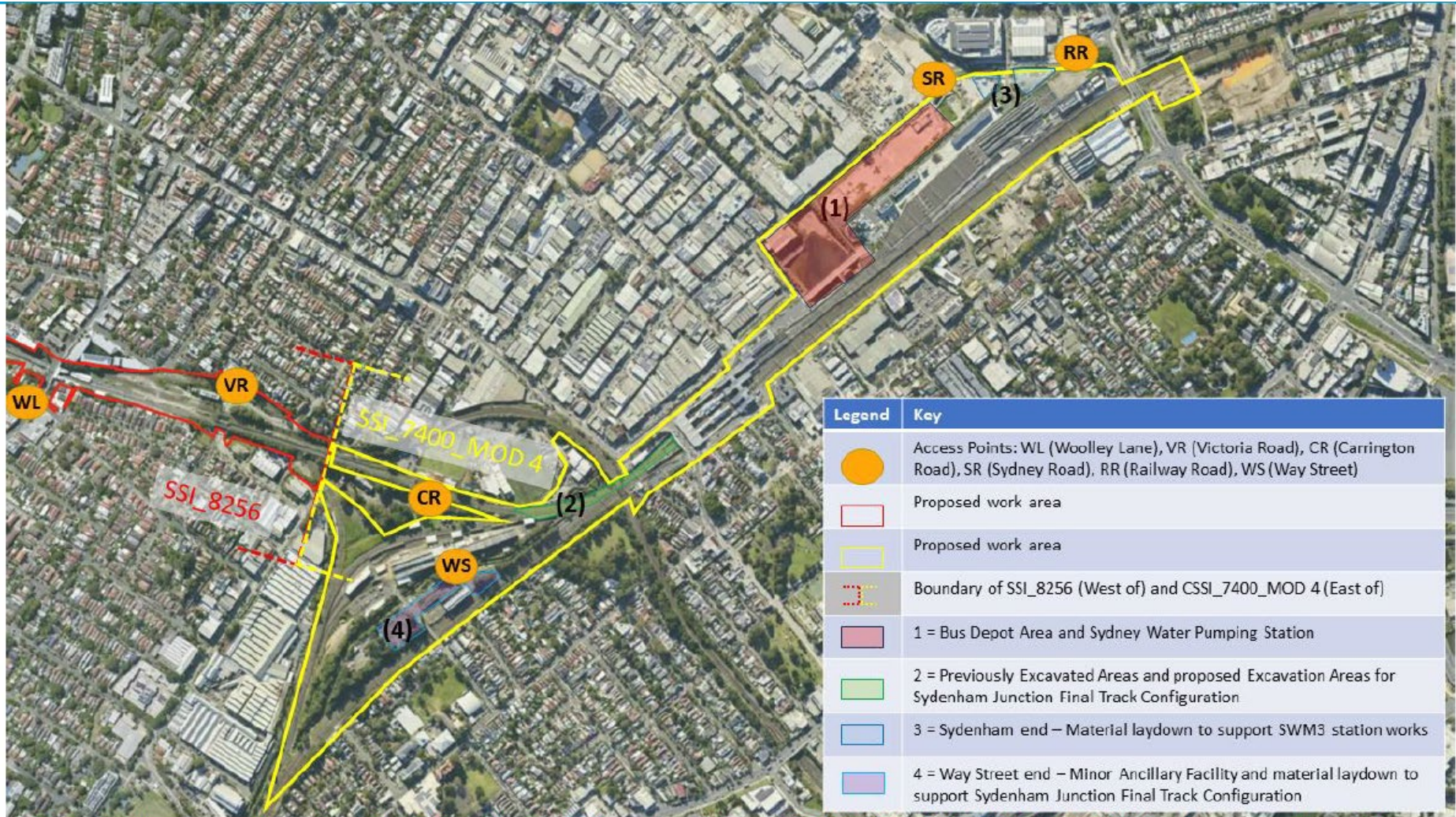


Figure 1 Sydney Metro Marrickville to Sydenham Site Layout

(source: Sydney Metro City & Southwest - Sydenham to Bankstown -Planning Approval Consistency Assessment Form: Final track configuration works to complete the connection between Marrickville Station and Sydenham Station, October 2023.)



Figure 1 Depicts the proposed work area; including the existing boundary between CSSI_8256 and CSSI_7400_MOD 4 planning approvals and the proposed access points. Note: Track slab involves installation of platforms and key elements of the Metro, at the platform level for the operation of the Metro line. Whereas Track Re-conditioning involves the restoration of existing track. Area 1 (the Temporary Marrickville Bus Depot Area and Sydney Water Pumping Station) is excluded from the proposed change

1.3. Objectives and targets

The HMP provides the basis for the management of heritage issues and aims to minimise the risk of impact during the course of the development, and to mitigate any impact that cannot be avoided. Mitigation and management measures are outlined in Table 13.

The objectives and targets of heritage management and mitigation are outlined below:

- Minimise impacts on items or places of heritage value;
- Avoid accidental impacts on heritage items;
- Maximise worker’s awareness of Aboriginal and non-Aboriginal heritage;
- No disturbance or damage to known heritage sites or items, beyond that approved by the SSI Approval;
- Unknown or undocumented heritage items are not knowingly destroyed, defaced or damaged;
- Consult with Registered Aboriginal Parties and other identified stakeholders prior to impacts in areas which have been assessed to possess archaeological potential, and/or upon the discovery of unexpected Non-Aboriginal and Aboriginal objects or cultural features;
- Any historical relics found on site shall be kept safe for consideration for incorporation into interpretation within the public domain—within the proposed site fixtures as may be supported by the Interpretation Strategy and Plan; and
- No harm, destruction or defacement of human remains, including Aboriginal burials, will occur.

These objectives conform to Sydney Metro’s objectives as described in the CEMF.

1.4. Consultation

CoA C3(d) requires that the HMP be prepared in consultation with the relevant Councils and Department of Premier and Cabinet Heritage NSW (formerly Heritage Division) as delegate for the NSW Heritage Council. As such the following stakeholders have been consulted with in developing this HMP:

- Heritage NSW;
- Canterbury Bankstown City Council (CBCC) & Inner West Council (IWC)

A summary of the consultation is provided below and in Appendix C.

Table 2 Consultation carried out in the development of this Plan

CoA	Agency Consultation	Requirements and date submitted	Key issues raised	HMP Section Reference
C6	Department of Planning, Housing & Infrastructure (DPHI)	New Plans for SWM3. Submitted 04 September 2024	Check cross reference throughout document	Throughout document
C3(d)	Heritage NSW & Heritage Council NSW	New Plans for SWM3. Submitted to 02 August 2024	No issues raised	NA



CoA	Agency Consultation	Requirements and date submitted	Key issues raised	HMP Section Reference
C3(d)	Inner West Council (IWC)	New Plans for SWM3. Submitted to 26 July 2024	mechanism for reporting on the impacts on the Inner West Local Environmental Plan 2022 listed items	Section 3.4

<p>C3 (d)</p>	<p>Canterbury Bankstown City Council (CBCC)</p>	<p>New Plans for SWM3. Submitted to 26 July 2024</p>	<ol style="list-style-type: none"> 1. Report needs referral to the Aboriginal Liaison officer. 2. Recommend that the project have a dedicated heritage liaison officer with known contact details so if issues arise there is an accessible means of communication (like the Excavation Director). Like in Part 5.3.4 where the ED is nominated the Heritage Consultant, Conservation Architect and Heritage Engineer should be nominated. 3. Page 10 - The lists of Heritage Items etc. do not include the Hurlstone Park HCAs and items near the corridor. The corridor works need to be mindful of these. 4. NAH11-Landscape works should be undertaken in consultation with the owners of the Sugarmill and Council as well. 5. Council should be provided with a digital copy of the archival recording (see also Section 5.2.3) 6. As far as I am aware the parcels office has not been demolished – it was still there recently. As such, this requirement is still valid. 7. Table 7 does not list all heritage items in and near the Project area. For example, around Hurlstone Park the HCAs are missing, as is the former station master's cottage on Floss Street (item 178). 8. Figure 16 does not show all heritage items that are on this map. 	<p>Refer to Appendix C</p>
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CoA	Agency Consultation	Requirements and date submitted	Key issues raised	HMP Section Reference
			<p>9. Figure 18 does not show all heritage items that are on this map.</p> <p>10. Figure 21 does not show all heritage items that are on this map.</p>	

Consultation with Registered Aboriginal Parties (RAP) was undertaken during concept design as part of the Sydney Metro Sydenham to Bankstown EIS and also during the preparation of the Aboriginal Cultural Heritage Assessment Report (ACHAR). No further RAP consultation is required under the CoA or REMM in the preparation of this HMP.

RAPs will be involved if Aboriginal objects were identified during excavations.

2. Legal and other requirements

The HMP addresses applicable requirements within the following documents:

- The Sydney Metro *City and Southwest - Sydenham to Bankstown Upgrade Conditions of Approval SSI-8256*, determined 12 December 2018 and modified 22 October 2020;
- The Sydney Metro *City and Southwest - Sydenham to Bankstown Upgrade Environmental Impact Statement*, September 2017;
- The Sydney Metro *City and Southwest - Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report*, dated June 2018;
- The Sydney Metro *City and Southwest - Sydenham to Bankstown Upgrade Bankstown Station Modification Report* May 2020;
- The Sydney Metro *Sydenham to Bankstown Staging Report Rev 08, 2024*;
- The Sydney Metro *Construction Environmental Management Framework v3.2*.
- Sydney Metro *Unexpected Heritage Finds Procedure* 2019
- Sydney Metro *Exhumation Management Plan* 2019
- The Sydney Metro *City & Southwest Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design*, prepared by Artefact Heritage (2018)
- The Sydney Metro *Sydenham Station and Sydney Metro Trains Facility South, Second Addendum to the Sydney Metro City and Southwest – Chatswood to Sydenham: Historical Archaeological Assessment and Research Design Report*, prepared by Artefact Heritage (2018).
- The Sydney Metro *City & Southwest Sydenham to Bankstown Upgrade Aboriginal Cultural Heritage Assessment Report* (Artefact Heritage 2018)
- The Sydney Metro *City and Southwest – Chatswood to Sydenham: Historical Archaeological Assessment and Research Design* (Artefact 2016)
- The SWM3 Design and Construction Deed, *Scope of Works and Technical Criteria – B06 Heritage* 2024

The Compliance Matrix in Section 2.2 provides a comprehensive list of compliance requirements, environmental documents and the contract documents.

Table 4 below details the legislation and planning instruments considered during development of this Plan.

Table 3 Legislation and Planning Instruments

Legislation	Description	Relevance to this HMP
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals for the State.	The approval conditions and obligations are incorporated into this HMP.

Legislation	Description	Relevance to this HMP
<p>Environment Protection and Biodiversity Conservation (EPBC) Act 1999 (Cwth)</p>	<p>The main purpose of this Act is to provide for the protection of the environment especially those aspects that are of national environmental importance and to promote ecological sustainable development.</p> <p>Heritage places are listed on the National Heritage List (NHL) for their ‘outstanding heritage value to the nation’ and are owned by a variety of constituents, including government agencies, organisations or individuals. Only items owned or controlled by the Commonwealth that meet the threshold for national heritage listing under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) are listed on the Commonwealth Heritage List (CHL) and/or the World Heritage List (WHL) and afforded protection under the EPBC Act.</p>	<p>Not relevant as no NHL, CHL or WHL items</p>
<p>National Parks and Wildlife Act 1974</p>	<p>The relevance of this Act is firstly in respect to the protection and preservation of Aboriginal artefacts. Discovery of material on site suspected as being of Aboriginal origin must be reported and protected pending assessment and direction by Sydney Metro.</p>	<p>No Aboriginal sites or areas of significant archaeological potential have been identified within the Project site. Two areas of PAD were observed during a site survey. However, one PAD was located outside the work area while the other showed low archaeological potential upon further assessments and has been removed as a PAD. An Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974 is not required for works approved under Part 5.1 of the EP&A Act.</p>
<p>Heritage Act 1977</p>	<p>This Act provides for the preservation and conservation of heritage items such as building, works, relic, places of historic interest, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance.</p> <p>It is an offence under this Act to wilfully and knowingly damage or destroy items of heritage value.</p> <p>Do not demolish, damage, move or develop around any place, building, work, relic, moveable object, precinct, or land that is the subject of an interim heritage order or listing on the State Heritage Register or heritage listing in a Local Environmental Plan without an approval from the Heritage NSW or local council.</p>	<p>Heritage Items are identified on the Project site and addressed as part of the CoA. An approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977 is not required for works approved under Part 5.1 of the EP&A Act.</p>

Legislation	Description	Relevance to this HMP
Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwth)	This Act provides for the preservation and protection from injury or desecration to areas and objects of particular significance to Aboriginals. Areas and objects can be protected by Ministerial Declaration and it is then an offence to contravene such a declaration.	No areas or objects within the Project have been identified as being subject to such a declaration and this Act is of little relevance to the Project.
Coroners Act 2009	This Act enables coroners to investigate certain kinds of deaths or suspected deaths in order to determine the identities of the deceased persons, the times and dates of their deaths and the manner and cause of their deaths.	This Act is relevant if Human Skeletal Remains are located within the Project area

A number of heritage reports were prepared during detailed design for the SWM3 Scope of works, in order to address design related REMM. The findings and recommendations of these reports have been included in the HMP where relevant. It is noted in the compliance matrix where the design related REMM for the project have been fulfilled by these reports (refer to Appendix A).

- Sydney Metro *City and Southwest Moveable Heritage Strategy*, January 2021;
- Sydney Metro *City and Southwest Adaptive Reuse Strategy*, October 2020;
- Sydney Metro *City and Southwest Heritage Salvage Strategy*, October 2020;
- Sydney Metro *City & Southwest – Significant Fabric Registers*, 2021
- METRON T2M *Heritage Interpretation Package Sydney Metro Southwest Metro Design Services (SMDS)*, AFC Rev 02 (for S2B Stations)
- *Artefact Sydney Metro City & Southwest: Sydenham to Bankstown Line Heritage Interpretation Strategy*, Rev 6, 20 May 2020
- METRON T2M *Inventory of Significant Heritage Elements - Bankstown Station (Stage 2)*, Rev A,
- *Artefact Sydney Metro City and Southwest - Bankstown Station Movable Heritage Strategy*, Final AFC, January 2022
- *Artefact Sydney Metro City and Southwest – Bankstown Station Heritage Salvage Strategy FINAL – AFC*, January 2022
- *Artefact Sydney Metro City & Southwest: Sydenham to Bankstown Line Heritage Interpretation Strategy*, May 2020
- Sydney Metro *City and Southwest Heritage Interpretation Plan Bankstown Station*, February 2021
- Sydney Metro *City and Southwest Heritage Interpretation Plan Dulwich Hill Station*, October 2020;
- Sydney Metro *City and Southwest Heritage Interpretation Plan Campsie Station*, October 2020; and

- Sydney Metro *City and Southwest Heritage Interpretation Plan Punchbowl Station*, October 2020.
- Sydney Metro *City and Southwest Heritage Interpretation Plan Marrickville Station*, April 2020;
- Sydney Metro *City and Southwest Heritage Interpretation Plan Canterbury Station* April 2020; and
- Sydney Metro *City and Southwest Heritage Interpretation Plan Lakemba Station*, April 2020.
- Sydney Metro *City and Southwest Heritage Interpretation Plan Hurlstone Plan Station*, October 2020;
- Sydney Metro *City and Southwest Heritage Interpretation Plan Belmore Station*, October 2020; and
- Sydney Metro *City and Southwest Heritage Interpretation Plan Wiley Park Station*, October 2020.
- *SWM3 Heritage Impact Assessment & Archaeological Method Statement*, July 2024
- Sydney Metro *City and Southwest – Southwest Metro & Bankstown and Additional Corridor: Aboriginal and Non-Aboriginal Heritage Impact Assessment*, October 2022
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Bankstown Station*, February 2021
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Dulwich Hill Station*, October 2021;
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Campsie Station*, October 2021; and
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Punchbowl Station*, October 2021.
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Marrickville Station*, April 2021;
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Canterbury Station* April 2021; and
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Lakemba Station*, April 2021.
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Hurlstone Plan Station*, October 2021;
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Belmore Station*, October 2021; and
- Sydney Metro *City and Southwest Heritage Impact Assessment Stage 3 Wiley Park Station*, October 2021.
- Memorandum - Mounting Provisions for TSOM CCTVs and Speakers - Heritage Issues
- Consistency Assessment - Charles Street Overhead Protection Beam, Canterbury

2.1. Guidelines

Additional guidelines and standards to the management of heritage include:

- *Code of Practice for the archaeological investigation of Aboriginal objects in NSW*, (OEH 2010);
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (OEH 2010);
- *Due Diligence Code of practice for protection of Aboriginal objects in NSW* (OEH 2010);
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2010);
- *Assessing Heritage Significance* (NSW Heritage Office 2001);
- *Levels of Heritage Significance* (NSW Heritage Office 2008);
- *Assessing Significance for Historical Archaeological Sites and Relics* (NSW Heritage Branch, Department of Planning 2009);
- *Investigating Heritage Significance* (NSW Heritage Office 2001);
- *How to Prepare Archival Recording of Heritage Items* (Heritage Branch 1998);
- *Photographic Recording of Heritage Items Using Film or Digital Capture* (Heritage Branch 2006).

2.2. Conditions of Approval

The CoA and REMM relevant to this HMP are listed in Table 4 below. In accordance with CoA C4, the relevant requirements of the CEMF have also been included in Table 4. Table 4 also provides a cross reference to demonstrate where the CoA or REMM is addressed in this HMP or other management documents.

Please refer to Appendix A for all other CoA, REMM and CEMF requirements relevant to the development of this Plan.

Table 4: HMP Compliance Matrix

No.	Requirement	Reference	How addressed?			
Conditions of Approval						
C3	<p>The CEMP Sub-plans must 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:</p> <table border="1" data-bbox="318 539 1032 587"> <tr> <td>(d)</td> <td>Heritage</td> <td>Heritage Council (or its delegate) and relevant council(s)</td> </tr> </table>	(d)	Heritage	Heritage Council (or its delegate) and relevant council(s)	Section 1.4 Appendix C	This Plan has been prepared in accordance with this condition and describes how JHLORJV proposes to manage heritage during construction of the Project. This Plan has been provided to Heritage NSW, Canterbury Bankstown City Council & Inner West Council for consultation. Details of consultation are provided in Section 1.4 and Appendix C – Consultation Register.
(d)	Heritage	Heritage Council (or its delegate) and relevant council(s)				
C4	The CEMP Sub-plans must be prepared in accordance with the CEMF	This Table	Table 4 demonstrates how this Plan has been prepared in accordance with the relevant requirements of the CEMF.			
C5	Details of all information requested by an agency to be included in a CEMP Sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant CEMP Sub-Plan.	Section 1.4 Appendix C	This Plan has been provided to Heritage NSW, Canterbury Bankstown City Council & Inner West Council for consultation. Details of consultation are provided in Section 1.4 and Appendix C.			
C6	Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before Construction.	Refer to section 1.2 of the CEMP	This Plan will be submitted for approval to DPHI along with or subsequent to the final submission of the CEMP for DPHI approval, and no later than one month prior to construction.			
C7	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and CEMP Sub-plans for that stage have been approved by the Planning Secretary.	Refer to section 1.2 of the CEMP	Construction will not commence until the CEMP and all CEMP Sub-plans have been approved by DPHI. The CEMP and Sub-plans will be implemented for the duration of construction.			

No.	Requirement	Reference	How addressed?
E10	Following completion of Work described in the documents listed in Conditions A1 and A2 in relation to heritage items, a Heritage Report including the details of any archival recording, further historical research either undertaken or to be carried out and archaeological excavations (with artefact analysis and identification of a final repository for finds), must be prepared in accordance with any guidelines and standards required by the Heritage Council of NSW and Heritage NSW.		<p>Archival record has been completed for;</p> <ul style="list-style-type: none"> • Marrickville Station • Dulwich Hill Station • Hurlstone Park Station • Hurlstone Park Railway Underbridge • Canterbury Station • Canterbury (Cooks River) Underbridge • Canterbury (Cooks River/Charles St) Underbridge – Main Line • Old Sugarmill • Campsie Station • Belmore Station • Lakemba Station • Wiley Park Station • Punchbowl Station • Bankstown Railway Station Group • Bankstown Parcels Office <p>Archival recording would be limited to areas of the heritage items where direct or visual impacts would be minor or greater than minor, or where the works would impact heritage items listed on the SHR. Archival recording of the railway stations has been prepared as part of the S2B design and would not need to be completed for SWM3.</p> <p>An Excavation Directors Report (EDR) would be prepared at the conclusion of the S2B archaeological program. This would include further historical research, results of archaeological excavations, artefact analysis and identification of a final repository for finds.</p>
E11	An Excavation Director's Report (EDR) must be prepared for any heritage items of State significance that are discovered during Work. The EDR must be prepared in consultation with Heritage NSW.	Section 5.3.4	An EDR would be prepared at the conclusion of the archaeological program and would include results of excavation of State and locally significant archaeology if relevant to the S2B program and the results of archaeological test excavations within the Canterbury Construction Site.

No.	Requirement	Reference	How addressed?
E12	The Heritage Report and Excavation Directors Report must be submitted to the Planning Secretary, the Heritage Council of NSW and Heritage NSW for information no later than 24 months after the completion of Work referred to in Condition E10.	Section 5.3.4	The archival recording report and EDR would be submitted to the Planning Secretary, Heritage NSW and DPWI Water DEECCW for information no later than 24 months after the completion of work.
E13	The Proponent must prepare a Heritage Interpretation Strategy which outlines a process to interpret key Aboriginal and non-Aboriginal heritage values and stories of heritage items in the final project design. The Heritage Interpretation Strategy must be prepared in consultation with the Heritage Council of NSW and submitted to the Planning Secretary for information before the commencement of Construction.	Section 5.2.4	A Heritage Interpretation Strategy (HIS) has been prepared for Sydney Metro City & Southwest: Sydenham to Bankstown Line by Artefact Heritage (October 2020), and individual Heritage Interpretation Plans have been prepared for the stations by Artefact Heritage or Metron T2M as part of the detailed design.

No.	Requirement	Reference	How addressed?
E14	<p>A Heritage Interpretation Plan(s) must be prepared, consistent with the Heritage Interpretation Strategy which identifies heritage items to be used in the final design of the project. The plan(s) must identify how items will be interpreted and provide a timeframe for their implementation which must be no later than the commencement of Operation. Heritage interpretation in any station precinct must be identified in the relevant Station Design and Precinct Plan(s) required in Condition E56.</p> <p>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.</p>	Section 5.2.4	<p>Individual Heritage Interpretation Plans, that are consistent with the HIS (October 2020), have been prepared for the station precincts by Artefact Heritage or Metron T2M as part of detailed design at the following station;</p> <ul style="list-style-type: none"> • Sydney Metro City and Southwest Heritage Interpretation Plan Bankstown Station, February 2021 • Sydney Metro City and Southwest Heritage Interpretation Plan Dulwich Hill Station, October 2020; • Sydney Metro City and Southwest Heritage Interpretation Plan Campsie Station, October 2020; and • Sydney Metro City and Southwest Heritage Interpretation Plan Punchbowl Station, October 2020. • Sydney Metro City and Southwest Heritage Interpretation Plan Marrickville Station, April 2020; • Sydney Metro City and Southwest Heritage Interpretation Plan Canterbury Station, April 2020; and • Sydney Metro City and Southwest Heritage Interpretation Plan Lakemba Station, April 2020. • Sydney Metro City and Southwest Heritage Interpretation Plan Hurlstone Park Station, October 2020; • Sydney Metro City and Southwest Heritage Interpretation Plan Belmore Station, October 2020; and • Sydney Metro City and Southwest Heritage Interpretation Plan Wiley Park Station, October 2020. <p>The Heritage Interpretation Plans will be implemented at the Project’s stations to reflect detailed design.</p>

No.	Requirement	Reference	How addressed?
E15	An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds in accordance with the guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW.	Section 5.1.2 Section 5.1.3 Section 5.1.4 Section 5.1.5 Section 5.3.5 Section 5.3.7 Appendix D	The Sydney Metro Unexpected Heritage Finds Procedure would be implemented for the project. Sydney Metro Exhumation Management Plan has been completed by Sydney Metro and is outside the management of this CHMP. Sydney Metro Exhumation Plan would be implemented where required.
E16	The Unexpected Heritage Finds and Human Remains Procedure must be prepared by a suitably qualified and experienced heritage specialist in consultation with the Heritage Council of NSW and submitted to the Planning Secretary for information no later than one (1) month before the commencement of Construction.	Section 5.1.2 Section 5.1.3 Section 5.1.4 Section 5.1.5 Section 5.3.5 Section 5.3.7 Appendix D	Sydney Metro Unexpected Finds Procedure (Appendix D) would be implemented for the project. Sydney Metro Exhumation Management Plan has been completed by Sydney Metro and is outside the management of this CHMP. Sydney Metro Exhumation Plan would be implemented where required.
E17	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Construction and during Operational maintenance Work. Note: Human remains that are found unexpectedly during Work are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.	Section 5.1.2 Section 5.1.3 Section 5.1.4 Section 5.1.5 Section 5.3.5 Section 5.3.7 Appendix D	Sydney Metro Unexpected Finds Procedure (Appendix D) would be implemented for the project. Sydney Metro Exhumation Management Plan has been completed by Sydney Metro and is outside the management of this CHMP. Sydney Metro Exhumation Plan would be implemented where required.
Revised Environmental Mitigation Measures Aboriginal Heritage			

No.	Requirement	Reference	How addressed?
AH1	Aboriginal stakeholder consultation would continue to be undertaken in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECC, 2010).	Section 1.4 Section 3.3.2 Section 5.1.5 Section 5.5 Section 6 Table 13	Consultation with RAPs was undertaken during concept design as part of the Sydney Metro Sydenham to Bankstown EIS and also during preparation of the ACHAR RAPs would be involved if Aboriginal objects were identified during excavations.
AH2	The Aboriginal Cultural Heritage Assessment Report would be implemented.	Section 3.3 Section 5.1.1	Aboriginal archaeological testing undertaken for S2B PAD02 as part of the S2B Project did not find any evidence of Aboriginal objects and concluded that S2B PAD02 was not a site (Artefact Heritage 2024).
AH3	Archaeological test excavation (and salvage if required) would be carried out at S2B PAD02 at Punchbowl Station. Excavations would be conducted in accordance with the methodology outlined by the Aboriginal cultural heritage assessment report.	Section 3.3.2	Aboriginal archaeological testing undertaken for S2B PAD02 as part of the S2B Project did not find any evidence of Aboriginal objects and concluded that S2B PAD02 was not a site (Artefact Heritage 2024).
AH4	Appropriate Aboriginal heritage interpretation would be incorporated into the design in consultation with Aboriginal stakeholders.	Section 5.2.4	In accordance with CoA E14, individual Heritage Interpretation Plans have been prepared for each station precinct as part of the Sydney Metro Sydenham to Bankstown upgrade detailed design process. The Heritage Interpretation Plans will be implemented at the Project's stations to reflect detailed design. As outlined in Section 2, these requirements have been met during the detailed design phase and are not applicable to this HMP. Metron T2M have prepared a Heritage Interpretation Package for Sydney Metro Southwest Metro Design Services (SMDS) for the AFC stage of design applicable for the 10 stations between Marrickville to Bankstown. JHLORJV will install the interpretation elements in accordance with this document.

No.	Requirement	Reference	How addressed?
AH5	<p>If potential Aboriginal items are uncovered during the works, all works in the immediate area would cease, and the unexpected finds procedure included in the construction heritage management plan would be implemented.</p> <p>During pre-work briefings, employees would be made aware of the unexpected finds procedures and obligations under the National Parks and Wildlife Act 1974.</p>	<p>Section 5.1.3 Sydney Metro Unexpected Finds Procedure (Appendix D)</p>	<p>Sydney Metro Unexpected Finds Procedure (Appendix D)</p>
Revised Environmental Mitigation Measures Non- Aboriginal Heritage			
NAH1	<p>The project design would minimise adverse impacts to heritage buildings, elements, fabric, spaces and vistas that contribute to the overall heritage significance of the Bankstown Line.</p>	<p>Section 5.2.1 Table 13</p>	<p>Although impacts to heritage values at the Stations would generally be minor, Moderate at Canterbury, Bankstown Parcels Office will be major as a result of SWM3, the following measures have been put in place to minimise adverse impacts:</p> <ul style="list-style-type: none"> • Exclusion zones • Implementation of a Heritage Impact Assessment (HIA) with heritage protection measures recommended per package and/or station • Use of a heritage / conservation architect for station and bridge works where required <p>Refer to the SWM3 HIA in Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement.</p>

No.	Requirement	Reference	How addressed?
NAH2	The project design would maximise the retention and legibility of heritage buildings, structures, fabric, spaces and vistas that are individually significant and contribute to the overall heritage significance of the Bankstown Line.	Section 5.2.1 Table 13	<p>SWM3 Station scope is a mixture of;</p> <ul style="list-style-type: none"> • Design and Construct, • Stage 3 to AFC and • construct only. <p>This requirement was largely fulfilled during the design phases of the Sydenham to Bankstown project. Any scope with a SWM3 design element will adhere to REMM NAH2 which include but is not limited to:</p> <ul style="list-style-type: none"> • Equitable canopies x 5 (Dulwich Hill, Hurlstone Park, Canterbury, Wiley Park, Punchbowl) • Secondary egress routes x 5 (Marrickville, Hurlstone Park, Canterbury, Campsie, Wiley Park) • Canterbury Footbridge Redecking • Punchbowl Demolition (Parcel Office and Candy Shop) <p>Refer to the SWM3 HIA in Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement</p>

No.	Requirement	Reference	How addressed?
NAH3	The project design would complement retained heritage buildings, elements, fabric, spaces and vistas to avoid outcomes that compromise the significance of these heritage items	Section 5.2.1 Table 13 Appendix G	<p>SWM3 Station scope is a mixture of;</p> <ul style="list-style-type: none"> • Design and Construct, • Stage 3 to AFC and • construct only. <p>This requirement was largely fulfilled during the design phases of the Sydenham to Bankstown project. Any scope with a SWM3 design element will adhere to REMM NAH3 which include but is not limited to:</p> <ul style="list-style-type: none"> • Equitable canopies x 5 (Dulwich Hill, Hurlstone Park, Canterbury, Wiley Park, Punchbowl) • Secondary egress routes x 5 (Marrickville, Hurlstone Park, Canterbury, Campsie, Wiley Park) • Canterbury Footbridge Redecking • Punchbowl Demolition (Parcel Office and Candy Shop) <p>Refer to the SWM3 HIA in Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement</p> <p>Refer to the Punchbowl HIA in Appendix G</p>

No.	Requirement	Reference	How addressed?
NAH4	The project design would be developed with guidance from an appropriately qualified and experienced conservation architect.	Section 5.2.1 Table 13 Appendix G	<p>SWM3 Station scope is a mixture of;</p> <ul style="list-style-type: none"> • Design and Construct, • Stage 3 to AFC and • construct only. <p>This requirement was largely fulfilled during the design phases of the Sydenham to Bankstown project. Any scope with a SWM3 design element will adhere to REMM NAH4 which include but is not limited to:</p> <ul style="list-style-type: none"> • Equitable canopies x 5 (Dulwich Hill, Hurlstone Park, Canterbury, Wiley Park, Punchbowl) • Secondary egress routes x 5 (Marrickville, Hurlstone Park, Canterbury, Campsie, Wiley Park) • Canterbury Footbridge Redecking • Punchbowl Demolition (Parcel Office and Candy Shop) <p>Refer to the SWM3 HIA in Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement Refer to the Punchbowl HIA in Appendix G</p>
NAH5	Where heritage significant items or elements are to be retained within the operational area, an adaptive reuse strategy would be prepared by an appropriately qualified and experienced heritage architect.	Section 5.2.5 Table 13	<p>An Adaptive Reuse Strategy was prepared for Bankstown Station as part of the detailed design and would be implemented as part of the project. The Adaptive Reuse Strategy identified that the Parcel Office would be demolished and therefore adaptive reuse of the building was not applicable. SWM3 would not directly impact other heritage items that would be appropriate for adaptive reuse.</p>
NAH6	A Heritage Interpretation Plan would be prepared to document the development of the Bankstown Line and detail the history of each station and its contribution to both the Bankstown Line and the surrounding suburbs. Appropriate heritage interpretation would be incorporated in the design and would provide legible connection between stations.	Section 5.2.4 Table 13	<p>A HIS has been prepared for Sydney Metro City & Southwest by Metro (October 20208). Individual Heritage Interpretation Plans have been prepared for the station precincts by Artefact Heritage or Metron T2M as part of the detailed design. Additional Heritage Interpretation plans are therefore not required for SMC.</p> <p>The Heritage Interpretation Plan for Bankstown Station would be implemented for the project works.</p>

No.	Requirement	Reference	How addressed?
NAH7	<p>A moveable heritage item strategy would be prepared by an appropriately qualified and experienced heritage specialist in consultation with Sydney Trains, and would include a comprehensive record of significant railway elements to be impacted. This would include items contained within station and platform buildings as well as of any other significant equipment within the curtilage of the heritage railway stations. The moveable heritage item strategy would form part of the broader interpretation strategy.</p>	<p>Section 5.2.6 Table 13</p>	<p>The Sydney Metro City and Southwest – Final Moveable Heritage Strategy for S2B (March 2021) and the Bankstown Station Moveable Heritage Strategy Report (dated January 2021) were prepared as part of the detailed design. Moveable heritage at Bankstown Station would potentially be impacted as part of the demolition of the Parcels Office.</p> <p>Moveable heritage would therefore be managed in accordance with the strategy. For the remaining stations, Appendix F work schedule will be updated once the status of the moveable heritage items has been confirmed with Sydney metro and Sydney Trains.</p>

No.	Requirement	Reference	How addressed?
NAH8	<p>Where significant buildings are to be re-purposed or refreshed:</p> <ul style="list-style-type: none"> the inherent character of the building should be retained with new additions, including form, palette and materiality, sympathetic to its heritage values a suitably qualified and experienced heritage architect should advise on appropriate materials and finishes which would be sympathetic to the heritage values of each individual station the internal layout of the building should be retained where possible, and rooms should not be subdivided unless it can be completed without adverse impact and/or is reversible without any long term adverse impact a significant element register should be prepared by a suitably qualified and experienced heritage architect. The register should list significant fabric, assess its condition, tolerance for change and recommend retention or salvage where fabric of high significance is to be removed, adequate assessment should be carried out that outlines impact and justification in accordance with the Statements of Heritage Impact guidelines (NSW Heritage Council 2002) 	<p>Section 2.1 Section 5.2.1 Section 5.2.7 Table 13</p>	<p>SWM3 Station scope is a mixture of;</p> <ul style="list-style-type: none"> Design and Construct, Stage 3 to AFC and construct only. <p>This requirement was largely fulfilled during the design phases of the Sydenham to Bankstown project. Any scope with a SWM3 design element will adhere to REMM NAH8 which include but are not limited to:</p> <ul style="list-style-type: none"> Equitable canopies x 5 (Dulwich Hill, Hurlstone Park, Canterbury, Wiley Park, Punchbowl) Secondary egress routes x 5 (Marrickville, Hurlstone Park, Canterbury, Campsie, Wiley Park) Canterbury Footbridge Redecking Punchbowl Demolition (Parcel Office and Candy Shop) <p>Refer to the SWM3 HIA in Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement</p> <p>Refer to the Punchbowl HIA in Appendix G</p> <p>A statement of heritage impact has been completed during design stage along with a significant elements register to satisfy this requirement, and will be prepared for any design scope related to this REMM.</p>

No.	Requirement	Reference	How addressed?
NAH9	<p>The design and materials used for the construction of new access stairs, concourses, canopies and lift shafts should be as sympathetic as possible to the existing character of the stations with the aim of minimising visual impacts.</p> <p>The design should use unobtrusive, modern, lightweight materials such as glass panelling and slim frame elements. The Design Review Panel should be consulted in regard to the design, form and material of these additions.</p>	<p>Section 5.2.1 Table 13</p>	<p>SWM3 Station scope is a mixture of;</p> <ul style="list-style-type: none"> • Design and Construct, • Stage 3 to AFC and • construct only. <p>This requirement was largely fulfilled during the design phases of the Sydenham to Bankstown project. Any scope with a SWM3 design element will adhere to REMM NAH9 which include but are not limited to:</p> <ul style="list-style-type: none"> • Equitable canopies x 5 (Dulwich Hill, Hurlstone Park, Canterbury, Wiley Park, Punchbowl) • Secondary egress routes x 5 (Marrickville, Hurlstone Park, Canterbury, Campsie, Wiley Park) • Canterbury Footbridge Redecking • Punchbowl Demolition (Parcel Office and Candy Shop) <p>Refer to the SWM3 HIA in Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement</p> <p>Refer to the Punchbowl HIA in Appendix G</p>
NAH10	<p>Where platforms are re-levelled, door thresholds and steps should be accessible without raising or relocation of entries. Sub-floor ventilation should remain open to avoid long term impacts to the structures.</p>	<p>Section 5.2.1 Table 13</p>	<p>Stage 3 documentation for the Bankstown Station platforms includes the raising or lowering of thresholds, and creation of access ramps, as necessary to ensure accessibility while retaining entries to the heritage station building intact and in-situ.</p> <p>The Stage 3 design ensures sub-floor ventilation remains open by including a small setback to regraded platform and stainless steel trim.</p>

No.	Requirement	Reference	How addressed?
NAH11	A landscape scheme would be prepared for the Old Sugarmill to re-instate planting within and close to the curtilage of the item. The scheme would consider appropriate period plants and trees. Any boundary wall treatment would be designed in consultation with a heritage architect.	Section 5.1.14 Section 5.2.2	Planting along the eastern boundary of the Canterbury Bowls Club (adjacent to the Sugarmill site) should be reinstated if trees are impacted for the site compound in accordance with NAH11. JHLORJV would prepare and implement the Landscape Scheme should it be triggered by their activities in accordance with NAH11 and the Policy 13 of the Conservation Management Plan (CMP) for Old Sugarmill. Works undertaken near the Old Sugarmill would be inspected by the Environmental Manager to ensure that vehicular movement in the area does not cause deterioration to the northern retaining wall. If evidence of deterioration is observed, advice on management and treatment should be sought from the heritage/conservation architect. Any boundary wall treatment would be designed in consultation with a heritage/conservation architect.
NAH12	The archaeological research design, including any mitigation measures identified in the Archaeological Assessment and Research Design report, would be implemented.	Section 5.3.3 Appendix F	An AMS has been prepared for SWM3 which outlines appropriate archaeological management in accordance with the AARD Refer to Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement

No.	Requirement	Reference	How addressed?
NAH13	Photographic archival recording would be carried out in accordance with the 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).	Section 5.2.3 Table 13	<p>Because the S2B works would be undertaken within the curtilage of several heritage items, archival recording required for the project area would include:</p> <ul style="list-style-type: none"> • Hurlstone Park Railway Underbridge • Canterbury (Cooks River) Underbridge • Canterbury (Cooks River/Charles St) Underbridge – Main Line • Old Sugarmill <p>Archival recording would be limited to areas of the heritage items where direct or visual impacts would be minor or greater than minor, or where the works would impact items listed on the SHR. Due to the negligible visual impact to Old Sugarmill, archival recording of the heritage item would be limited to external views and vistas. Archival recording of the stations has been completed and would not be required for the remainder of SWM3 works. Archival recording of the Bankstown Station Group and the Parcels Office has been completed as well as at each of the other stations.</p>
NAH14	An unexpected finds procedure would be developed and included in the construction heritage management plan.	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)	The Sydney Metro Unexpected Heritage Finds Procedure would be implemented for the project

No.	Requirement	Reference	How addressed?
NAH15	Methodologies for the removal of existing structures and construction of new structures would be developed and implemented during construction to minimise direct and indirect impacts to other elements within the curtilages of the heritage items, or to heritage items located in the vicinity of works.	Section 5.2.8 Table 13	<p>The SWM3 works at the stations would generally involve the construction of equitable canopies, switchback ramps, landscaping, defect close out, station deep clean, heritage painting, final conversion scope Platform Screen Doors (PSDs), mechanical gap filler (MGFs) works.</p> <p>The SWM3 works in the corridor would include protection modification to ARTC freight line overpass, Sydenham (S170#: 4805746), the removal of non-significant redundant ARTC infrastructure and services, and the installation of new overhead wiring structures, GST/GLT and fencing with heritage curtilages. Mitigation measures for minimising impacts associated with these works have been outlined in the HIA prepared for SWM3 and would be implemented during construction.</p> <p>Environmental Work Method Statements would be included as part of the Demolition Management Plans for Punchbowl Parcel Office and Candy Shop, and Canterbury Signalling Hut and part of the Bankstown Station Platform. Note: the Bankstown Parcel Office, and Bankstown Amenity Block was demolished as part of SMC and Additional Works Scope. The Design AFC Stage HIA will be used in place of a Environmental Work Method Statement for the ARTC freight line overpass, Sydenham.</p>

<p>NAH16</p>	<p>All retained heritage buildings, structures, fabric and moveable heritage items would be protected to avoid damage during works in the vicinity of these items, including from vibration. Retained significant buildings or elements susceptible to damage would be protected by hoardings or screens.</p>	<p>Section 5.2.10 Table 13</p>	<p>SWM3 would involve works in the vicinity of heritage items and could involve vibration impacts, though it is unlikely. Physical exclusion zones would be put in place where works are within 5 m of a listed heritage item or within a curtilage if significant fabric is within 5 m of works. This may apply to;</p> <ul style="list-style-type: none"> • ARTC freight line overpass • Marrickville Railway Station Group • Dulwich Hill Railway Station Group • Hurlstone Railway Station Group • Canterbury Railway Station Group • Belmore Railway Station Group • Lakemba Railway Station Group • Wiley Park Railway Station Group • Campsie Railway Station Group • Punchbowl Railway Station Group • Bankstown Railway Station Group • Bankstown Parcels Office (to be demolished as part of Bankstown Station Works) • South Dulwich Hill Heritage Conservation Area • Hurlstone Park Railway Underbridge • Canterbury (Cooks River) Underbridge • Canterbury (Cooks River/Charles St) Underbridge – Main Line • Inter-War Hotel (former Hotel Canterbury) • Electricity substation no. 275 <p>Vibration monitoring will be undertaken in accordance with Section 8 of the Construction Noise and Vibration Management Sub-plan. Vibration monitoring would be undertaken for works involving the use of vibration intensive plant in close proximity to significant heritage fabric, such as the removal of redundant ARTC infrastructure, demolition activities adjacent to platforms at the following stations:</p>
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No.	Requirement	Reference	How addressed?
			<ul style="list-style-type: none">• Marrickville Railway Station Group• Dulwich Hill Railway Station Group• Hurlstone Railway Station Group• Canterbury Railway Station Group• Belmore Railway Station Group• Lakemba Railway Station Group• Campsie Railway Station Group• Punchbowl Railway Station Group• Bankstown Railway Station Group. Note: the Bankstown Parcel Office, and Bankstown Amenity Block was demolished as part of SMC and Additional Works Scope.

<p>NAH17</p>	<p>Prior to construction commencing, a detailed inventory of all buildings, structures, fabric, spaces and vistas of heritage significance that are to be retained or removed would be prepared by appropriately qualified and experienced heritage specialists. The inventory must provide an assessment of the heritage impact based on the significance of each element and sub- element that comprises it and include recommendations for protection and conservation relative to the identified level of heritage significance.</p>	<p>Section 2.1 Section 5.2.7 Appendix F</p>	<p>A significant fabric inventory has been prepared by Metron during the design phase for the station curtilages and detailed impact assessments have also been prepared for the stations. An additional inventory and HIA has been completed for S2B. The HIA and inventory, which outlines potential impacts and protection measures for significant fabric, spaces and vistas, has been prepared for the following items:</p> <ul style="list-style-type: none"> • Marrickville Railway Station Group • Dulwich Hill Railway Station Group • Hurlstone Park Railway Station Group • Canterbury Railway Station Group • Campsie Railway Station Group • Belmore Railway Station Group • Lakemba Railway Station Group • Wiley Park Railway Station Group • Punchbowl Railway Station Group • Bankstown Railway Station Group • Stone house, including interiors • Sewage Pumping Station 271 • Old Sugarmill • Inter-War Hotel (former Hotel Canterbury) • Federation Post Office Building (former Canterbury Post Office) • Electricity substation no. 275 • Federation House (former station master’s cottage) • Post-war bus shelter and public lavatories • Lakemba Water Pumping Station (WP0003) • Hurlstone Park Railway Underbridge • Canterbury (Cooks River) Underbridge • Canterbury (Cooks River/Charles St) Underbridge – Main Line
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No.	Requirement	Reference	How addressed?
			<ul style="list-style-type: none"> • South Dulwich Hill Heritage Conservation Area • Bankstown Parcels Office (former) • Shop <p>The HIA includes assessments of impacts to elements and significant fabric and has been provided for review to Sydney Metro.</p> <p>It is noted that only the exteriors of the items ;Sewage Pumping Station 271', 'Stone house, including interiors', 'Old Sugarmill', 'Inter-War Hotel (former Hotel Canterbury)', 'Federation Post Office Building (former Canterbury Post Office)', 'Electricity substation no. 275', 'Federation House (former master's cottage)', 'Post-war bus shelter and public lavatories', 'Lakemba Water Pumping Station (WP0003)' and shop have been included as these items are located outside of S2B and there are no impacts to the interiors associated with the works.</p>
NAH18	In the event that unexpected archaeological remains, relics, or potential heritage items are discovered during construction, all works in the immediate area would cease, and the unexpected finds procedure would be implemented.	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)	The Sydney Metro Unexpected Heritage Finds Procedure would be implemented for the project
NAH19	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Transport for NSW Exhumation Management Plan would be implemented.	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)	Sydney Metro Exhumation Management Plan has been completed by Sydney Metro and outside the management of this CHMP. Sydney Metro Exhumation Plan would be implemented where required

No.	Requirement	Reference	How addressed?
NAH20	All works to conserve, protect or remove significant heritage fabric would be undertaken by skilled tradespeople with experience working on heritage sites, in consultation with an appropriately qualified conservation heritage architect.	Section 5.2.9 Table 13	Advice would be sought from a heritage/conservation architect on work methodologies where direct impacts to significant fabric of Canterbury Railway Station Group, and Bankstown Parcels Office, Wiley Park Railway Station Group, Bankstown Railway Station Group, Cooks River underbridges, Hurlstone Park Railway Underbridge and South Dulwich Hill Heritage Conservation Area are proposed. This measure would not apply to other items as significant fabric would not be directly impacted
NAH23	Prior to the removal of the Bankstown Parcels Office (former), a heritage salvage and moveable heritage register should be prepared, identifying those significant elements which can be removed and retained for potential reuse.		The removal of Bankstown Parcels Office is not within this scope of this Project (previously completed). This REMM is not relevant to this Plan.
Construction Environmental Management Framework			
10.2(a)	Principal Contractors will develop and implement a Heritage Management Plan which will include as a minimum:	-	This Plan
i.	Evidence of consultation with Registered Aboriginal Parties and the NSW Heritage Council	Section 1.4 Appendix B Appendix C	RAP consultation is not required under the Project's scope of works as no Aboriginal sites or areas of archaeological potential will be impacted by SWM3. As outlined in Section 1.4, the key stakeholders related to Heritage who will be consulted in finalisation of this HMP are <ul style="list-style-type: none"> Heritage NSW (delegate of the Heritage Council) Canterbury Bankstown City Council & Inner West Council
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	Table 13: Management action checklist	Table 13 includes detailed management and mitigation measures which include all relevant requirements of the CoA, REMM and recommendations of the Heritage Impact Assessment reports prepared during detailed design, as outlined in Section 2.
iii.	The heritage mitigation measures as detailed in the environmental approval documentation	Section 5 Table 13 Appendix A	The Table in Appendix A outlines how the heritage mitigation measures as detailed in the environmental approval documentation have been considered in the development of this Plan.

No.	Requirement	Reference	How addressed?
iv.	The responsibilities of key project personnel with respect to the implementation of the plan	Section 2.3 Table 5	Section 2.3 and Table 5 outline roles and responsibilities of key Project personnel with respect to the implementation of this Plan.
v.	Procedures for interpretation of heritage values uncovered through salvage or excavation during detailed design	Section 2 Section 5.2.4	As outlined in Section 2 and 5.2.4, a Heritage Interpretation Strategy has been prepared for the Sydney Metro Sydenham to Bankstown upgrade project and individual Heritage Interpretation Plans have been prepared for each station precinct by Artefact Heritage as part of detailed design. This requirement has been met during design phases.
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 5.3 & Appendix F	An Archaeological Method Statement (AMS) has been prepared for this Project which includes appropriate archaeological management strategies in accordance with the Archaeological Assessment and Research Design (AARD).
vii.	Details for the short term and/or long term management of artefacts or movable heritage	Section 5.3.8	The Bankstown Moveable Heritage Strategy outlines retention, storage and reinstatement requirements for moveable heritage identified at Bankstown Station office and the Former Parcel Office. Artefact management would be undertaken in accordance with the strategies outlined in the AARD
viii.	Details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/or measures to protect unaffected sites during construction works in the vicinity)	Section 5 Table 13	As outlined in Section 5 and Table 13 the following measures have been put in place to minimise adverse impacts: <ul style="list-style-type: none"> • Exclusion zones; • Recommendations of the station specific heritage impact assessments as outlined in Table 13 will be adhered to; • Use of a heritage/conservation architect where required; • Sydney Metro Unexpected Heritage Finds Procedure; • Archaeological management under the AARD and AMS.

No.	Requirement	Reference	How addressed?
ix.	Procedures for unexpected heritage finds, including procedures for dealing with human remains	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Heritage Finds Procedure (Appendix D)	The Sydney Metro Unexpected Heritage Finds Procedure will be implemented for the Project. It is not expected that human remains will be encountered as no potential for burials has been identified. The Sydney Metro Exhumation Plan will be implemented where required.
x.	Heritage monitoring requirements	Section 7	Monitoring of works within Archaeological Management Zones will occur in accordance with the requirements of the relevant AMS and the instruction of the Excavation Director.
xi.	Compliance record generation and management	Section 7	Compliance record generation and management in relation to this Plan will be undertaken in accordance with Section 7.

2.3. Roles and responsibilities

The roles and responsibilities of key personnel with respect to heritage management are as followed in Table 5. All personnel are responsible for ensuring that heritage items are protected.

Table 5: Roles and responsibilities

Roles	Responsibilities
Department of Planning, Housing and Infrastructure	Approval of the Heritage Management Plan Monitor JHLORJV compliance with the Heritage Management Plan
Project Director	Ensure that sufficient resources are allocated for the implementation of this HMP Ensure that the CEMP covers the management and mitigation measures presented in this HMP Ensure that the outcomes of the visual checks / compliance construction monitoring / incident reporting are systematically evaluated as part of ongoing management of construction activities Ensure audits of construction site records / monitoring records/ incident reports are undertaken and findings are shared with relevant site personnel and corrective actions are implemented Authorise all monitoring reports and any revisions to this HMP
Environment Manager	Oversee the overall implementation of this HMP Site Inductions Ensure all relevant personnel have access to and understand the most up-to-date copy of this HMP Ensure that any required actions arising from the detection of unexpected heritage items or if works are required outside of the approved development footprint are reported to the relevant personnel for further action and ensure that the actions are effectively implemented Ensure all monitoring reporting requirements are met and maintained on site
Construction supervisors Subcontractors	Understand and implement mitigation protocols as required in the HMP and any other required measures during construction Undertake relevant training to implement the requirements of this HMP All personnel are responsible for ensuring that heritage items are protected All site personnel to undertake toolbox talks in relation to the reporting process for unexpected finds Informing the Environmental Manager of any heritage issues as they arise
Environmental Representative	<ul style="list-style-type: none"> Receive and respond to communications from the Secretary in relation to the environmental performance of the Project; Receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI; Consider and inform the Planning Secretary on matters specified in the terms of this approval; Consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community; Review documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary, to

Roles	Responsibilities
	<p>ensure they are consistent with requirements in or under this approval and if so:</p> <ul style="list-style-type: none"> ○ (i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or ○ (ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Secretary); <ul style="list-style-type: none"> • Regularly monitor the implementation of the documents listed in Conditions C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval; • As may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A34 of this approval; • As may be requested by the Planning Secretary, assist the Department in the resolution of community complaints; • Assess the impacts of minor ancillary facilities as required by Condition A19 of this approval; • Consider any minor amendments to be made to the documents listed in Conditions C1, C3 and C8 and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and • Prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI.
Designers	<p>Ensure designs maximise the retention and legibility of heritage buildings, structures, fabric, spaces and vistas that are individually significant and contribute to the overall heritage significance of the Bankstown Line.</p> <p>Ensure designs complement retained heritage buildings, elements, fabric, spaces and vistas to avoid outcomes that compromise the significance of these heritage items</p> <p>Ensure designs be developed with guidance from an appropriately qualified and experienced heritage/conservation architect or heritage specialist.</p>
Primary Excavation Director	<p>The Primary Excavation Director must be suitably qualified and be someone who meets the Heritage Council of NSW's Criteria for Assessment of Excavation Directors (September 2019) to oversee and</p>

Roles	Responsibilities
	<p>advise on matters associated with historic archaeology and advise the DPHI and Heritage NSW</p> <p>The Excavation Director must be present to oversee excavation and advise on archaeological issues</p> <p>The Excavation Director has the authority to advise on the duration and extent of oversight required as informed by the provisions of the approved AARD and Excavation Methodology</p> <p>JHLORJV will nominate an Excavation Director who is able to manage State significant archaeology under the NSW Heritage Council Excavation Directors Criteria</p> <p>The Primary Excavation Director will be engaged by the JHLORJV</p>
Heritage/Conservation Architect	<p>The Heritage / conservation architect will be responsible for providing advice and guidance to manage and minimise potential impacts to any built heritage values through a variety of means, prepare heritage impact assessment reports for built heritage and to undertake required archival recording of the heritage items in accordance with the approval and relevant documents</p> <p>Provide guidance to designers for works that have potential to impact heritage items or within heritage curtilages The heritage / conservation architect will be engaged by the JHLORJV for delivery related impacts and engaged directly by the designers for design related assessment, notably REMM NAH 1-4.</p>
Forensic Anthropologist	<p>The Forensic Anthropologist will respond to find of potential human remains in accordance with the Sydney Metro Exhumation Management Plan</p> <p>The Forensic Anthropologist will be engaged by the JHLORJV if required</p>

2.4. SWM3 Sustainability Requirements

To achieve an “Design & As-built” ISC Rating Scheme (V1.2) rating of at least 65 for the constructed SWM3 Works. Below is the list of ISC requirements related to this CHMP.

- Her-1: Heritage Impact and Assessment
 - Measures to minimise adverse impacts to heritage during construction have been identified and implemented.
 - Prepare a Heritage Strategy, including stakeholder engagement with relevant stakeholders.
 - Implement the Heritage Strategy during design and delivery, to conserve and activate.
 - Maximise opportunities for archaeological research and future interpretation of archaeological finds.
- Her-2: Monitoring of heritage

Monitoring of heritage is undertaken at appropriate intervals during construction. Opportunities for heritage interpretation identified and implemented at each of the station precincts.

3. Existing environment

3.1. Context

The existing environment and heritage context of the Project has been assessed in the following background reports prepared to support the EIS and SPIR prepared for the Sydney Metro Sydenham to Bankstown upgrade project:

- Sydney Metro City and Southwest – Sydenham to Bankstown: *Aboriginal Heritage Archaeological Assessment*, prepared by Artefact Heritage (2017a);
- Sydney Metro City and Southwest – Sydenham to Bankstown: *Non-Aboriginal Heritage Impact Assessment*, prepared by Artefact Heritage (2017b);
- Sydney Metro City & Southwest - Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report Appendix F: Non-Aboriginal Heritage Assessment (June 2018)
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Bankstown Station Modification Statement of Heritage Impact (May 2020)

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

- Sydney Metro City and Southwest – Sydenham to Bankstown *Historical Archaeological Assessment and Research Design (AARD)*, prepared by Artefact Heritage (2018a)
- Sydney Metro City and Southwest – Sydenham to Bankstown: *Aboriginal Cultural Heritage Assessment Report (ACHAR)*, prepared by Artefact Heritage (2018b)
- Sydney Metro City and Southwest – Chatswood to Sydenham: *ACHAR*, prepared by Artefact Heritage (2016)
- Chatswood to Sydenham – Sydenham Station and Sydney Metro Trains Facility South Modification Report (TfNSW 2017a)
- Chatswood to Sydenham – Sydenham Station and Sydney Metro Trains Facility South Modification Submissions Report (TfNSW 2017b)
- Chatswood to Sydenham – Sydenham Station and Sydney Metro Trains Facility South Modification Report: Appendix E: Non-Aboriginal Heritage and Technical Information (TfNSW 2017c)
- Sydenham Station and Sydney Metro Trains Facility South, Second Addendum to the Sydney Metro City and Southwest – Chatswood to Sydenham: *Historical Archaeological Assessment and Research Design Report* (Artefact 2018a)
- Sydney Metro City & Southwest - Southwest Metro: Corridor Works Non-Aboriginal Heritage Impact Assessment and (Archaeological Method Statement (revised June 2022)
- Sydney Metro City and Southwest - Bankstown Metro Station Heritage Impact Assessment Report Stage 2 (April 2021)
- Sydney Metro City and Southwest – Final Moveable Heritage Strategy for S2B (March 2021)

- Sydney Metro City and Southwest - Bankstown Station Movable Heritage Strategy Report (January 2021). These reports have been referenced to inform this management plan in regard to existing environment, heritage significance and archaeological potential
- Sydney Metro Upgrade Construction Heritage Management Plan (SMCSWSSJ-JHL-WSS-HE-PLN-000034), March 2022
- Sydney Metro *City and Southwest – Southwest Metro & Bankstown and Additional Corridor: Aboriginal and Non-Aboriginal Heritage Impact Assessment*, October 2022.
- Consistency Assessment - Charles Street Overhead Protection Beam, Canterbury, Sydney Metro 2026

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

3.2. SWM3 Scope of Works

This document refers to the Southwest Metro – Sydenham to Bankstown; Southwest Metro Conversion and Station Works Package Scope 3 (SWM3 the Project). Refer to the latest CEMP S 1.1 for details on permanent and temporary works as well as temporary construction facilities.

3.3. Aboriginal heritage

3.3.1. CSSI 7400 Project Area

The Aboriginal archaeological context of the Sydenham final conversion portion of the SWM3 project area has been investigated and assessed as part of the CSSI7400 project-wide ACHAR in relation to the Marrickville dive site (south) (Sydney Metro City and Southwest – Chatswood to Sydenham: Aboriginal Cultural Heritage Assessment Report) and has been further considered within the Sydenham Station Junction Modification Report (Chatswood to Sydenham – Sydenham Station and Sydney Metro Trains Facility South Modification Report).

3.3.1.1. Environmental Overview

Previous research from the 7400 EIS, Modification Report, Submissions Report and the addendum ARD indicates that the Sydenham final conversion portion of the SWM3 project area is on the margins of the former Gumbramorra Swamp; and is located at the foot of the declining Hawkesbury Sandstone and Ashfield Shale ridges of the Marrickville area, in a relatively low-lying, narrow area surrounded by low spurs. The swamp itself has been drained, filled in and canalised since the 1890s, but prior to non-Aboriginal occupation the area was characterised by mudflats, mangroves and saltmarsh. The swamp was a tidal estuary that emptied into the Gumbramorra Creek and eventually into the Cooks River; it supported diverse and abundant wildlife, making it an ideal economic resource gathering area for local Aboriginal people. Those parts of the wider landscape that were slightly elevated above the floodplain of the swamp would have been ideal campsites and activity areas for local Aboriginal people.

No Aboriginal objects have been previously identified in the Project work area; and the closest recorded site is a Potential Archaeological Deposit (PAD) in Fraser Park, immediately west of the study area. Further investigation of this PAD by Susan McIntyre-Tamwoy in 2009 revealed that it was likely a naturally occurring (i.e., not cultural) shell bed formed by fluvial processes, which had been partially destroyed through the installation of new underground electricity

cables in 2003. On the whole, however, previous archaeological investigation of the area has been constrained to surface investigation only; as existing buildings and built-up environments obscure the ground surface and hinder inspection of the underlying soils.

Deep, Quaternary soils of the Birrong Soil Landscape are associated with the Gumbramorra Swamp and its margins and may date back to the Pleistocene (more than 10,000 years before present). Sediment samples from boreholes in nearby Murray Street and Edgeware Road reveal that soils of the area comprise between 0.7 and 1.3m of modern fill and historic deposits, overlying natural silty clays, sandy peats and muds, to depths of 7.5 metres below ground surface. These results suggest that deep residual soils with potential to contain Aboriginal objects are present across the Project study area, even where historical use of the site has caused some ground surface disturbance.

Considerable ground surface disturbance has occurred as a result of the construction of the Sydenham Pit and Drainage Pumping Station and its associated concrete-lined drainage canals, while parts of the Sydenham Railway Station line have cut into the surrounding landscape to the shale bedrock. In these discrete areas where significant disturbance has occurred, there remains a low likelihood of Aboriginal objects and intact Aboriginal deposits surviving.

3.3.1.2. Aboriginal Archaeological Potential

The project ACHAR and subsequent modification reports identify the Aboriginal archaeological potential of the Marrickville Dive Site (encompassing the Sydney Metro Trains Facility South) and of the study area as follows:

- Geotechnical information indicates that natural sediments are located beneath built structures at the Marrickville dive site. There is potential for Aboriginal objects to occur in the sub-surface archaeological deposits within these natural sediments.
- The [Marrickville Dive Site] has been significantly modified by previous developments, including canalisation of the natural watercourse through the area to Cooks River, construction of large industrial estates, and the large-scale use of the area for brickmaking (including the extraction of clay soil). These activities are likely to have impacted or removed archaeological deposits. Notwithstanding this impact, a previous archaeological excavation in the local area (Etheridge, 1905) identified dugong bones and stone artefacts during construction of Alexandria Canal, demonstrating the potential for Aboriginal objects to be present in sub-surface contexts where there have not been extensive sub-surface impacts (Artefact Heritage 2016 ACHAR: 26).

And for the modification area specifically:

- Consistent with the assessment of the approved project, the area of the proposed Sydney Metro Trains Facility South was identified as an area of moderate to high archaeological potential. This is based on the likelihood of deep natural soils remaining intact beneath large areas of surface disturbance in that area.
- The preliminary assessment of archaeological potential indicates the possible survival of Aboriginal objects in sub-surface contexts. Intact Aboriginal archaeological deposits in this area would be extremely rare and would be of high research significance.

- Due to the largely modified nature of the remainder of the proposed modification area, no other sites of Aboriginal archaeological potential were identified in relation to the proposed modification (TfNSW Modification report 2017:188-189).

Previous studies, archaeological modelling and geotechnical investigation suggests that the Aboriginal archaeological resource of the study area would be dominated by subsurface artefact scatters and isolated finds, if present. These site types may occur across the study area; but are considered less likely to be present in areas where considerable ground surface disturbance has occurred, and conversely, are more likely to occur in areas that have not been subjected to significant ground disturbance.

Investigations have also been undertaken at the 11 Sydenham Rd site to determine the presence of insitu soil profiles. The report by the Senior Heritage Advisor concluded that, based on observed fill deposits, aboriginal archaeological potential is low and non-aboriginal archaeological potential is nil to low.

For the purposes of Aboriginal cultural heritage management, the following figure illustrates the potential Aboriginal archaeological resource of the study area on the basis of the research undertaken to date. Figure 4 Aboriginal Archaeological Potential provides an indication of Aboriginal archaeological potential. This is closely tied to significance (see following Section 3.3.1.3).

3.3.1.3. Aboriginal Archaeological Significance

No Aboriginal objects or sites have been previously recorded within the study area, though areas of moderate to high Aboriginal archaeological potential have been identified. The significance of the potential archaeological resources has been based on a preliminary assessment of the archaeological potential, and would be further clarified following excavation, if required.

The project area retains potential for intact, deep residual deposits of the Birrong Soil Landscape which may be of considerable antiquity (greater than 10,000 years), to a depth of 7.5m below the present ground surface. Aboriginal sites in this region are a rare occurrence and, if present, have the potential to have moderate to high scientific value and high research potential.

Over the course of the community consultation that was undertaken for the preparation of the ACHAR (Artefact Heritage 2016), no specific areas of Aboriginal cultural value were identified by the RAPs in relation to the Marrickville dive site (which incorporates a small part of the project area). However, sites of potential antiquity, and which contain extensive cultural material, are frequently identified as being of importance to Aboriginal people, and as such the project area can be considered to have moderate to high overall Aboriginal heritage significance.

Further consultation has been completed with the RAPs on the SMu CHMP. The SWM3 final conversion works in the shared project area is considered to have a lesser impact, as such no further consultation is proposed.

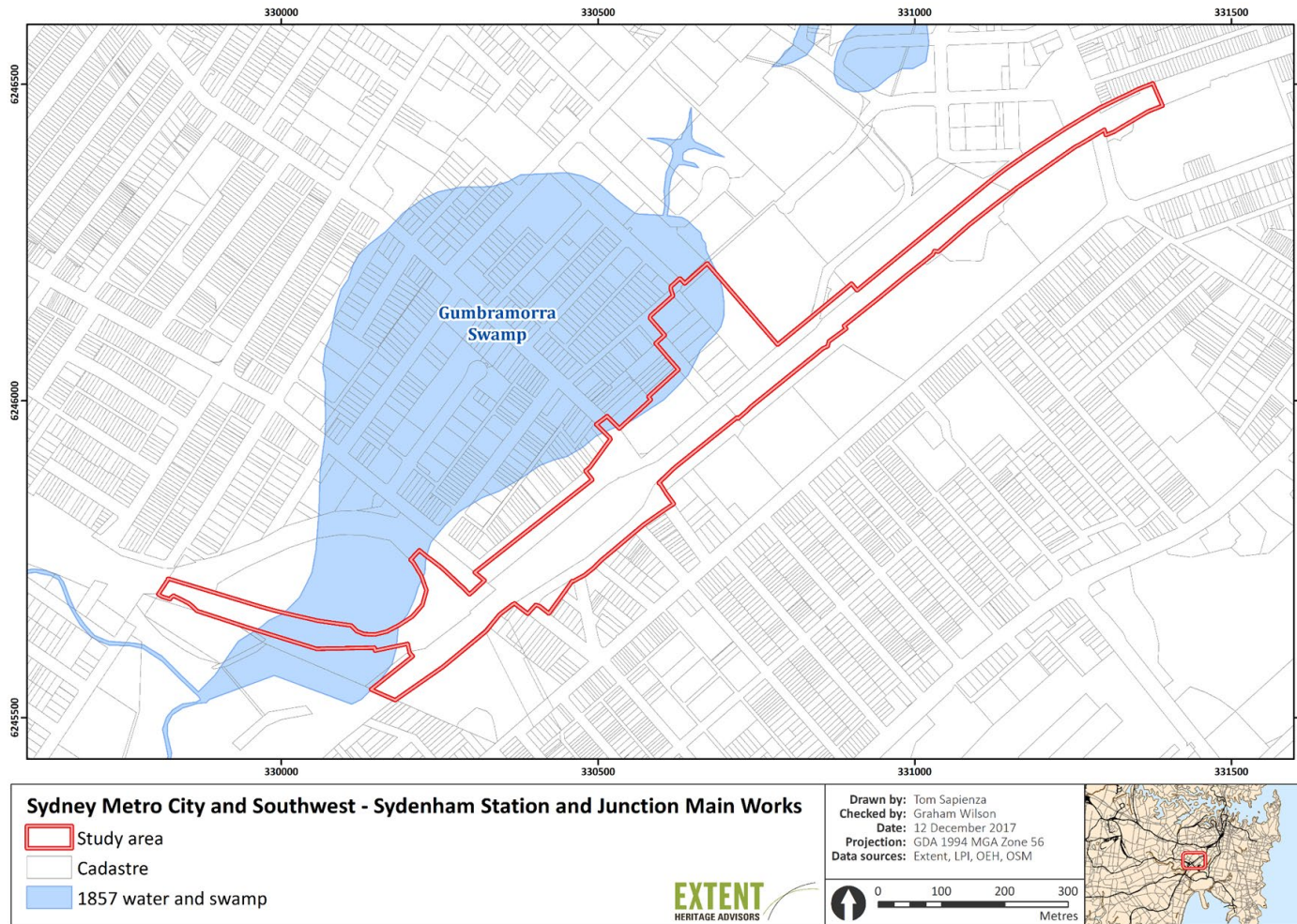


Figure 2 Gumbramorra Swamp and associated waterway on current cadastre

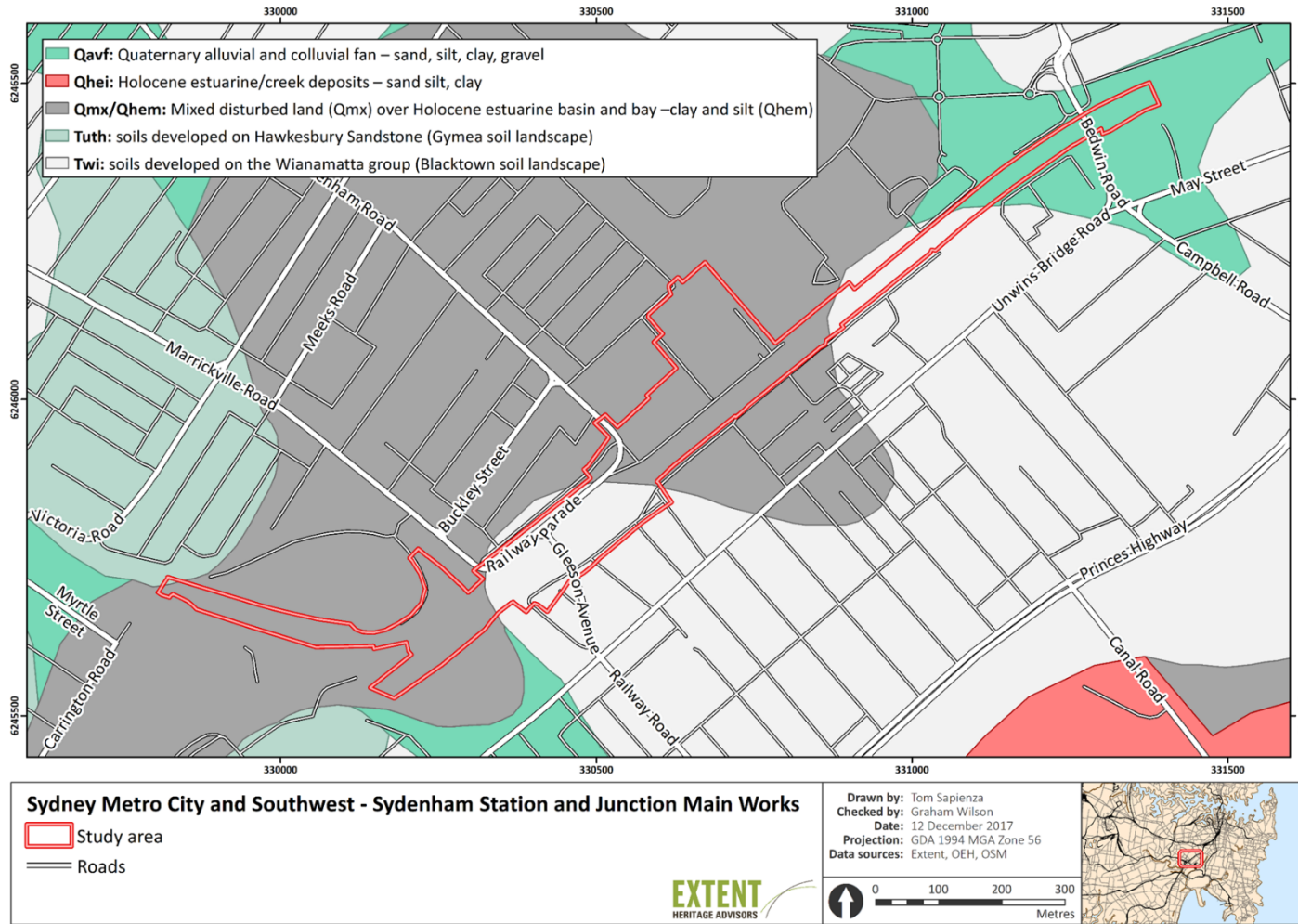


Figure 3 Soil mapping

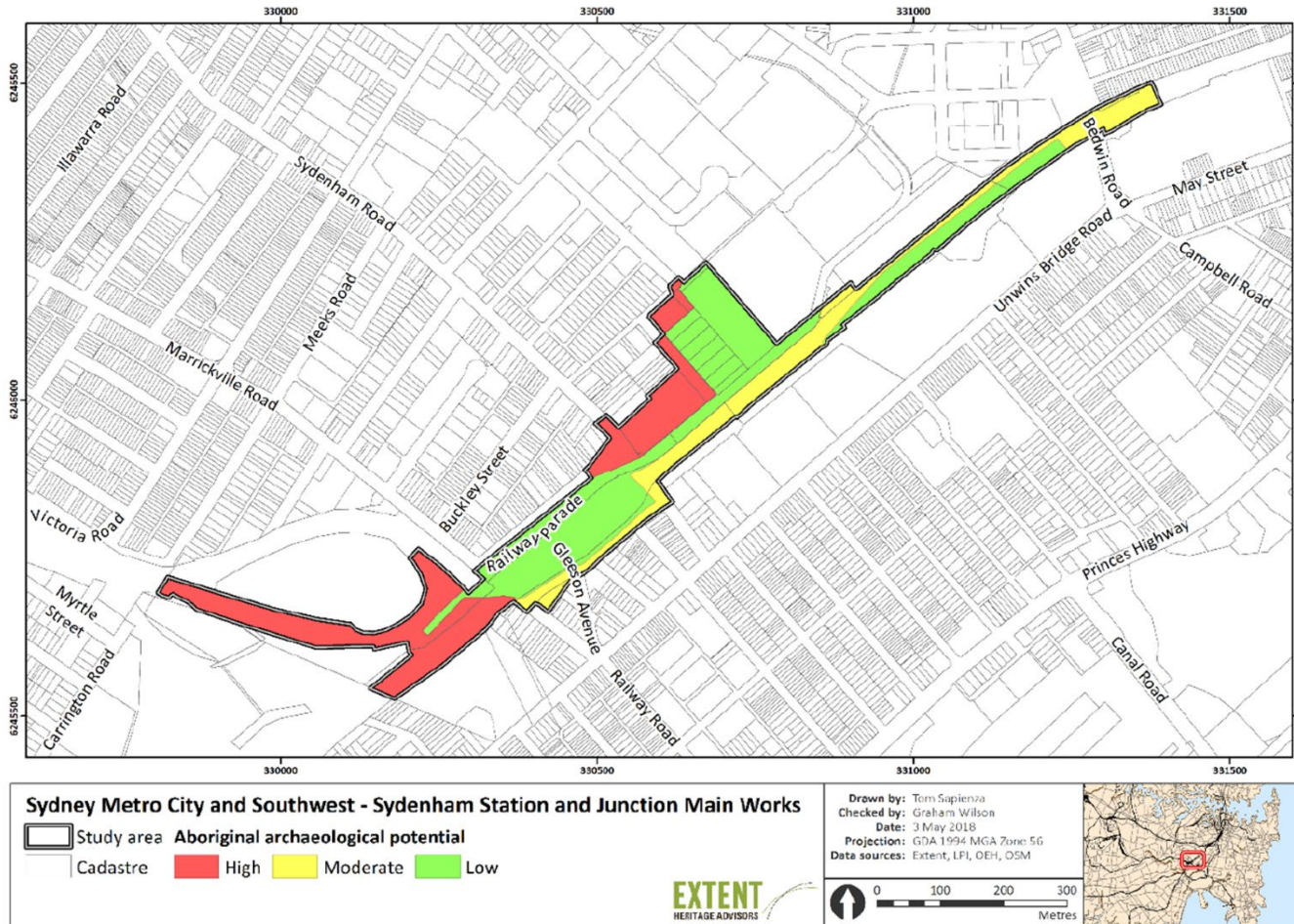


Figure 4 Aboriginal Archaeological Potential

3.3.2. CSSI 8256 Project Area

Artefact Heritage (2017a) undertook a heritage assessment of the Sydney Metro City and Southwest – Sydenham to Bankstown Project. An ACHAR was also prepared in consultation with the RAPs (2017d). No previously registered Aboriginal sites were located within the project area. Two areas of PAD were located during the site survey for the EIS study, S2B PAD01 and S2B PAD02, near Belmore and Punchbowl Stations respectively. However, SWM3 works would be located outside of the area of S2B PAD01, and Aboriginal archaeological testing undertaken for S2B PAD02 as part of the S2B Project did not find any evidence of Aboriginal objects and concluded that S2B PAD02 was not a site (Artefact Heritage 2024).

The remainder of the EIS project area was found to have low Aboriginal archaeological potential and significance. An assessment of Aboriginal archaeological potential for the rail corridor that encompasses the S2B area found:

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

Visibility was generally low throughout the corridor, impeded by vegetation, structures, fill, rail track and ballast. Soil exposures occurred within areas of erosion in vehicle access tracks and cuts. Impacts within the rail corridor are extensive, and include landform modification, subsurface infrastructure such as gas pipelines and galvanised steel troughs, electricity and telecommunications cables as well as rail infrastructure such as overhead wiring structures. (ACHAR page 28)

The Bankstown Station survey unit is located within a highly modified and disturbed area. The survey unit is located over 500 metres away from a major watercourse. The station and rail are located within a cut indicating that any archaeological deposits would have been highly disturbed during the construction of the rail corridor. Therefore, the archaeological potential is considered to be nil to low.

The archaeological potential for the SWM3 project area is considered to be low with a low Aboriginal archaeological and cultural significance.

3.4. Built heritage

The SWM3 works would be largely undertaken outside the State Heritage Register (SHR) station curtilages, however, the installation of fencing and/or the installation of GST, service relocation, track refurbishment as well as works at the Stations including awning modifications, Mechanical Gap Fillers (MGFs), Platform Screen Doors (PSDs) and platform re-levelling and finishing works would be required within three of the SHR listed stations along the alignment (Marrickville, Canterbury and Belmore Railway Station Groups). The final conversion works will be partially located within the Sydenham Railway Station Group curtilage, however only in the track area, therefore further assessment is not required regarding potential impacts to built heritage. As a result, the three listed stations would be subject to negligible to minor direct and indirect impacts with the exception of Canterbury where the direct impact would be moderate negligible (vibration) and moderate indirect. The risk of vibration impacts would be reduced through the implementation of mitigation measures.

More substantial works are planned within the curtilage of the s170 listed Bankstown Railway Station Group. This includes the demolition of the Bankstown Parcels Office (already completed as part of previous scope of works), which is part of the station group and also an

item of local significance listed on the Bankstown LEP 2015 (I13), partial demolition of existing Sydney Trains Bankstown platform, platform extension works, and the construction and installation of the new station concourse and canopies. These works would impact significant fabric and the setting of the station group, resulting in moderate impacts to Bankstown Railway Station Group and major impacts to the Bankstown Parcels Office. Additional minor scopes of work would be undertaken at the remaining s170 and LEP listed railway station groups as part of the finishing works.

A number of locally listed items would also be visually impacted by the SWM3 works. These heritage items and their registered listings are shown in Table 6 below. Note that the ‘stone house including interiors’, ‘Old Sugarmill’, ‘Inter-War Hotel (former Hotel Canterbury)’, ‘Federation Post Office Building (former Canterbury Post Office)’, ‘Electricity substation no. 275’, ‘Federation House (former station master’s cottage)’, ‘Post-war bus shelter and public lavatories’ and ‘Shop’ will not be directly impacted. Works will occur adjacent to these items therefore they have been included in order to manage any indirect impacts. In the event that the significance of listing cannot be retained the Custodian of the listings will be notified by the Proponent.

Descriptions of the heritage listed items in or adjacent to SWM3 works have been included in Table 6 below.

Table 6: Heritage listed Items in and near the Project area

Item	Listings	Significance
Sydenham Railway Station Group	<ul style="list-style-type: none"> SHR (01254) Transport Asset Holding Entity (TAHE) s.170 Heritage and Conservation Register (4801154) Inner West LEP 2022 (I1748) 	State
Sydenham Pit and Drainage Pumping Station 1	<ul style="list-style-type: none"> SHR (01644) Sydney Water s.170 Heritage and Conservation Register Inner West LEP 2022 (I1233) 	State
Brick retaining walls	<ul style="list-style-type: none"> Inner West LEP 2022 (I1261) 	Local
Sydenham (Illawarra Line) Underbridge	<ul style="list-style-type: none"> TAHE s.170 Heritage and Conservation Register (4805746) 	Local
Sewage Pumping Station 271	<ul style="list-style-type: none"> SHR (01342) Sydney Water s170 Heritage and Conservation Register (4571727) Inner West LEP 2022 (I1212) 	State
Stone house, including interiors	<ul style="list-style-type: none"> Inner West LEP 2022 (I1270) 	Local
Marrickville Railway Station Group	<ul style="list-style-type: none"> SHR (01186) TAHE s170 Heritage and Conservation Register (4801091) Inner West LEP 2022 (I1241) 	State

South Dulwich Hill Heritage Conservation Area	<ul style="list-style-type: none"> Inner West LEP 2022 (C107) 	Local
Dulwich Hill Railway Station Group	<ul style="list-style-type: none"> TAHE S.170 Heritage and Conservation Register (4801909) Inner West LEP 2022 (I1024) 	Local
Turpentine - Ironbark Forest Understory	<ul style="list-style-type: none"> Inner West LEP 2022 (I1222) 	Local
Hurlstone Park Railway Station Group	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (4802051) Canterbury-Bankstown LEP 2023 (I175) 	Local
Hurlstone Park Railway Underbridge	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (4805737) Canterbury-Bankstown LEP 2023 (I181) 	Local
Hurlstone Park Heritage Conservation Area	<ul style="list-style-type: none"> Canterbury-Bankstown LEP 2023 (C2, C4, C6) 	Local
Old Sugarmill	<ul style="list-style-type: none"> SHR (00290) Canterbury-Bankstown LEP 2023 (I105) 	State
Canterbury Railway Station Group	<ul style="list-style-type: none"> SHR (01109) TAHE s170 Heritage and Conservation Register (4801100) Canterbury-Bankstown LEP 2023 (I90) 	State
Inter-War Hotel (former Hotel Canterbury)	<ul style="list-style-type: none"> Canterbury-Bankstown LEP 2023 (I91) 	Local
Federation Post Office Building (former Canterbury Post Office)	<ul style="list-style-type: none"> Canterbury-Bankstown LEP 2023 (I89) 	Local
Electricity substation no. 275	<ul style="list-style-type: none"> Ausgrid S.170 Heritage and Conservation Register (3430425) 	Local
Canterbury (Cooks River) Underbridge	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (4801568) Canterbury-Bankstown LEP 2023 (I95) 	Local
Canterbury (Cooks River/Charles St) Underbridge – Main Line	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (5062566) 	Local
Campsie Railway Station Group	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (4801101) Canterbury-Bankstown LEP 2023 (I63) 	Local

Belmore Railway Station Group	<ul style="list-style-type: none"> • SHR (01081) • TAHE s170 Heritage and Conservation Register (4801084) • Canterbury-Bankstown LEP 2023 (I33) 	State
Federation House (former station master's cottage)	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I32) 	Local
Post-war bus shelter and public lavatories	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I51) 	Local
Lakemba Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4801916) • Canterbury-Bankstown LEP 2023 (I208) 	Local
Wiley Park Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4801946) • Canterbury-Bankstown LEP 2023 (I236) 	Local
Lakemba Water Pumping Station (WP0003)	<ul style="list-style-type: none"> • Sydney Water s170 Heritage and Conservation Register (4570136) • Canterbury-Bankstown LEP 2023 (I208) 	Local
Punchbowl Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4802067) • Canterbury-Bankstown LEP 2023 (I226) 	Local
Bankstown Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4802067) • Canterbury-Bankstown LEP 2023 (I12) 	Local
Bankstown Parcels Office (former)	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I11) 	Local
Shop	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I13) 	Local

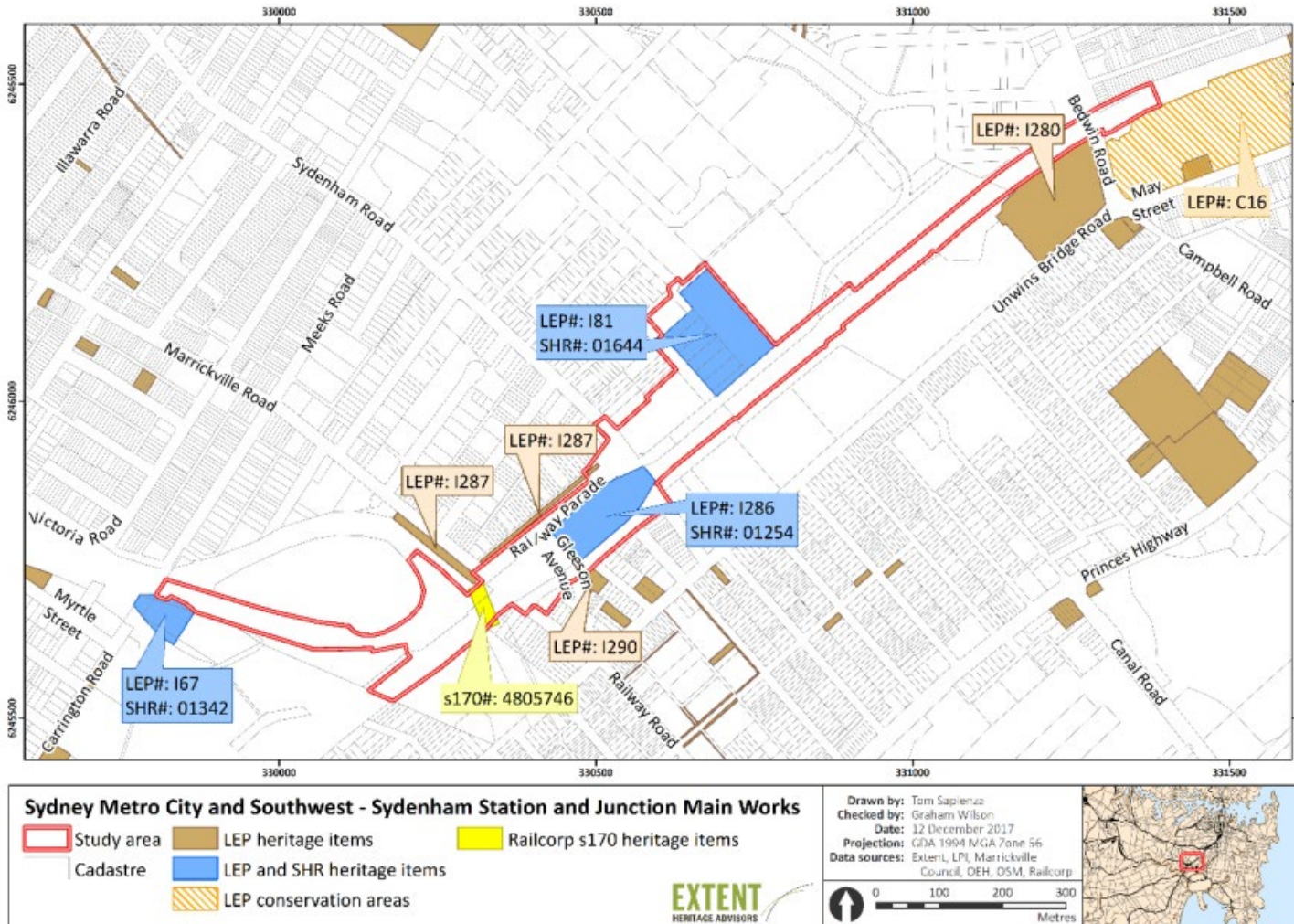


Figure 5 Heritage curtilages overview Carrington Road, Marrickville to Bedwin Road, Sydenham (CSSI7400)



Figure 6 Listed sites within and in the vicinity of Sydenham Station (CSSI7400)



Figure 7 Heritage curtilage – stone house including interiors



Figure 8 Heritage curtilage – Marrickville Railway Station Group



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Figure 9 Heritage curtilage – South Dulwich Hill Conservation Area



Figure 10 Heritage items – Heritage curtilage Dulwich Hill Railway Station Group and Turpentine - Ironbark Forest Understory (I1222).

Note: Turpentine - Ironbark Forest Understory (I1222) was not a listed item at the time of the Project approval



Figure 11 Heritage items – Heritage curtilage Hurlstone Park Railway Station Group



Figure 12 Heritage items – Heritage curtilage Hurlstone Park Railway Underbridge



Figure 13 Heritage items – Heritage curtilage Canterbury Railway Station Group and nearby heritage items



Figure 14 Heritage items – Heritage curtilage Canterbury Old Sugar Mill.

Note: The LEP curtilage of Old Sugar Mill has been reduced since the time of Project approval

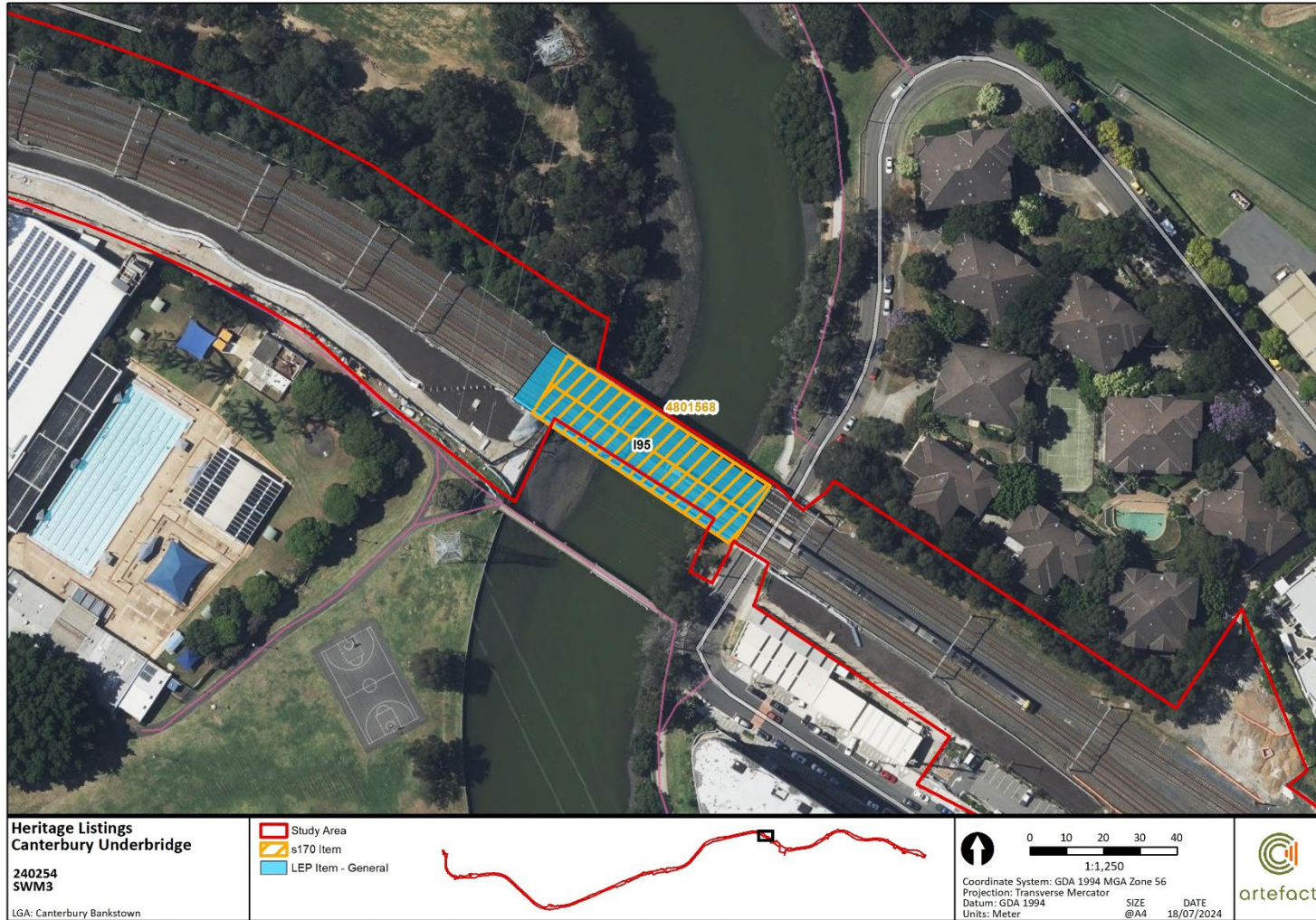


Figure 15 Heritage items – Heritage curtilage Canterbury (Cooks River/Charles St) Underbridge – Main Line



Figure 16 Heritage items – Heritage curtilage Campsie Railway Station Group



Figure 17 Heritage items – Heritage curtilage Belmore Railway Station Group

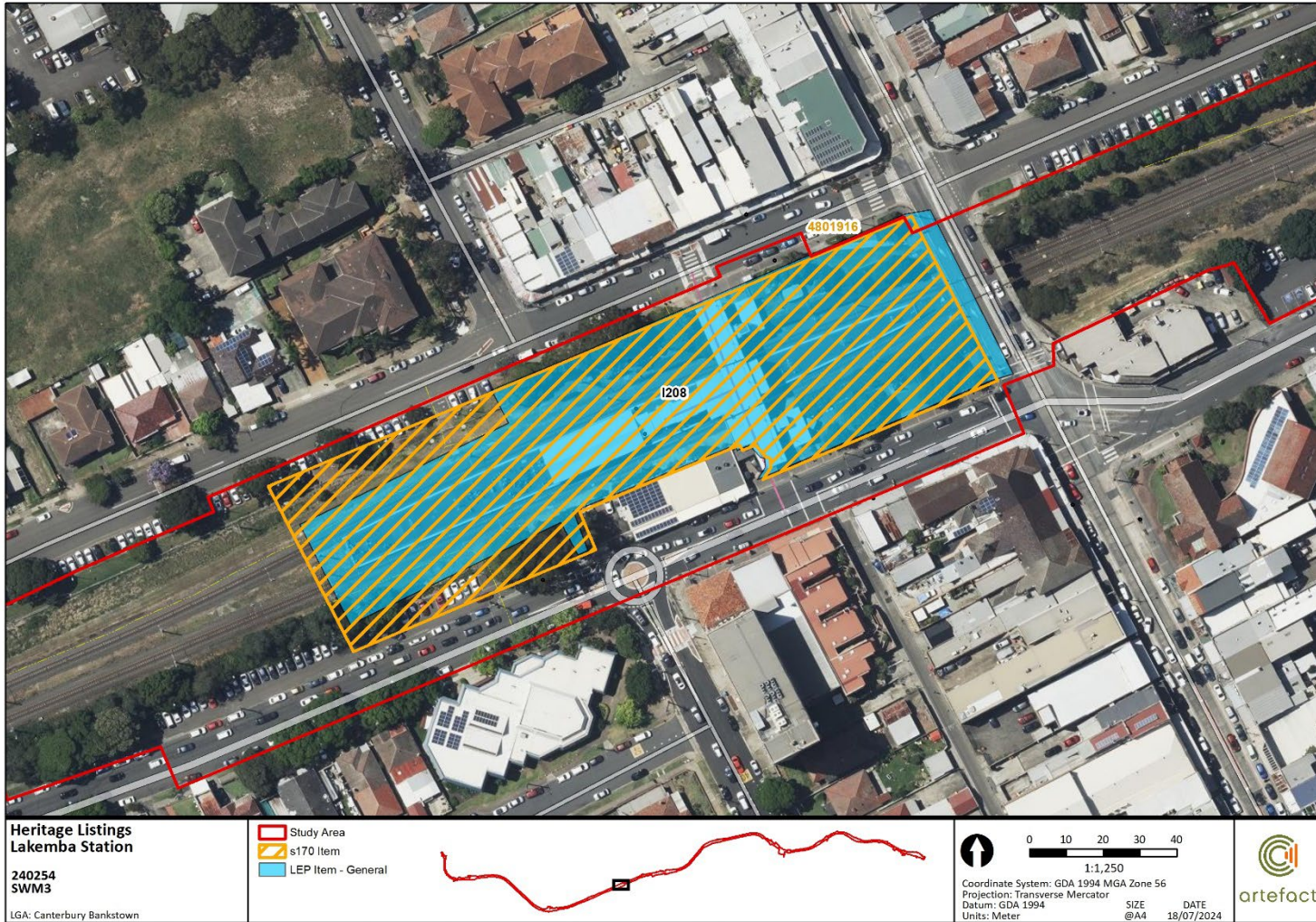


Figure 18 Heritage items – Heritage curtilage Lakemba Railway Station Group



Figure 19 Heritage items – Heritage curtilage Wiley Park Railway Station Group



Figure 20 Heritage items – Heritage curtilage Punchbowl Railway Station Group



Figure 21 Heritage items – Heritage curtilage Bankstown Railway Station Group

3.5. Non-Aboriginal archaeology

3.5.1. CSSI 7400 Project Area

The non-Aboriginal heritage context of the Sydenham final conversion portion of the SWM3 project area has been investigated and assessed as part of the CSSI7400 project EIS. Additional information has been provided in the- Sydenham Station Junction Modification Report (Chatswood to Sydenham – Sydenham Station and Sydney Metro Trains Facility South Modification Report). This included the preparation of the *Addendum to the Sydney Metro City and Southwest – Chatswood to Sydenham: Historical Archaeological Assessment and Research Design Report* (Artefact Heritage 2018a). Further archaeological assessment was also undertaken by Extent Heritage (2017) for the CHMP for the Sydenham Station and junction works.

3.5.1.1. Historical Overview

Much of western Sydenham is located within Thomas Moore's Douglas Farm of 470 acres granted in 1799. A further grant of 700 acres was made in 1803 followed by purchases of adjoining land so that by 1807 held 1920 acres, making him one of the largest landowners in the Cooks River District. Douglas farm as the Sydenham property was known had extensive stands of timber. A small portion of the property was under cultivation, primarily maize and wheat. The eastern boundary of Moore's land was formed by the present line of Unwins Bridge Road. The whole of the study area south of a line extending westwards from the Mary Street/Unwins Bridge Road intersection lies within the former Douglas Farm. Moore's property was subsequently leased to Garnham Blaxcell although there is little evidence to indicate large-scale clearing or construction on the property. The farm was purchased by Dr Robert Wardell on 21 July, 1830 and renamed the Petersham Estate. The estate extended from Parramatta Road at Lewisham to Cooks River. Following Wardell's murder in 1834 the estate was divided between his sisters Anne Fisher, Margaret Fraser and Jane Isabella Priddle. Sections of the property were sold progressively from 1834 onwards but the Sydenham section of the estate was not subdivided for sale until 1857 as the Sydenham Farms. These were 4-acre to 10-acre blocks. Up-take of the blocks was slow with few of the farmlets being occupied or built-on by 1881.

The northern portion of the study area crosses three other early land grants, those of John Fincham (30-acres), James Waine (30-acres) and Thomas Dukes (30-acres). No evidence has been located for the presence of farmhouses or other buildings on these properties within the study area. By 1857 Fincham's and Waine's farms had become the property of Thomas Smidmore, was a successful businessman and alderman on the Sydney City Council, from 1842 to 1850. The Sydenham property was named Silverleigh and became Smidmore's principal residence until his death in 1861. The residence fronted Unwins Bridge Road opposite Edith Street.

A significant change to the district was the construction of the Illawarra railway line from Eveleigh to Kiama. Work commenced in 1882 and the line as far as Hurstville was opened in 1884. The present station at Sydenham was constructed as Marrickville Station with platforms 2/3 and 4/5 being constructed in anticipation of a branch line to Bankstown. This latter line was constructed in 1895 and extended from Sydenham to Belmore. Road access across the lines consisted of level crossings in the north (Sydenham Road-Bailey Street) and in the south (Marrickville Road-Railway Road). A stationmaster's residence was also constructed at 117 Railway Road as part of the station complex. This unlisted structure was demolished by Railcorp between February and April 2014 with an intention to sell the property and citing contamination remediation as the reason for demolition.

Sydenham Station has undergone a number of major modifications since its opening in 1884. In 1925 platforms 1 and 6 were constructed although platforms 1 and 2 remained inactive until the early 1950s. The Gleeson Avenue concourse also underwent significant modification. The steel footbridge was replaced by a concourse attached to the Gleeson Avenue overbridge. The weatherboard ticket office burnt down in the 1980s. The replacement concourse was removed and replaced by the existing concourse in 2012-2013.

Railway buildings also occupied the area on the northern side of the Bankstown line west of Gleeson Avenue. These structures included a residence (removed by 1943) and a signal box on the southern side of the Marrickville Road level crossing.

The presence of the railway was a stimulus to development and a number of the former small holdings were subdivided into residential blocks. The floods of May 1889 did however illustrate the problems associated with attempting to build on a former swamp. The Gumbramorra Swamp was restricted to a single creek-line flowing into Cooks River and the surrounding lands partly filled. In 1898 construction of a network of formal low-level drainage channels in Marrickville commenced. This initial program of works was followed by a second stage in 1903. The resulting network of channels and culverts discharged into Cooks River immediately west of Tempe Railway Station. Later improvements to the scheme between 1935 and 1941 consisted of the construction of the Sydenham Drainage Pit that discharged by means of a pumping station into the existing channels. In 1965 much of the channel network west of the rail corridor was widened to its current dimensions.

The creation of a large area of flat land stimulated the development of industries within the Sydenham area in the period between 1895 and 1920. These included the Vicars Woollen Mill, Sydenham Pottery Company, Fowler Potteries, Sydney Steel Company and Jubilee (later Sydney) Brickworks and Marrickville Margarine Company. The Sydney Steel Company is located immediately adjacent to the work zone and lies within the Sydney Metro Trains Facility Area.

Messrs Ramsay and Johnston established a small pottery in Garden Street as early as 1907 as the Sydenham Pottery Works. In 1909 Alfred Dawes, son of Naasson Dawes, General Manager of Bakewell Brothers brickworks section, provided financial backing for Ramsay and Johnston with the company operating under the name A. Dawes & Co. Following Dawes transfer to R. Fowler's as General Manager of their brickworks section in 1910 the pottery operated under the name Ramsay and Johnston. The pottery may have operated as the Sydenham Pottery Company in 1916 following acquisition of the firm by Thomas Arthur Ashton, Wilfred Cox and William Bloomer. Thomas Arthur Ashton (1870 Longton, Staffordshire, England - 1957 Redcliffe, Queensland), was a porcelain decorator from Staffordshire. The partnership was dissolved in 1924 and in the following year R. Fowler Ltd, located on the adjoining block to the east, purchased the Sydenham Pottery Company. Although Fowler's absorbed the Sydenham Pottery Company it continued manufacturing under its own name until at least 1947. The precise range of wares produced is unclear. The earliest material appears to have been restricted to bottles. Later wares were primarily domestic vessels such as toilet sets, mixing bowls and art pottery. The date at which the pottery ceased operations is unknown. Fowler's Pottery complex ceased operation in Marrickville in 1975.

Between 1916 and 1925 a goods line referred to as the Sydenham to Botany rail line was constructed. At the Sydenham end of the line significant earthworks and embankments faced in brick were constructed along Marrickville Road and Railway Parade providing elevated road access across the rail line at Gleeson Avenue. Following completion of the overbridge the level-crossings at Sydenham and Marrickville Roads were closed.

The following figures provide an overview of the history of the areas as per the above.



One of the Steel Girders Designed and Manufactured Complete in 1917 for C&S CHOSKINS LTD. LITHGOW. IRONWORKS By The SYDNEY STEEL Co. PTY LTD at MARRICKVILLE, N.S.W. LENGTH-86feet WIDTH-3feet DEPTH-9feet WEIGHT-40tons. Teams of 45 horses drawing girder to SYDENHAM RAILWAY.

Figure 22 Sydney Steel Company, 1917.

View east to railway line showing cutting in front of 'Silverleigh'. (Marrickville Library Asset 003152).



Figure 23 Works at Sydenham 1935 (SLNSW 81937).

Excavation of the Sydenham Drainage Pit looking northwest towards the Garden Street/Shirlow Street intersection. The Sydenham Pottery Company at top right.



Figure 24 Storm drain, Sydenham 1965.

The image shows the removal and replacement of the c.1898 brick channel by the extant concrete channel adjacent to Sydney Steel Company, looking north (SLNSW Government Printing Office 2 – 26989)



Figure 25 Bridge, stormwater channel, Sydenham - Botany rail, 3 November 1916.

View shows the 1898 stormwater channel, the Marrickville Road railway embankment wall (left), the Sydenham station concourse buildings (top right)



Figure 26 Construction of retaining wall adjacent to Railway parade, Sydenham n.d. (1916).

Looking northwest, the image shows the now-concealed rear of the retaining wall. (SLNSW image 221584)

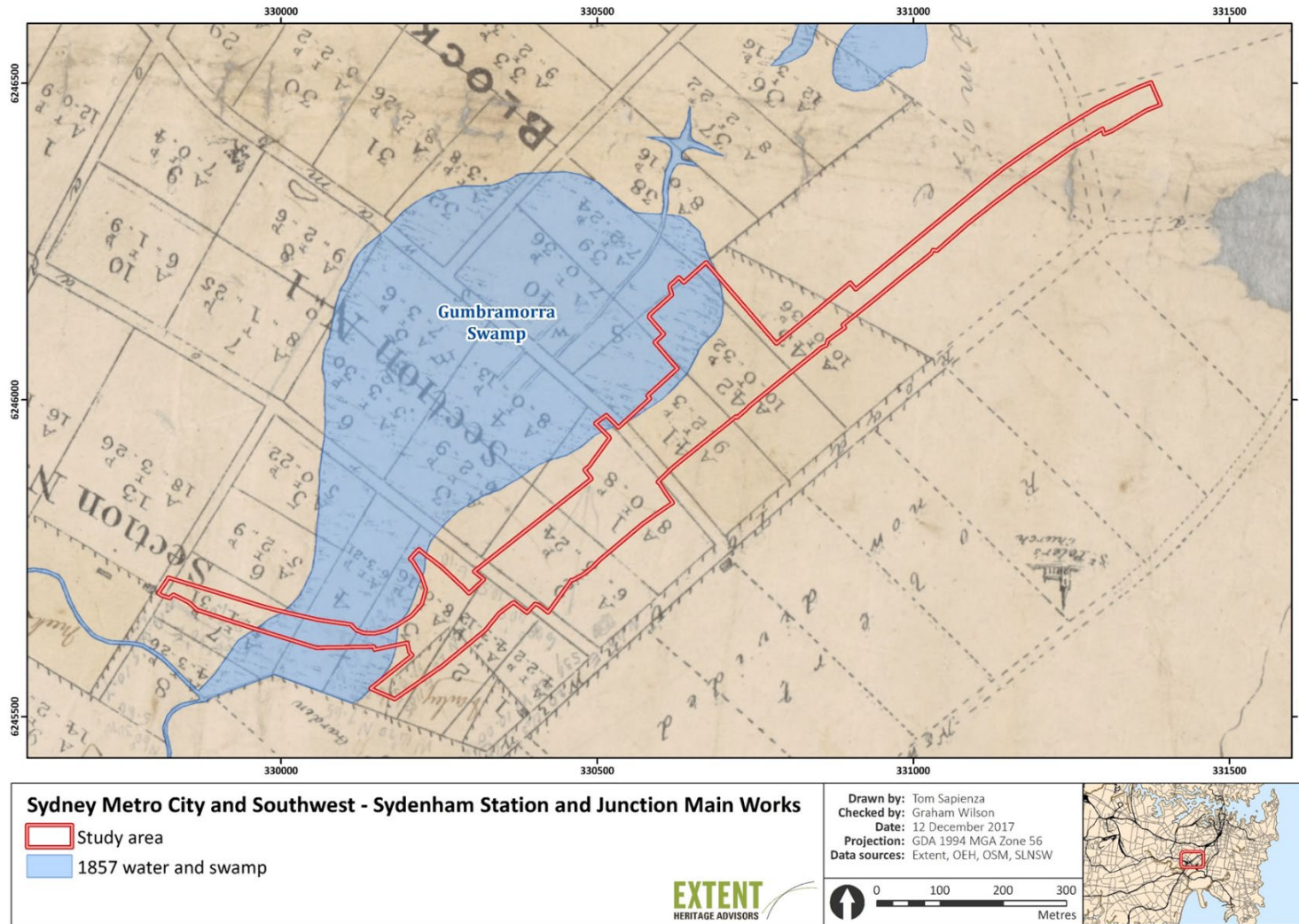


Figure 27 Study Area shown on 1857 plan with swamp and watercourses indicated

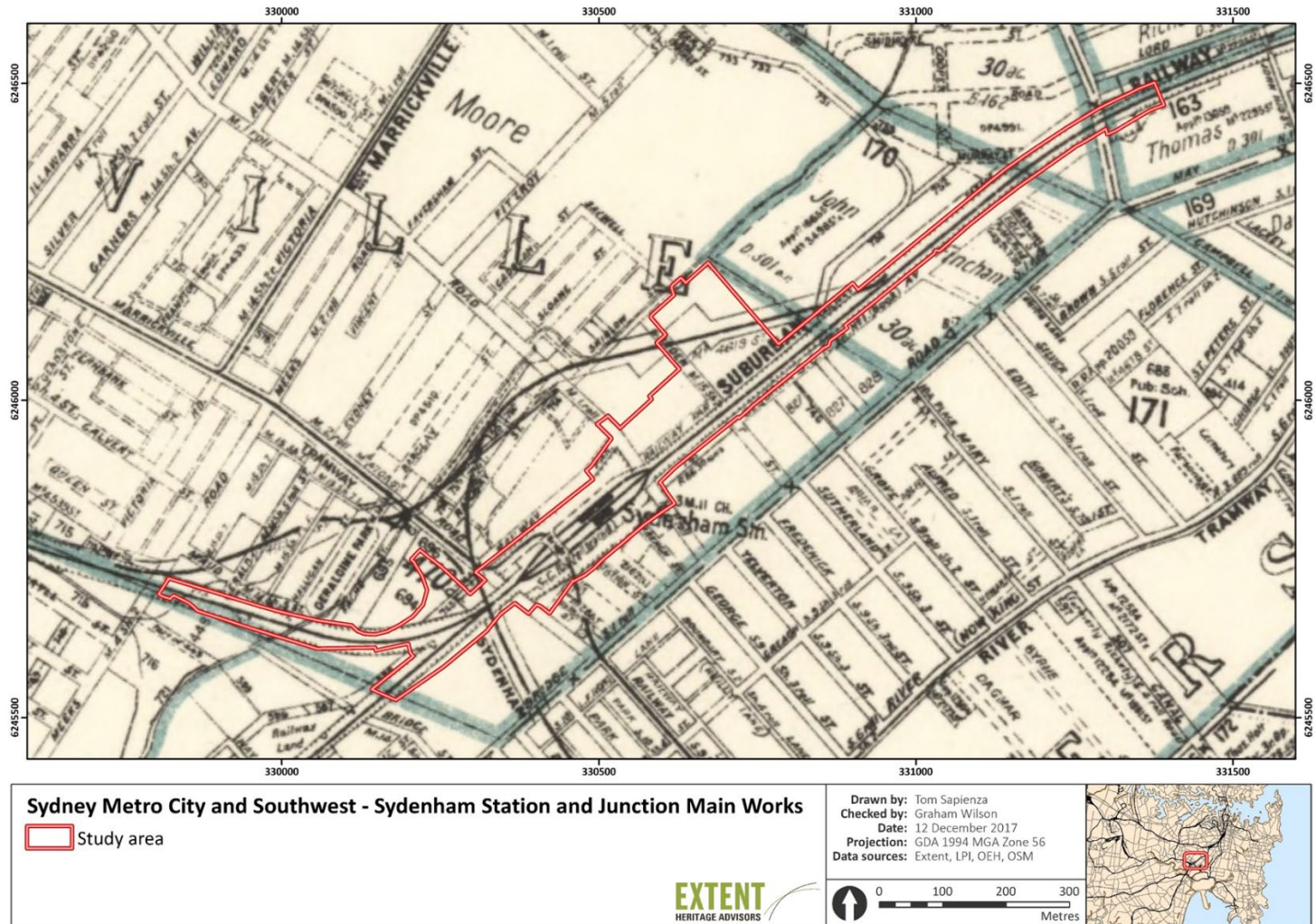


Figure 28 Study area on 1916 plan (NSW LPI parish of Petersham 1916)

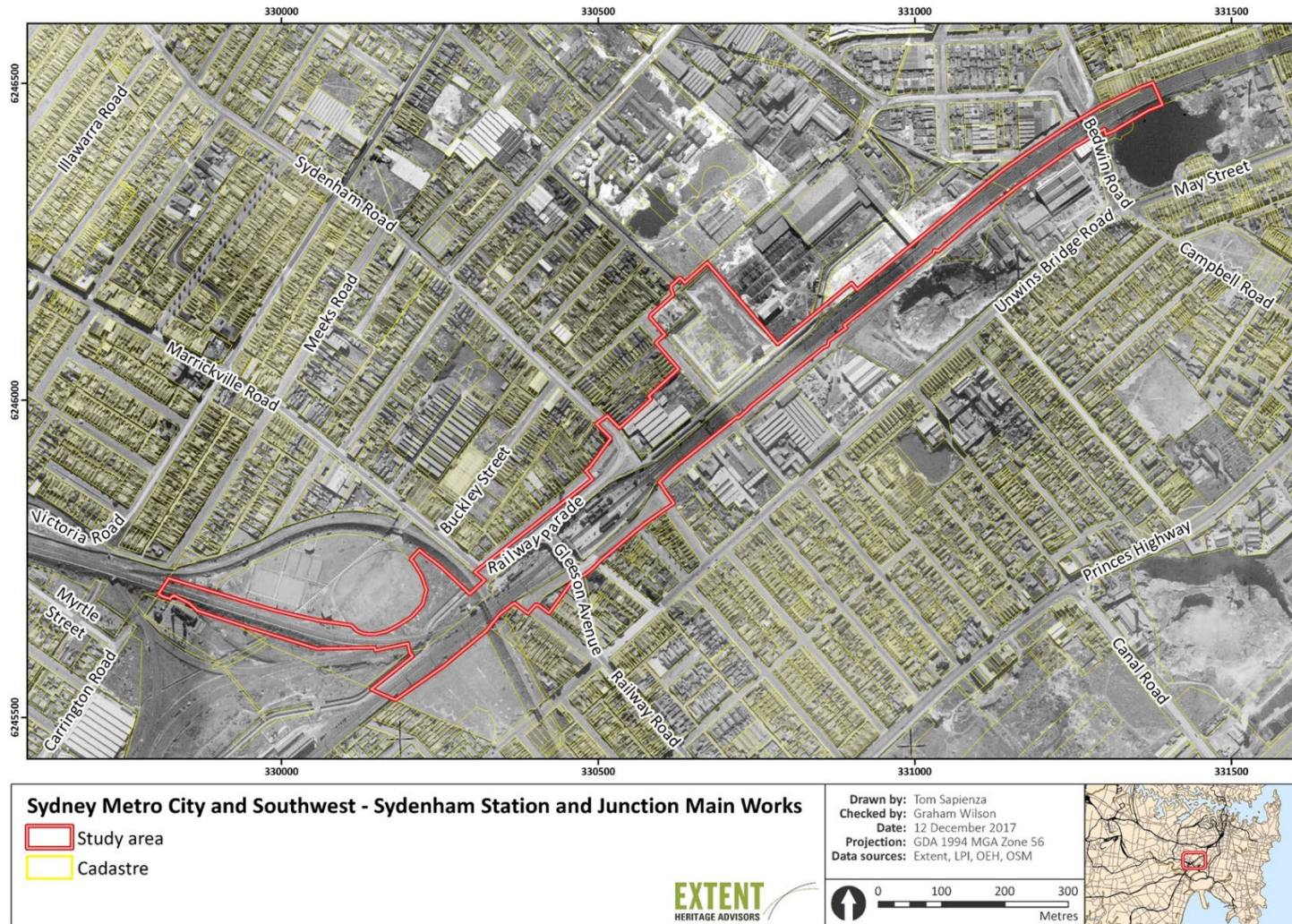


Figure 29 Study Area on 1943 aerial with current cadastre in yellow (Source NSW LPI – corrected)

Areas of Historical Archaeological Potential within the Study Area:

Phase 1 (1788 – 1840s)

There is no evidence of structures located within the study area during this phase. Archaeological remains associated with early agricultural land use near marginal swamp land may include tree boles, field drains, fence line postholes, imported garden soils and isolated refuse deposits/rubbish pits. The likelihood of remains from this period surviving is low.

Phase 2 (1840s – 1880s)

There is no documentary evidence of specific industrial activities taking place within the study area during this phase. Structures associated with King's Garden, in the south-west of the study area, were located further south, on Unwin's Bridge Road. Archaeological remains associated with grazing and land drainage, such as fence line postholes, drainage channels, land fill, and isolated artefacts from this phase, if present, are likely to have been disturbed by later construction works. The likelihood of remains from this period surviving is low.

Phase 3 (1880s – 1909)

There is low to moderate potential for archaeological remains associated with the early phase of railway infrastructure such as ceramic and wooden service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track to be located within the rail corridor on the south eastern side of the study area.

The study area has low-moderate potential to contain archaeological remains associated with the draining of the swampland commencing in the late 19th century. Evidence of this drainage scheme may include subsurface brick, concrete and terracotta drains and former land-drains (likely concrete or similar). As these drains continued to be used into the 20th century (and may possibly still be in use), they are unlikely to contain intact soil deposits with research potential. There is low potential that artefactual remains associated with the construction of the drainage system remain within the drain cuts and backfilled soils.

Phase 4 (1909 – present)

Archaeological remains associated with rail line upgrades such as utilities and drainage may be present. The level of preservation will be dependent on subsequent disturbance, primarily associated with the upgrade of the rail line.

The location of the Sydney Steel Company and yards have been subject to development of warehouses and infrastructure since its decommissioning. Manufacturing would have largely occurred in the factory itself which was constructed on a slab. It is therefore unlikely evidence of the manufacturing process or workers would remain. Archaeological remains in the yard section of the factory are likely to have been impacted by previous development and would largely have consisted of incidental remains such as offcuts which may not have survived. There is a low potential that remains of crane footings, the steam crane tracks in the rear yard, or footings of other structures may remain beneath the existing warehouse slabs. The steam crane track was elevated on fill therefore it is probable it was removed during levelling in preparation for the construction of existing warehouses.

Any remains are more likely to be in the northern section of the Sydney Steel Company site as the southern section vacant until around 1950 and was not the focus of the operation. There is moderate evidence that remains associated with the former Smidmore Estate may remain in the north-eastern portion of the study area, below the present-day warehouses. Remains are likely to be typical of those associated with early to mid-20th century residential development, including brick and concrete footings and remnant floor treatments. Artefacts

and occupation deposits are rarely found in structures of this date. There is some potential for rubbish pits and other domestic refuse deposits (yard scatters, outhouses) to be located in the rear yards of the properties. This potential, however, is low, due to the introduction of municipal rubbish collection and sewage services in the 1880s.

The potential for the survival of archaeological remains including relics, works, deposits and features of State or local significance within the remainder of the corridor is low. Figure 30 below illustrates historical archaeological potential zoning.

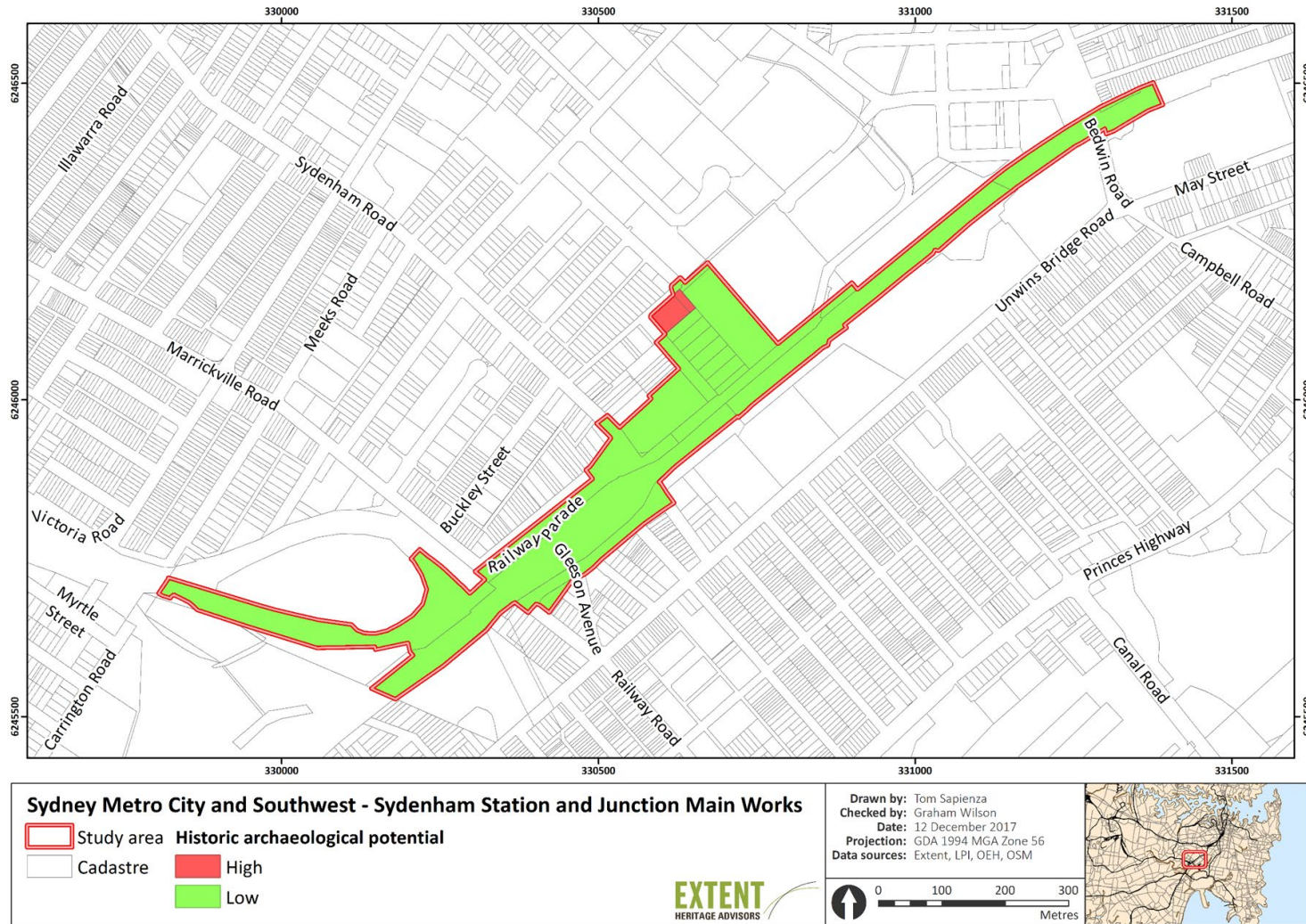


Figure 30 Historic Archaeological Potential

3.5.1.2. Statement of Significance

Table 7 below provides the summary from the addendum ARD of the significance of the archaeology of the project area.

Table 7 Assessment of archaeological significance

Criteria	Discussion
Research potential	<ul style="list-style-type: none"> It is highly unlikely that archaeological remains associated with Phase 1 and Phase 2 would be present within the site and they are unlikely to have research potential Potential archaeological remains associated with the Sydney Steel Company site may give insight into early 20th century industrial development, manufacturing techniques and structural layouts. Archaeological remains associated with Phase 4 may have local significance under this criterion.
Association with individuals, events or groups of historical importance	<ul style="list-style-type: none"> The development of the rail network facilitated economic development and suburban growth in Sydney in the latter half of the nineteenth and early twentieth centuries. The Illawarra line was constructed in 1881 and was extended to accommodate the Bankstown line between (1895-1939). The potential Phase 3 archaeological remains are associated with the historical development of the Illawarra and Bankstown rail lines The potential archaeological Phase 4 remains associated with the Sydney Steel Company site are associated with Alexander Stuart, who was a Scottish-born merchant and politician who became Premier of New South Wales in 1883. The factory produced steel for the Sydney Harbour Bridge, numerous landmark buildings in Sydney and iconic structures including the Garden Island Hammerhead Crane. It was also one of the first major factories constructed after the Gumbramorra Swamp was drained. Archaeological remains associated with Phases 3 and 4 may have local significance under this criterion
Aesthetic or technical significance	<ul style="list-style-type: none"> The potential archaeological remains from Phase 1 and 2 are not likely to have aesthetic value The remains of Phase 3 former rail infrastructure may demonstrate changes in technology and rail engineering over time. However, they are not expected to demonstrate technical significance Evidence of the Phase 3 swamp drainage, and associated works, would have technical significance Any remains of Phase 4 steel works structures and rail infrastructure may demonstrate changes in technology and rail engineering over time. Archaeological remains associated with Phases 3 and 4 may have local significance under this criterion.
Ability to demonstrate the past through archaeological remains	<ul style="list-style-type: none"> The potential archaeological remains are not considered to have the ability to illustrate the historical development of the surrounding area.

3.5.2. CSSI 8256 Project Area

3.5.2.1. Defined areas of archaeological potential within S2B area

The SWM3 scope of works will be undertaken within portions of the CSSI 8256 Project containing four areas of defined archaeological potential as outlined in the AARD. These areas are within and in the vicinity of the listed curtilages of Marrickville, Canterbury, Belmore and Lakemba Railway Stations. A detailed history, assessment for archaeological potential and significance is included in the AARD and is summarised below.

Marrickville Railway Station

The SWM3 area includes a portion of the rail corridor through Marrickville Railway Station which was assessed in the AARD as having a moderate-high potential for locally significant archaeology associated with the development of rail infrastructure. The area to be impacted by SWM3 is designated in the AARD partly requiring an AMS and possibly archaeological management such as salvage excavation and monitoring, while a portion would be managed under the Unexpected Finds Heritage Procedure. A former air raid shelter was also identified outside of the SWM3 impact area which depending on intactness has the potential to reach the threshold of local significance.

The AARD assessed that there would be nil to low potential for archaeological remains associated with nineteenth century farming. Any remains are unlikely to have research value. There is moderate to high potential for archaeological remains associated with the late nineteenth and early twentieth century development of the Bankstown rail line, Marrickville Station and the Earlwood tramline, although they are likely to be truncated. These archaeological remains have potential to reach the threshold for local heritage significance, depending on the intactness. Potential archaeological remains of the WWII air raid shelter would be of local significance for research potential, associative and technical significance, and for demonstrating the historical and physical elements of Sydney's defence and protection response to World War II.



Figure 31 Archaeological Potential at Marrickville Station

Canterbury Railway Station

The SWM3 area includes a portion of Canterbury Railway Station which was assessed in the AARD as having moderate potential for locally significant archaeology associated with the development of rail infrastructure. The SWM3 area includes the Canterbury Construction Site which was assessed in the AARD as having moderate to high potential for State significant archaeology associated with the Australasian Sugar Company. The SWM3 area also includes an area to the east of Canterbury Railway Station which was assessed in the AARD as having a low potential for locally significant archaeology associated with the development of rail infrastructure and the early settlement of the township associated with the Australasian Sugar Company. The areas to be impacted by SWM3 are designated in the AARD as partly requiring an AMS and possibly archaeological management such as test excavations and monitoring (particularly within the Canterbury Construction Site), while a portion would be managed under the Unexpected Finds Procedure as remains are likely to have been impacted by the construction of the rail line.

The AARD found that there is nil to low potential for archaeological remains associated with nineteenth century farming to be present. Any remains are unlikely to have research value. There is moderate to high potential for remains of structures associated with the Canterbury Sugar Company works such as timber slab huts and outbuildings. These would have high research value and associative and historical significance at a local or State level depending on nature and

intactness, although remains of State significance are unlikely to be present in the rail corridor where the SWM3 works would largely be undertaken as identified in the AARD. Archaeological remains associated with the historical development of the Bankstown rail line, Canterbury Station and Canterbury Park Racecourse may be present. Depending on the intactness of the remains, potential archaeological remains could reach the threshold for local significance.



Figure 32 Archaeological Potential at Canterbury Station

Belmore Railway Station

The SWM3 area includes a portion of the rail corridor to the west of Belmore Railway Station which was assessed in the AARD as having a low-moderate potential for locally significant archaeology associated with the development of rail infrastructure. The area to be impacted by the SWM3 is designated in the AARD partly requiring an AMS and possibly archaeological management such as monitoring, while a portion would be managed under the Unexpected Heritage Finds Procedure.

The AARD found that there is nil to low potential for archaeological remains associated with nineteenth century farming to be present. Any remains are unlikely to have research value. There is low-moderate potential for archaeological remains associated with the late nineteenth and early twentieth century development of the Bankstown rail line and Belmore Station, including the former goods shed and platform, converter room, and coal bin. These archaeological remains have potential to reach the threshold for local heritage significance, depending on the intactness.



Figure 33 Archaeological Potential Belmore Station

Lakemba Railway Station

The SWM3 area includes a portion of the rail corridor through Lakemba Railway Station which was assessed in the AARD as having a low-moderate potential for locally significant archaeology associated with the development of rail infrastructure. The SWM3 area also includes a portion of the rail corridor east of Lakemba Railway Station which was assessed in the AARD as having a low potential for locally significant archaeology associated with the development of Taylor House (Lakemba) and associated stables and outbuildings. The area to be impacted by the SWM3 is designated in the AARD partly requiring an AMS and possibly archaeological management such as monitoring, while a portion would be managed under the Unexpected Heritage Finds Procedure.

The AARD found that there is nil to low potential for archaeological remains associated with nineteenth century farming to be present. Any remains are unlikely to have research value. There is low potential for archaeological remains associated with the late nineteenth and early twentieth century establishment of the Taylor House (Lakemba), stables and potential outbuildings, as well as evidence of associated farming activities. There is low-moderate potential for archaeological remains associated with the late nineteenth and early twentieth century development of the Bankstown rail line and Lakemba Station, including the first timber island platform at the station. These archaeological remains have potential to reach the threshold for local heritage significance, depending on the intactness, particularly remains associated with 'Lakemba' and the Lakemba 1909 timber island platform.



Figure 34 Archaeological Potential Lakemba Station

4. Construction risk assessment

Impacts of the Project are described in Table 9, Table 10 and Table 11, and the aspects and impacts register in the CEMP. Management measures to address these identified risks are included in Section 5.

Table 8: Aboriginal Heritage – Aspects, Impacts and Risks

Activity	Aspect/s	Impact/s
<p>Subsurface excavations into natural ground surface.</p> <p>No Aboriginal objects or sites have been previously recorded within the study area, though areas of moderate to high Aboriginal archaeological potential have been identified. The significance of the potential archaeological resources has been based on a preliminary assessment of the archaeological potential, and would be further clarified following excavation, if required.</p> <p>The risk is low as the SWM3 final conversion scope of works is completely within the highly disturbed rail corridor and unlikely to excavate down to natural material in the CSSI 7400 Project Area.</p>	Excavation	Finding/disturbance to and/or destruction of unexpected burials, human remains or Aboriginal objects.
<p>Subsurface excavations into natural ground surface. The risk is low as no areas within the rail corridor were found to have Aboriginal archaeological potential in the CSSI 8256 Project Area.</p> <p>There would be no works within S2B PAD01.</p>	Excavation	Finding/disturbance to and/or destruction of unexpected burials, human remains or Aboriginal objects.

Table 9: Built heritage – Aspects, Impacts and Risks

Activity	Aspect/s	Impact/s
<p>Bankstown Station and Precinct Works:</p> <p>Stage 1: Sydney Trains Bankstown Works</p> <p>Stage 2: Sydney Metro Turn back, fencing and rail adjustment</p> <p>Stage 3: Sydney Trains Bankstown Works</p> <p>Stage 3: Bankstown Metro Works</p> <p>Stage 4: all remaining Bankstown Station and Precinct Works</p>	<p>Demolition of some elements Platform (Bankstown parcel office and Amenity Block already removed) and construction work at Station</p> <p>Removal of intrusive material, repurposing, impacts to some significant fabric. Make good</p>	<p>Direct: moderate negligible (vibration)</p> <p>Indirect: Moderate</p>

Activity	Aspect/s	Impact/s
<p>Southwest Station Work</p> <p>Equitable canopies and lifts, switchback ramps, landscaping, defect close out, station deep clean, heritage painting, final conversion scope (Platform Screen Doors), gap filler works</p>	<p>Removal of intrusive material, repurposing, impacts to some significant fabric. Make good</p> <p>Demolition of some elements including Punchbowl Station Parcel Office and Candy Shop, Canterbury Signalling Hut and construction</p> <p>Removal of brick and concrete coping and construction of Platform screen doors which will require struts to be anchored in the platform.</p>	<p>Marrickville, Dulwich Hill, Hurlstone Park, Campsie, Belmore, Lakemba, Wiley Park,</p> <p>Direct: Minor Negligible (vibration)</p> <p>Indirect: Minor</p> <p>Canterbury, Punchbowl and Bankstown:</p> <p>Direct: Moderate, Negligible (vibration)</p> <p>Indirect: Moderate</p>
<p>Southwest Corridor Works</p> <p>Corridor access stairs</p> <p>Screens fixed to CSR on bridges</p> <p>Veg management</p> <p>Acoustic treatment</p> <p>Boundary fencing</p> <p>Track monitoring</p> <p>within curtilages of heritage items</p>	<p>Installation and minor excavations</p>	<p>Visual impacts, impacts to fabric</p> <p>Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance</p>
<p>Asset Upgrades</p> <p>Infringement and track rectification</p> <p>Bridge upgrades renewals</p> <p>Civil asset upgrade renewal</p>	<p>Excavation, vibration and soil compaction due to the use of heavy machinery to hammer out overhead wire portals and footings</p>	<p>Visual impacts to listed items, impacts to fabric</p>
<p>Final Conversions</p> <p>Sydenham junction final track configuration, fencing, wayfinding & signage (all stations), BMCS and lift conversions (Marrickville Station to Punchbowl Station)</p> <p>Earthing bonding, alteration works, insulated rail joints, redundant asset works</p> <p>Clean up work (final rail grind, final rail tamp, station refresh/deep clean)</p> <p>Station meal room alterations at 9 stations (excluding Bankstown)</p> <p>Fixed gap filler works</p>	<p>Excavation, vibration and soil compaction due to the use of heavy machinery to hammer out overhead wire portals and footings</p>	<p>Visual impacts to listed items, impacts to fabric</p>
<p>ARTC Works</p> <p>Temporary and permanent adjustments to ARTC operated and maintained infrastructure within curtilages of heritage items</p>	<p>Protection modification such as screens to bridge structures, Excavation, vibration and soil compaction due to the use of heavy machinery to hammer out overhead wire portals and footings</p>	<p>Temporary visual impacts to listed items, impacts to fabric</p>

(Uncontrolled when printed)

Activity	Aspect/s	Impact/s
Utility works Qenos Pipe removal Non Sydney Trains (ST) or Sydney Metro (SM) assets (typically non-contestable works)	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Temporary visual impacts to listed items, impacts to fabric
Local area works modification, reinstatement of public space, roads and pedestrian way, required for, or as a consequence of the SWM3 Contractor's Activities	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Temporary visual impacts to listed items, impacts to fabric
Property works The Property Works comprises permanent adjustments to existing private properties required for, or as a consequence of the SWM3 Works and Temporary Works	Pedestrian control and access, installation of hoarding, fencing and other temporary works such as temporary generator installation	Temporary visual impacts to listed items
Construction and use of compound sites and laydown areas	Installation and operation	Temporary visual impacts to listed items, impacts to fabric
Temporary works	Pedestrian control and access, installation of hoarding, fencing and other temporary works such as temporary generator installation	Temporary visual impacts to listed items

Table 10: Non-Aboriginal Archaeology– Aspects, Impacts and Risks

Activity	Aspect/s	Impact/s
Bankstown Station and Precinct Works: Stage 1: Sydney Trains Bankstown Works Stage 2: Sydney Metro Turn back, fencing and rail adjustment Stage 3: Sydney Trains Bankstown Works Stage 3: Bankstown Metro Works Stage 4: all remaining Bankstown Station and Precinct Works	Demolition of some elements Platform (Bankstown parcel office and Amenity Block already removed) and construction work at Station Removal of intrusive material, repurposing, impacts to some significant fabric. Make good	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level. However archaeological potential is low
Southwest Station Work Equitable canopies and lifts, switchback ramps, landscaping, defect close out, station deep clean, heritage painting, final conversion scope (Platform Screen Doors), gap filler works	Removal of intrusive material, repurposing, impacts to some significant fabric. Make good Demolition of some elements and construction Removal of brick and concrete coping and construction of Platform screen doors which will require struts to be anchored in the platform.	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level

Activity	Aspect/s	Impact/s
	Excavation, vibration and soil compaction due to the use of heavy machinery to hammer out potential rock.	
Southwest Corridor Works Corridor access stairs Screens fixed to CSR on bridges Veg management Acoustic treatment Boundary fencing Track monitoring Within curtilages of heritage items	Installation and minor excavations	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level
Asset Upgrades Infringement and track rectification Bridge upgrades renewals Civil asset upgrade renewal	Excavation, vibration and soil compaction due to the use of heavy machinery to hammer out overhead wire portals and footings	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level
Final Conversions Sydenham junction final track configuration, fencing, wayfinding & signage (all stations), BMCS and lift conversions (Marrickville Station to Punchbowl Station) Earthing bonding, alteration works, insulated rail joints, redundant asset works Clean up work (final rail grind, final rail tamp, station refresh/deep clean) Station meal room alterations at 9 stations (excluding Bankstown) Fixed gap filler works	Excavation, vibration and soil compaction due to the use of heavy machinery to hammer out overhead wire portals and footings	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level
ARTC Works Temporary and permanent adjustments to ARTC operated and maintained infrastructure within curtilages of heritage items	Excavation, vibration and soil compaction due to the use of heavy machinery to hammer out overhead wire portals and footings	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level
Utility works Genos Pipe removal Non Sydney Trains (ST) or Sydney Metro (SM) assets (typically non-contestable works)	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level
Local area works Modification, reinstatement of public space, roads and pedestrian way, required for, or as a consequence of the SWM3 Contractor's Activities	Excavation, vibration and soil compaction due to the use of heavy machinery, cutting and filling, installation of fencing	Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level

Activity	Aspect/s	Impact/s
<p>Property works The Property Works comprises permanent adjustments to existing private properties required for, or as a consequence of the SWM3 Works and Temporary Works</p>	<p>Pedestrian control and access, installation of hoarding, fencing and other temporary works such as temporary generator installation</p>	<p>Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level</p>
<p>Construction and use of compound sites and laydown areas</p>	<p>Installation and operation</p>	<p>Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level</p>
<p>Temporary works</p>	<p>Pedestrian control and access, installation of hoarding, fencing(excavation) and other temporary works such as temporary generator installation</p>	<p>Disturbance to and/or destruction of non-Aboriginal archaeological deposits of local significance within or below platform level</p>

5. Management measures

5.1. Aboriginal archaeological management

5.1.1. Aboriginal Cultural Heritage Assessment Report

5.1.1.1. CSSI 7400 Project Area

An ACHAR was prepared by Artefact Heritage (2016) as part of the SPIR which forms part of the Approved Project. Comprehensive Aboriginal consultation was undertaken as part of the preparation of the ACHAR, including an Aboriginal Focus Group (AFG) meeting. All RAPs who responded through consultation were in support of the proposed archaeological management methodology included in the ACHAR.

The ACHAR divided all Metro station, construction sites and power supply routes into three Method Areas (Mas) for the purposes of managing Aboriginal archaeological resources. The 2017 *Chatswood to Sydenham – Sydenham Station and Sydney Metro Trains Facility South Modification Report* identified the area around Sydenham Station as being within MA3:

- **Method Area 3 (MA3):** Project sites where there is high potential for the survivability of natural soils and deep sands, and where there will be less intensive historical archaeological excavation than at MA2 sites.

Further archaeological assessment undertaken for the Sydenham Station and junction works (Extent Heritage 2022) refined the model of Aboriginal archaeological potential for the area. The Aboriginal archaeological management zone mapping is based on a ‘traffic light’ coding as described below, and is shown in Figure 4 Aboriginal Archaeological Potential :

- **Red (Zone 1):** Areas of high Aboriginal archaeological potential, where historical disturbance has been minimal, or material has been imported to fill the area, thus protecting the underlying deposits. Construction to proceed in accordance with unexpected finds procedure, but archaeological investigation is likely to be required in event that intact natural soils or Aboriginal objects are identified.
- **Amber (Zone 2):** Areas of moderate Aboriginal archaeological potential, where localised historical disturbance has occurred and may have truncated Aboriginal archaeological deposits. Construction to proceed in accordance with unexpected finds procedure, but archaeological investigation may be required, in event that intact natural soils or Aboriginal objects are identified.
- **Green (Zone 3):** Areas of low Aboriginal archaeological potential, where historical development activities have significantly truncated underlying soils and removed evidence for Aboriginal occupation. Construction to proceed in accordance with unexpected finds procedure, but archaeological investigation is highly unlikely to be required.

The SWM3 works will implement the management measures required for MA3 as outlined in the ACHAR.

SWM3 works are expected to be limited to established rail formation levels, including within Zone 1 and Zone 2, and are not expected to encounter natural soils. As a result, works within the Sydenham Station corridor would be managed under the Sydney Metro Unexpected Heritage Finds Procedure in accordance with the outlined methodology.

The HIA (Artefact Heritage 2022) prepared for the PACA determined that this management was consistent with the management for CSSI 8256 (discussed below). The same archaeological management will therefore be applied for SWM3 in both CSSI 7400 and CSSI 8256 project areas.

If excavations below rail formation layers are required within Zone 1 and Zone 2 areas during SWM3, JHLORJV will obtain advice from a suitably qualified archaeologist prior to conducting works. If Aboriginal archaeological investigations would be required, a site specific AMS would be prepared in accordance with the ACHAR methodology.

5.1.1.2. CSSI 8256 Project Area

An ACHAR was prepared by Artefact Heritage (2018b) as part of the Preferred Infrastructure Report (PIR) which forms part of the Approved Project as modified. Comprehensive Aboriginal consultation was undertaken as part of the preparation of the ACHAR, including an AFG meeting. All RAPs who responded through consultation were in support of the proposed archaeological management methodology included in the ACHAR.

The ACHAR identified two areas of PAD, S2B PAD01 and S2B PAD02, near Belmore and Punchbowl Stations respectively. However, SWM3 works will be outside of S2B PAD01 and previous archaeological test excavations have demonstrated that S2B PAD02 is not a site. Therefore, no further Aboriginal archaeological test excavation is required in accordance with the ACHAR.

The ACHAR required that the rest of the Sydenham to Bankstown corridor will be managed under the Sydney Metro Unexpected Heritage Finds Procedure. The ACHAR will be implemented in accordance with REMM AH2 if unexpected Aboriginal objects were located within the project area.

5.1.2. Human remains

If suspected human remains or burial sites are identified, the Sydney Metro Exhumation Management Plan will be implemented in accordance with CoA E15, E16 and E17 and REMM NAH19. In accordance with CoA E17, the Sydney Metro Exhumation Management Plan will be implemented for the duration of the Project's Construction's activities.

The Sydney Metro Exhumation Management Plan has been prepared to satisfy the requirements of CoA E15.

Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, Principal Contractor, Forensic Anthropologist, Primary Excavation Director and Sydney Metro Environmental Representative. The Sydney Metro Exhumation Management Plan will be enacted. Preliminary notification to the NSW Police will be undertaken by the Sydney Metro Environmental Manager.

Once confirmation is received from the Forensic Anthropologist or Primary Excavation Director that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan.

No works to recommence until clearance is provided by Heritage NSW, and/or the NSW Police as per the documented in the Sydney Metro Exhumation Management Plan.

5.1.3. Unexpected finds

In accordance with CoA E15 and REMM NAH14, Sydney Metro has prepared the Sydney Metro Unexpected Heritage Finds Procedure (SM-18-00105232) (attached to Appendix D). In accordance with CoA E17, the Sydney Metro Unexpected Heritage Finds Procedure will be implemented for the duration of the Project's Construction's activities.

In accordance with REMM NAH18, following the discovery of new finds of Aboriginal objects – works will cease in the immediate area and the area secured. Assessment of the site/object and subsequent management of the site will be carried out in accordance with the Sydney Metro Unexpected Finds Procedure. The use of the Sydney Metro Unexpected Finds Procedure will satisfy the requirement in E15, E16 and E17 to include measures to manage an unexpected find in the HMP.

All new sites will be recorded on standard Aboriginal Heritage Information Management System (AHIMS) site cards and lodged with Heritage NSW.

5.1.4. Clearance

A written clearance confirmation will be provided by the Project Archaeologist to JHLORJV once Aboriginal archaeological management has been completed in an area. This will be signed off by Sydney Metro before works recommence. Construction will continue under the Sydney Metro Unexpected Heritage Finds Procedure.

5.1.5. Reporting

Upon completion of any unexpected finds reporting and the implementation of any required mitigation measures, post excavation reporting in accordance with the Heritage NSW, DCCEEW Aboriginal requirements will be undertaken within two years of the completion of the Project's archaeological works. The post-excavation report to be prepared by the Aboriginal Archaeologist in consultation with the RAPs. RAPs will review the draft report prior to finalisation.

5.2. Built heritage management

5.2.1. Design Requirements

This Project is a predominately construct-only project and detailed design has been completed by others. A number of designs need to be progressed to Issued for Construction (IFC). As outlined in Section 2, a number of heritage reports have been prepared during detailed design and the relevant mitigations therein have been incorporated into this Plan. Detailed HIAs were prepared for all stations which included an impact tracker for detailed design as well as detailed management and mitigation measures responding to the Stage 3 design. The designers are responsible for ensuring that applicable design revised Environmental Mitigation Measures are implemented as part of the change management process, including:

REMM NAH 1 -The project design would minimise adverse impacts to heritage buildings, elements, fabric, spaces and vistas that contribute to the overall heritage significance of the Bankstown Line.

REMM NAH 2 - The project design would maximise the retention and legibility of heritage buildings, structures, fabric, spaces and vistas that are individually significant and contribute to the overall heritage significance of the Bankstown Line.

REMM NAH 3 - The project design would complement retained heritage buildings, elements, fabric, spaces and vistas to avoid outcomes that compromise the significance of these heritage items

REMM NAH 4 - The project design would be developed with guidance from an appropriately qualified and experienced conservation architect.

These measures have been considered in the plan where appropriate and have been included in the management action checklist (refer to Table 13).

5.2.2. Conservation Architect

Work methodologies undertaken where heritage items will be directly impacted will be carried out with the oversight of a conservation architect in accordance with REMM NAH20.

The conservation architect will also be available to produce heritage impact assessments and advise JHLORJV during construction and work with the skilled trades people to facilitate good heritage outcomes.

5.2.3. Archival Photographic Recording

Archival photographic recording has been undertaken by Sydney Metro according to the methodologies of the following documents as specified in CoA E10 and E12 and REMM NAH13:

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

SWM3 would involve the protection modification to ARTC freight line overpass, Sydenham, removal of ARTC redundant infrastructure and the installation of new overhead wiring infrastructure, GST and utilities within the curtilages of several stations and bridges. SWM3 would also involve construction work after demolition works at Bankstown Station (Parcel office and Amenity Block already demolished, part of the station platform), Punchbowl Station (parcel office and Candy Shop) and close to Canterbury Station (Signalling Hut), meal room alterations at nine stations, and the installation of fencing and throw screens at the rail/road bridges.

Archival recording has been completed for the following:

- Marrickville Station
- Dulwich Hill Station
- Hurlstone Park Station
- Hurlstone Park Railway Underbridge
- Canterbury Station
- Canterbury (Cooks River) Underbridge
- Canterbury (Cooks River/Charles St) Underbridge – Main Line
- Old Sugarmill

- Campsie Station
- Belmore Station
- Lakemba Station
- Wiley Park Station
- Punchbowl Station
- Bankstown Railway Station Group
- Bankstown Parcels Office

Archival recording would be limited to areas of the heritage items where direct or visual impacts would be minor or greater than minor, or where the works would impact heritage items listed on the SHR. Where an archival recording has been previously prepared for a heritage item an additional archival recording would not be required as part of SWM3, this is the case for all stations as listed above.

Due to the minor nature of the works archival recordings would not be required for the heritage items which are located further from the SWM3 works or that would not be impacted, including:

- Sewage Pumping Station 271
- Stone house, including interiors
- South Dulwich Hill Heritage Conservation Area
- Inter-War Hotel (former Hotel Canterbury)
- Federation Post Office Building (former Canterbury Post Office)
- Electricity substation no. 275
- Federation House (former station master's cottage)
- Post-war bus shelter and public lavatories
- Lakemba Water Pumping Station (WP0003)
- Shop (Bankstown)

The Heritage Archival Recording Report will be prepared within two years of completion of S2B archival recording in accordance with condition E12 and submitted to the Planning Secretary, the Heritage Council of NSW and Heritage NSW, DEECCW.

In accordance with CoA E10, archival recording undertaken at each station will be captured within the Heritage Report prepared for the Project.

As outlined in Section 2, archival recording requirements have been met during the detailed design phase and are not applicable to this HMP.

5.2.4. Heritage Interpretation

In accordance with CoA E13, Sydney Metro prepared the Sydney City and Southwest: Sydenham to Bankstown Line Heritage Interpretation Strategy, and issued this for information to DPHI on 3 June 2020. In accordance with CoA E14, individual Heritage Interpretation Plans

have been prepared for each station precinct as part of the Sydney Metro Sydenham to Bankstown upgrade detailed design process. The Heritage Interpretation Plans will be implemented at the Project’s stations to reflect detailed design. As outlined in Section 2, these requirements have been met during the detailed design phase and are not applicable to this HMP.

Due to the more substantial body of work planned at Bankstown Station, the Bankstown Station Heritage Interpretation Plan will be implemented to reflect the detailed design for the station in accordance with E14 and NAH6.

Based on the limited SWM3 final conversion scope at Sydenham, no further interpretation is triggered and has already been completed under the CSSI 7400 Planning Approval.

5.2.5. Adaptive reuse

An Adaptive Reuse Strategy has been prepared for Bankstown Station as part of the Sydney Metro City and Southwest – Sydenham to Bankstown Project and was considered during the project’s detailed design. The Adaptive Reuse Strategy for Bankstown Station would be implemented where required.

5.2.6. Moveable heritage

In accordance with REMM NAH7, Sydney Metro prepared the *City and Southwest Movable Heritage Strategy* after consultation with and seeking moveable heritage registers from Sydney Trains. Where a moveable heritage item is required to be removed in order to undertake the proposed works at a station, such as at Bankstown Station (Table 11 & Table 12), the methods of relocation, storage and reinstatement outlines of the Strategy will be followed. The working Schedule in Appendix E will be updated once the current status of moveable heritage is established with Sydney Metro and Sydney Trains.

Table 11: Bankstown Parcels Office (former) moveable heritage

Sydney Trains Registration number	Description of object	Location within station	Sydney Trains Significance/ Condition (2019)	Artefact Significance/Condition (2020)
SM-BNK0013	Painted metal safe (green interior)	Station office	Moderate	Moderate / Good

Table 12: Bankstown Station moveable heritage

Sydney Trains Registration number	Description of object	Location within station	Sydney Trains Significance/ Condition (2019)	Artefact Significance/Condition (2020)
BNK0012	Orange Hand Lamp - signalling	Bankstown Station Office	Moderate / Good	Moderate / Good

5.2.7. Significant fabric register

As outlined in Section 2, a significant fabric register has been prepared and was considered during detailed design. A salvage register was prepared based on identification of significant

fabric and a number of elements have been required for salvage for the Project stations. This requirement has been met at the design phase and is not applicable to this HMP.

5.2.8. Works methodologies

In accordance with REMM NAH15, where work activities are likely to impact upon built heritage (as outlined in Table 9) JHLORJV will ensure methodologies for the removal of existing structures and construction of new structures will be developed and implemented during construction to minimise direct and indirect impacts to other elements within the curtilages of the heritage items, or to heritage items located in the vicinity of works. The methodology will be prepared by the nominated conservation architect where required and provided to JHLORJV and Sydney Metro.

5.2.9. Skilled tradespeople

In accordance with REMM NAH20, appropriately skilled tradespeople with experience working on heritage sites will be used for all works to conserve, protect or remove significant fabric. This includes works within the station buildings that involve the reuse, conservation or maintenance of significant fabric such as masonry, stonework, interiors and flooring. JHLORJV will notify Sydney Metro of the tradespeople nominated for the works. A conservation architect will be nominated for the Project in accordance with REMM NAH4, and this architect will be available to consult with the nominated tradesperson.

5.2.10. Exclusion zones

Physical exclusion zones, including hoarding or screening will be provided where the Project works are to be undertaken in close proximity to significant elements/fabric that is not approved to be impacted. In accordance with NAH16 exclusion zones are to be applied to protect fabric during construction works carried out at:

- Sydenham Station
- Marrickville Station
- Dulwich Hill Station
- Hurlstone Park Station
- Canterbury Station
- Campsie Station
- Belmore Station
- Lakemba Station
- Wiley Park Station
- Punchbowl Station
- Bankstown Station

Where works will be undertaken adjacent to a heritage item but not within the heritage curtilage, the exclusion zones will primarily be limited to identifying the nearby items on the environmental control map. As a minimum this will apply to SWM3 works within 5m from the listed items in section 3.2 of this management plan.

5.2.11. Works on significant fabric

HIAs were prepared by Artefact Heritage / Metron during the stations detailed design. The HIA include detailed recommendations on management of significant fabric including station buildings, bridges and platforms. These recommendations have been included in the management measures action checklist (refer to Table 13) and will be adhered to during construction by JHLORJV.

5.2.12. Landscape plan and environmental controls

Planting along the eastern boundary of the Canterbury Bowls Club (adjacent to the Sugarmill site) should be reinstated if trees are impacted for the site compound in accordance with NAH11. JHLORJV will prepare and implement the Landscape Plan should their activities result in impacts to the existing trees on the eastern edge of the site.

An area of Sydney Turpentine Ironbark Forest, a Threatened Ecological Community (TEC), which is also a heritage item listed on the Inner West LEP (Turpentine - Ironbark Forest Understorey, LEP no. I1222), is present along Garnett Street near Dulwich Hill Station. It is noted that this item is not included in the SPIR as it was not a listed on the LEP at the time. Works in proximity to the TEC will adhere to SWM3 construction environmental management plan to ensure that there are no impacts to sensitive vegetation or the heritage item.

5.3. Non-Aboriginal archaeological management

5.3.1. Archaeological Zoning

The AARDs for CSSI 7400 and CSSI 8256 divided the Project into archaeological management zones based on archaeological potential and construction impacts, with further refinement made to the management zones for Sydenham Station by Extent Heritage (2017) for the CHMP for the Sydenham Station and junction works.

Archaeological management zone mapping depicted at Sydenham Station, Marrickville Station, Canterbury Station including the Bowling Club, Belmore Station and Lakemba Station (,. to ,.) is based on a 'traffic light' coding:

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

5.3.2. Archaeological Management

Archaeological management will be undertaken in accordance with the works specific AMS documents and in accordance with the archaeological management zoning and AARD (refer to Figure 35 to Figure 39).

The HIA that was prepared as part of the PACA to assess the impacts that the proposed S2B works would have on potential non-Aboriginal archaeological resources within the Sydenham Station area to connect the projects, recommended that works in Zone 3 (where SWM3 scope would be located) be managed under the Sydney Metro Unexpected Heritage Finds Procedure. It was determined that this management was consistent with the management for

CSSI 8256. The same archaeological management will therefore be applied for SWM3 in both CSSI 7400 and CSSI 8256 project areas.

5.3.3. Archaeological Method Statement

An AMS will be prepared for the Project prior to sub-surface impacts within Red (Zone 1) and Amber (Zone 2) archaeological management zones as mapped Figure 35 to Figure 39. The AMS will include management for works within the defined areas of archaeological potential at Marrickville Station, Canterbury Station including the Canterbury Station compound site (Bowling Club), Belmore Station and Lakemba Station that will be impacted, as well as the procedure for managing unexpected archaeological finds. No works are planned within the area of potential (Zone 2) at Sydenham Station.

The AMS will include detail on archaeological potential and significance based on the AARD with additional information related to the subject site as required. It will include a methodology for archaeological management such as archaeological monitoring or test/salvage excavation (if required) in accordance with the AARD approved methodology. In accordance with REMM NAH12 the AMS will also include a methodology for analysis of heritage items, archaeological and artefact management strategies and a sieving strategy.

The AMS will be informed by the results of archaeological investigations undertaken as part of the wider S2B Project where available. As an example, following archaeological test excavations undertaken at Canterbury Compound as part of the previous SWMC scope no further test excavation is recommended for that area (Artefact Heritage 2021).

5.3.4. Excavation Directors

Before excavation of archaeological management sites, JHLORJV will nominate a suitably qualified Excavation Director (ED) who complies with the Heritage Council of NSW's *Criteria for Assessment of Excavation Directors* (September 2019) to oversee and advise on matters associated with historic archaeology and advise DPHI and Heritage NSW. Where impacts to State significant archaeology are proposed, an ED who meets the criteria for managing State significant archaeology will be required.

The nominated Primary Excavation Director is Dr Iain Stuart and the Secondary Excavation Director is Jayden van Beek. The Excavation Director will have input into any AMS for areas where local or State significant archaeology is to be impacted and would oversee archaeological investigations and responses to unexpected finds as required, including:

- Archaeological monitoring during excavation works at Marrickville, Canterbury, Belmore and Lakemba Stations within Zone 1 and 2 areas
- Programs of archaeological salvage excavation as required
- Responses to unexpected finds as required within the remainder of the Project Area.

Roles and responsibilities are discussed in Table 5.

5.3.5. Unexpected finds

In accordance with CoA E15 and E16 and REMM NAH 14 and NAH18, unexpected non-Aboriginal archaeological finds will be managed under the Sydney Metro Unexpected Heritage Finds Procedure (see Appendix D). In accordance with CoA E17, the Sydney Metro Unexpected Heritage Finds Procedure will be implemented for the duration of the Project's Construction's activities.

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

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

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

Notification under s146 of the Heritage Act 1977 will only be required if the relic was unexpected.

5.3.6. Clearance

A written clearance confirmation will be provided by the Primary Excavation Director to JHLORJV once archaeological management has been completed in an area. This will be signed off by Sydney Metro before works recommence. Construction will continue under the Sydney Metro Unexpected Finds Procedure (refer to Appendix D).

5.3.7. Human Remains

If suspected human remains are identified, the Sydney Metro Exhumation Management Plan will be implemented in accordance with CoA E15, E16 and E17 and REMM NAH19. It is not expected that human remains will be found as no potential burials were identified during research for the EIS and SPIR. In accordance with CoA E17, the Sydney Metro Exhumation Management Plan will be implemented for the duration of the Project's Construction's activities.

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

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

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

5.3.8. Storage of archaeological remains

Where possible artefact cleaning and preliminary cataloguing will occur on site, otherwise artefacts will be catalogued and stored off site at a location approved by Sydney Metro. Details on proposed sampling and analysis are provided in the AMS document in accordance with the AARD. A heritage specialist would create the artefact catalogue under oversight of the Primary Excavation Director.

5.3.9. Analysis and reporting

In accordance with CoA E10 and E11, a Historical Archaeological Excavation Report and/or Excavation Director's Report (EDR - if any heritage items of State significance that are discovered) will be prepared at the completion of works for the Project. The Historical Archaeological Excavation Report / EDR will be prepared in accordance with the standard requirements of an Excavation permit issued by the Heritage Council, and include:

- An executive summary of the archaeological programme;
- Due credit to the client paying for the excavation, on the title page;
- An accurate site location and site plan (with scale and north arrow);
- Historical research, references and bibliography;
- 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;
- Detailed response to research questions (at minimum those stated in the approved Research Design);
- Conclusions from the archaeological programme. The information must include a reassessment of the site's heritage significance, statement(s) on how archaeological investigations at this site have contributed to the community's understanding of the site and other comparable archaeological sites in the local area and any relevant recommendations for the future management of the site information and artefacts; and
- Details of how this information about this excavation has been publicly disseminated (for example provide details about Public Open Days and include copies of press releases, public brochures and/or information signs produced to explain the archaeological significance of the site).

In accordance with CoA E11 and E12, the Historical Archaeological Excavation Report / EDR will be prepared in consultation with Heritage NSW following the completion of the Sydenham to Bankstown Upgrade project works and submitted to the Planning Secretary, Heritage NSW for information within two years of completion of the Sydenham to Bankstown Upgrade project works.

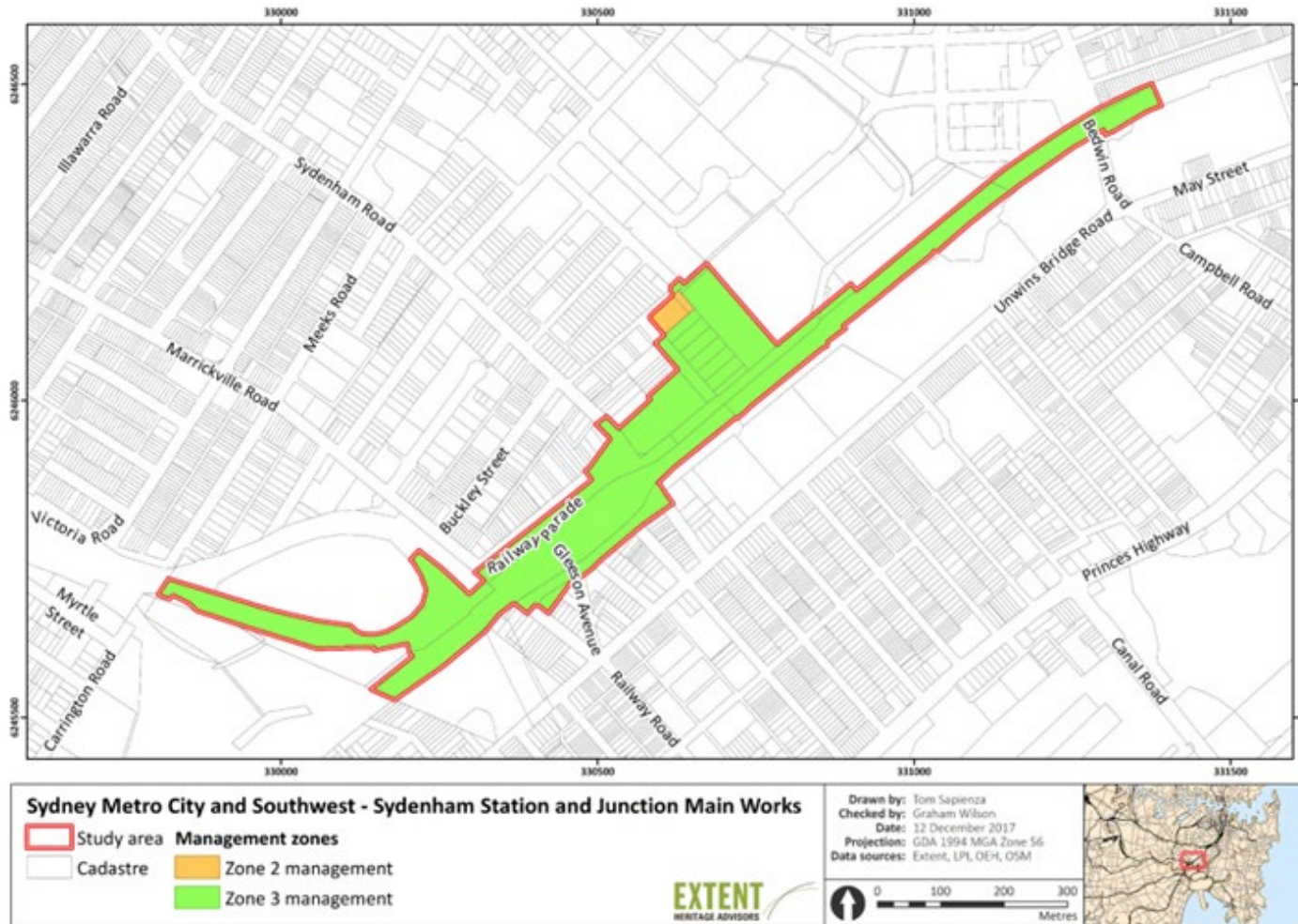


Figure 35: Archaeological Management zoning for Sydenham Station (Extent, 2017)



Figure 36: Archaeological Management zoning for Marrickville Station (Artefact Heritage 2018a)



Figure 37: Archaeological Management zoning for Canterbury Station (Artefact Heritage 2018a)



Figure 38: Archaeological Management zoning for Belmore Station (Artefact Heritage 2018a)



Figure 39: Archaeological Management zoning for Lakemba Station (Artefact Heritage 2018a)

5.4. Heritage awareness training and induction

All relevant personnel and contractors involved in the Project will be advised of the relevant heritage considerations and legislative requirements and cultural awareness training will be undertaken for all, including those involved with ground disturbing activities, which will include the following as relevant:

- Information on the heritage significance;
- Information on the Aboriginal archaeological and cultural heritage values of the Project;
- The location and type of archaeological sites within the Project and give instructions not to disturb these sites;
- Clear information about statutory obligations for heritage in accordance with the NSW National Parks and Wildlife Act 1974 (NP&W Act). It is important to note that failure to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the NP&W Act (as amended);
- How to identify stone artefacts and other Aboriginal heritage sites; and
- Stop works and reporting protocols for discovery of previously unknown heritage and archaeological items.

All relevant personnel and contractors involved in the Project will be advised of the relevant heritage considerations, legislative requirements and recommendations in the Project Heritage Assessment, AARDS, HIAs and AMS;

All personnel involved with ground disturbing activities are made aware of their obligations to avoid any impacts to non-Aboriginal heritage under the Heritage Act 1977:

- This will include information on historic heritage sites and 'relics' and information about statutory obligations under the NSW Heritage Act 1977;
- This will also include information on the potential for human skeletal remains and the requirements of the Sydney Metro Exhumation Management Procedure;
- Information relating to the nature of works and potential impacts via pre-starts at the start of activity; and
- Information about appropriate storage of materials, for example within designated laydown zones and only brought in when ready to install.

All training and tool box meetings will be recorded by JHLORJV. All project documentation, including environmental compliance and training records, will be kept as objective evidence of compliance with environmental requirements.

Further details regarding staff induction and training are outlined in Section 3.5 of the CEMP.

5.5. Ongoing notifications – unexpected finds

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

- For all unexpected heritage finds JHLORJV Environmental Manager shall notify the Environmental Representative and Sydney Metro Senior Heritage Advisor in accordance with the Sydney Metro Unexpected Finds Procedure;
- Notification under s146 will only be required if the relic was unexpected and will apply to relics of State significance;
- For unexpected Aboriginal archaeological finds, RAPs will be notified immediately;
- Notification to the RAPs will occur within 1 week where changes to the Project are identified that may have implications for Aboriginal heritage management (such as changes in design);
- Feedback requested from the RAPs should be received within two weeks and no later than four weeks from the date correspondence is issued;
- The appropriate address and format for responses shall be provided as part of the request. Where no response is issued within this timeframe, a follow-up phone call will be made by JHLORJV' Environmental Manager (or project Heritage Specialist/excavation director) to close out the outstanding request.

All notification and consultation records will be kept by JHLORJV and its relevant consultants.

6. Management action checklist

The management actions below are a quick reference to management required under the CoA, REMMS and recommendations of the HIAs prepared during detailed design.

Table 13: Management action checklist

Management Action	Timing	Responsibility	Description of Management	Location
General actions				
Undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoA and this plan.	Weekly during construction	Environmental Manager	<ul style="list-style-type: none"> Undertake weekly inspections and monitoring of construction activities to ensure compliance with the requirements of the CoAs and this plan. 	All stations
Daily inspections of controls will be undertaken by Supervisors during works.	Daily during construction	Site Supervisors	<ul style="list-style-type: none"> Complete daily inspections of the controls during works. 	All stations
All relevant personnel and contractors involved in the design and construction of the Project must be advised of the relevant heritage considerations, legislative requirements and commitments.	Pre-construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Ensure all personnel involved in earthworks or any type of disturbance are appropriately trained / inducted and made aware of the cultural significance of the area, including site identification and materials likely to be uncovered. Personnel will be instructed to notify the Environmental Manager in the event they identify any object which they believe to be of archaeological or cultural origin. 	All stations
Where impacts are identified outside the Project area	During construction	Environmental Manager	<ul style="list-style-type: none"> Non-compliance procedures outlined in the CEMP. Where practicable avoid additional impacts, or confirm appropriate mitigation measures. Ensure that Consistency Assessments are undertaken for any new impact areas and approval sought from Sydney Metro, as outlined in the CEMP. <p>Further consultation with RAPs will be required where a Consistency Assessment identifies additional impacts to Aboriginal heritage. The Consistency Assessment will outline appropriate mitigation measures.</p>	All stations

(Uncontrolled when printed)

Management Action	Timing	Responsibility	Description of Management	Location
Aboriginal stakeholder identification (RAP) and contact details in case of unexpected finds.	Pre-construction	Environmental Manager Archaeologist	<ul style="list-style-type: none"> Identify RAPs (Appendix B). Contact RAPs in accordance with the Sydney Metro Unexpected Finds Procedure in the case of unexpected finds of an Aboriginal object or potential Aboriginal human skeletal remains and/or Aboriginal burials RAPs should be consulted prior to test or salvage excavation commencing in accordance with the project ACHAR and should be given the opportunity to participate in any excavation works in accordance with the ACHAR. 	All stations
Nomination of an Excavation Director	Pre-construction	Environmental Manager	<ul style="list-style-type: none"> Before excavation of archaeological management sites, a qualified Excavation Director (ED) will be nominated who complies with the Heritage Council of NSW's Criteria for Assessment of Excavation Directors (September 2019) in accordance with the AARD. DPPI and Heritage NSW shall be advised of the nominated ED. 	All stations
Preparation of AMS	Pre-construction	Excavation Director	<ul style="list-style-type: none"> A works specific AMS will be prepared for this Project in accordance with the excavation methodology outlined in the AARD (NAH12). The AMS will be signed off by the Primary Excavation Director and will be prepared in consultation with the Environmental Representative. The AMS should note archaeological management required in the Canterbury Station compound site (Canterbury Bowls Club) where State significant archaeology may be present. 	All stations
Archaeological management	Construction	Excavation Director	<ul style="list-style-type: none"> Non-Aboriginal archaeological management is to be undertaken in accordance with the AARD and AMS. Zoning for the Project is shown in Figure 35 to Figure 39. Archaeological management will be undertaken in those portions of identified archaeological management zones at Marrickville, Canterbury, and Lakemba Stations. Details of required management will be outlined in the AMS. 	All stations
Notification and management of relics	Construction	Excavation Director	<ul style="list-style-type: none"> If any potential relics are located the ED will assess significance of the find and provide advice. If relics are of local or State significance and are not identified in the AARD or AMS the Heritage NSW will be notified under s146 of the NSW Heritage Act. 	All stations

Management Action	Timing	Responsibility	Description of Management	Location
Site clearance after archaeological management completed	Construction	Excavation Director	<ul style="list-style-type: none"> Site clearance will be required from the project archaeologist prior to construction commencing. This clearance will be in the form of a memo or email and will apply to a work specific area or the project sites as a whole, depending on stage of works. 	All stations
Unexpected finds procedures for Aboriginal objects.	Construction	Archaeologist	<ul style="list-style-type: none"> Following the discovery of previously unrecorded Aboriginal objects – works will cease in the immediate area and the area secured in accordance with the Sydney Metro Unexpected finds Procedure which in accordance with CoA E15, E16 and E17 and REMM AH5, NAH14 and NAH18. Assessment of the site/object and subsequent management of the site will be carried out in accordance with the Sydney Metro Unexpected Finds Procedure and the ACHAR (REMM AH2). In addition, the site will be recorded on standard AHIMS site cards and lodged with Heritage NSW Upon completion of any unexpected finds reporting and required mitigation measures, post excavation reporting in accordance with the Heritage NSW Aboriginal heritage requirements will be undertaken within two years of the completion of the Project. Post-excavation report to be prepared by the Aboriginal archaeologist in consultation with the RAPs. 	All stations
Unexpected finds procedures for human skeletal remains.	Construction	Archaeologist	<ul style="list-style-type: none"> Works will immediately cease in that area. The discoverer will immediately notify machinery operators so that no further disturbance of the remains will occur, as well as notify the foreman/site supervisor, JHLORJV, project archaeologist and Sydney Metro Environmental Representative (CoA E17, REMM NAH14, AH5, and NAH19). The Sydney Metro Exhumation Management Plan (CoA E15) will be enacted. Preliminary notification to the NSW Police will be undertaken by the Sydney Metro Heritage Program Manager. Once confirmation is received from the technical specialist that the remains are of human origin, there are three possible statutory pathways to follow based on the assessment. Refer to the Sydney Metro Exhumation Management Plan. No works to recommence until clearance is provided by Heritage NSW and/or the NSW Police as per the protocol outlined in the Sydney Metro Exhumation Management Plan. 	All stations

Management Action	Timing	Responsibility	Description of Management	Location
Conservation architect	During construction	Environmental Manager Conservation Architect Designers	<ul style="list-style-type: none"> A heritage conservation architect will be consulted where impacts to heritage items are proposed in accordance with NAH20. This will generally be in relation to reviewing work methodologies and advising on managing and minimising impacts to significant fabric within the heritage curtilage in accordance with REMM NAH 4. 	Within heritage, specifically all stations
Skilled tradespeople	During construction	Environmental Manager Engineers	<ul style="list-style-type: none"> Appropriately skilled tradespeople will be used for works that will impact significant fabric. This includes works within the station buildings that involve the reuse, conservation or maintenance of significant fabric such as masonry, stonework, interiors and flooring. JHLORJV will notify Sydney Metro of the tradespeople nominated for the works. 	All stations
Moveable Heritage	Pre-construction During construction	Environmental Manager Heritage specialist	<ul style="list-style-type: none"> Identified movable heritage items to be impacted are listed in Section 5.2.6. Where a movable heritage item is required to be removed in order to undertake the proposed works at a station, the methods of relocation, storage and reinstatement outlined in the Movable Heritage Strategy should be followed. 	All stations
Identification of significant fabric	Pre-construction During construction	Environmental Manager Heritage specialist	<ul style="list-style-type: none"> Significant fabric has been identified in the station specific Significant Fabric Registers. Where significant fabric is to be impacted appropriate management should be undertaken in accordance with the salvage strategy and the recommendations of the heritage impact assessments for design as outlined below. Specific fabric which will be impacted by Stage 3 design has been included in the Heritage Salvage Strategy 	All stations
Salvage of significant fabric	Pre-construction During construction	Environmental Manager Heritage specialist	<ul style="list-style-type: none"> Salvaged elements identified in the Heritage Salvage Strategy should be carefully salvaged, transported and stored in a safe and weather-proofed location, in keeping with the requirements of this report. Salvaged elements should be labelled to identify the origin of the element (i.e. station, building number, room designation), or where large volumes of material are salvaged (e.g. platform coping brick) these should be transported and stored in separately to avoid intermixing of materials from different locations. 	All stations

Management Action	Timing	Responsibility	Description of Management	Location
			<ul style="list-style-type: none"> Where significant fabric identified for salvage is found to be contaminated or effected by insects it should be disposed of in accordance with environmental control measures. 	
Storage of salvaged fabric	Pre-construction During construction	Environmental Manager Heritage specialist	<ul style="list-style-type: none"> All salvaged materials to be re-used during construction for the Project will be stored on site and will be the responsibility of JHLORJV to ensure their condition and security during works. All salvaged items will be affixed with removable labels to identify their provenance and stored in a safe and weatherproof environment. 	All stations
Vibration monitoring	During construction	Environmental Manager	<ul style="list-style-type: none"> Vibration monitoring will be undertaken in accordance with the Project's Noise and Vibration Management Plan. 	All stations
Fixing detail for installation of services	Pre-Construction During Construction	Designers Trades Engineers	<ul style="list-style-type: none"> Ensure sufficient detail is provided for the fixing components for the installation of services. Designers and conservation architects should be consulted for these details (in accordance with RMMM NAH4) 	All heritage items and within heritage curtilages
Removal of brick coping on the platforms	During construction	Conservation architect	<ul style="list-style-type: none"> That brick coping is removed along a single continuous horizontal line between brick coursework for the length of each platform, to ensure that a clean horizontal course of brick is preserved before the interface with new fabric above 	All stations
Conduit installations in the platform	During construction	Environmental Manager Conservation architect	<ul style="list-style-type: none"> That proposed conduits to be installed in the below-platform cavity are covered or painted in matte, recessive or neutral colours, to minimise their visibility. The installation of a removable screening panel over the conduit cavity, also painted in matte, recessive or neutral colours, should be considered, in order to conceal services located within while still allowing access for maintenance That conduits, cabling or new structures are not installed over or on to any lower remnants of original brick fabric If fixing details for services or conduit installation is insufficient on design, works are not to proceed until a conservation architect is consulted. 	All stations
Platform ventilation shafts	During construction	Environmental Manager	<ul style="list-style-type: none"> Platform modification works should not impact, cover or remove any existing subfloor ventilation vents. Should platform grading be 	All stations

Management Action	Timing	Responsibility	Description of Management	Location
		Conservation architect	proposed which will cover over these vents, small spacings should be kept open.	
Subfloor archaeology	During construction	Environmental Manager Excavation Director	<ul style="list-style-type: none"> Subfloor ground disturbance for these works should be managed under relevant provisions of the project Archaeological Research Design (AARD) 	All stations
Subfloor ventilation	During construction	Environmental Manager Conservation architect	<ul style="list-style-type: none"> The installation of the suspended concrete slab on concrete piers should ensure that the subfloor cavity around the perimeter of each room is left open to ensure passive ventilation Subfloor ventilation grates should be protected to prevent inadvertent damage during floor replacement works 	All stations
Repair of significant fabric	During construction	Environmental Manager Conservation architect Conservation Architect	<ul style="list-style-type: none"> Repainting works should follow relevant guidelines in Heritage Paint Schemes (RailCorp 2013). Protocols for repainting should match the existing colour scheme present at the station. Brickwork which is modified should be repointed following the completion of works as necessary, to ensure a clean and consistent external appearance Where the brickwork to the platform station buildings include a red stain to the mortar and tuck pointing. Ensure that the original condition is maintained and restored, as appropriate, where damage has occurred New ceilings, lighting, flooring and proposed interior window coverings should be carefully detailed to avoid impacting significant fabric (such as door and window frames, panels, lintels and skirting boards and cornices). Where works require the removal of existing intrusive fabric that adjoins original fabric (interior walls, services), the removal of the element should be conducted by hand to mitigate any potential heritage impact. During renovation works, any damaged and deteriorating original fabric should be restored and refreshed. Where a timber element is damaged, remove the entire thickness of the damaged area and geometrically splice in a matching section to the same thickness, shape, profile, form and species of the original timber. 	All stations

Management Action	Timing	Responsibility	Description of Management	Location
			<ul style="list-style-type: none"> Ensure that complementary coloured glass in colour and type is utilised in the top lights to the window sashes by replacing all non-coloured glass in the panes originally intended as coloured glass. 	
Installation of services	During construction	Environmental Manager Conservation architect	<ul style="list-style-type: none"> Existing penetrations into original fabric should be utilised where introduced fabric (new services and equipment) is to be located. Any existing penetrations that will not be utilised for new works should be repaired and made good. A suitably qualified heritage tradesperson should be engaged to complete these works Above ground conduit installation should endeavour to use existing penetrations and entry points to structures. Conduits should not cover significant fabric or areas of detailing wherever possible. Conduits and conduit casings should not introduce large noticeable structures or items in areas of significant detailing or within significant view lines. During detailed design, conduit works should adhere to the principles and guidelines outlined in the <i>Heritage Technical Note, Installation of New Electrical and Data Services at Heritage Sites</i> (Sydney Trains, 2017) to prevent minor cumulative impacts to fabric from occurring due to ad hoc conduit design solutions. Conduit design solutions should avoid ad hoc solutions which can cause further physical and visual impacts to heritage significant fabric New Combined Services Route (CSR) and Galvanised Steel Troughing (GST) will increase the visual clutter. Prior to the commencement of the Sydney Metro service operation, redundant Sydney Trains GST should be removed to minimise the impact of new services in the station area. 	All stations

7. Monitoring, auditing and reporting

7.1. Compliance

JHLORJV will regularly review the Project activities to ensure compliance with this Plan. A regular inspection program for heritage management will be conducted as follows:

- Details of daily inspection undertaken by JHLORJV' Site Supervisor will be logged in their respective site diaries, and maintenance will be undertaken during active site works;
- Routine weekly inspections are to be conducted by JHLORJV' Environmental Manager to monitor heritage management and implementation of this HMP at active worksites. Weekly inspections will be documented to maintain compliance and effectiveness of controls;
- Items that require action will be documented on the site environmental inspection. Items that require specific and detailed action will be recorded on the Project's Corrective Action Register, maintained by JHLORJV' Environmental Manager.

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

Records associated with this Plan will be maintained in accordance with Section 3.16 of the CEMP. Site inspections will be undertaken and records maintained within JHLORJV' Information Management System.

7.2. Archaeological monitoring

Archaeological monitoring of works which may impact significant archaeological remains will be undertaken in accordance with the AMS. Monitoring will be overseen by the Excavation Director.

7.3. Archaeological reporting

A preliminary results report will be prepared within two months of completion of archaeological work. This will be prepared under the direction of the Primary Excavation Director. An excavation report will be prepared within two years of completion of the Project's archaeological excavations in accordance with CoA E12.

8. Review and improvement

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies objectives and targets. JHLORJV will be responsible for carrying out these routine and ongoing evaluations.

The continuous improvement process will be designed to:

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

This HMP will be reviewed on a six-monthly basis and earlier if required taking into account the following:

- The status and progress of The Project's 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 Sydney Metro's Representative under the Deed;
- Where deemed appropriate in relation to items raised within inspections or audits;
- Lessons learnt from incident, events or near misses;
- Feedback from Compliance Tracking Reports; and
- Feedback on Construction Monitoring Program results.

8.1. Enquiries, complaints and incident management

Environmental incidents and non-compliances associated with heritage will be managed in accordance with Section 3.11 of the CEMP.

Enquiries and complaints that relate to heritage management will be managed in accordance with the Project's Overarching Community Communication Strategy and Section 3.7 of the CEMP.

9. HMP administration

9.1. Hold points

Heritage management hold points are included within Table 14: HMP hold points.

Table 14: HMP hold points

Item	Process Held	Acceptance Criteria	Approval Authority
Encounter of Unexpected Heritage Item	Commencement of works in the affected area	The Unexpected Finds Process as outlined in the HMP and Sydney Metro Unexpected Finds Procedure must be applied in the event of encountering unexpected/potential heritage items.	JHLORJV Environmental Manager (or delegate)
Construction identified as affecting buildings	Site activities	Building Condition Survey conducted by an appropriate professional nominated by the JHLORJV	JHLORJV Construction Manager

9.2. Records

Records associated with this management plan will be maintained in accordance with Section 3.16 of the CEMP. Records relating to heritage management will include (but are not limited to):

- Inspections undertaken in relation to heritage management measures;
- Archival recordings undertaken of any heritage item;
- Unexpected finds and stop work orders; and
- Records of any impacts avoided or minimised through construction methods.



Appendix A – Other Conditions of Approval, Revised Environmental Mitigation Measures and CEMF Requirements Relevant to this Plan

Other relevant Conditions of Approval relevant to the development of this Plan

CoA No.	Condition Requirement	Document Reference
E10	Following completion of Work described in the documents listed in Conditions A1 and A2 in relation to heritage items, a Heritage Report including the details of any archival recording, further historical research either undertaken or to be carried out and archaeological excavations (with artefact analysis and identification of a final repository for finds), must be prepared in accordance with any guidelines and standards required by the Heritage Council of NSW and OEH.	Section 5.2.3 Section 5.3.9
E11	An Excavation Director's Report (EDR) must be prepared for any heritage items of State significance that are discovered during Work. The EDR must be prepared in consultation with OEH	Section 5.3.9 Table 13
E12	The Heritage Report and Excavation Directors Report must be submitted to the Planning Secretary, the Heritage Council of NSW and OEH for information no later than 24 months after the completion of Work referred to in Condition E10.	Section 5.3.9 Table 13
E13	The Proponent must prepare a Heritage Interpretation Strategy which outlines a process to interpret key Aboriginal and non-Aboriginal heritage values and stories of heritage items in the final project design. The Heritage Interpretation Strategy must be prepared in consultation with the Heritage Council of NSW and submitted to the Planning Secretary for information before the commencement of Construction.	Section 5.2.4
E14	A Heritage Interpretation Plan(s) must be prepared, consistent with the Heritage Interpretation Strategy which identifies heritage items to be used in the final design of the project. The plan(s) must identify how items will be interpreted and provide a timeframe for their implementation which must be no later than the commencement of Operation. Heritage interpretation in any station precinct must be identified in the relevant Station Design and Precinct Plan(s) required in Condition E56. 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.	Section 5.2.4
E15	An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds in accordance with the guidelines and standards prepared by the Heritage Council of NSW or OEH	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D) Sydney Metro Exhumation Management Plan

CoA No.	Condition Requirement	Document Reference
E16	The Unexpected Heritage Finds and Human Remains Procedure must be prepared by a suitably qualified and experienced heritage specialist in consultation with the Heritage Council of NSW and submitted to the Planning Secretary for information no later than one (1) month before the commencement of Construction	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D) Sydney Metro Exhumation Management Plan
E17	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Construction and during Operational maintenance Work. Note: Human remains that are found unexpectedly during Work are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)

Revised Environmental Mitigation Measures relevant to the development of this Plan

REMM No.	REMM Requirement	Timing	Document Reference
Non-Aboriginal Heritage			
NAH1	The project design would minimise adverse impacts to heritage buildings, elements, fabric, spaces and vistas that contribute to the overall heritage significance of the Bankstown Line.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 13
NAH2	The project design would maximise the retention and legibility of heritage buildings, structures, fabric, spaces and vistas that are individually significant and contribute to the overall heritage significance of the Bankstown Line.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1 Table 13

REMM No.	REMM Requirement	Timing	Document Reference
NAH3	The project design would complement retained heritage buildings, elements, fabric, spaces and vistas to avoid outcomes that compromise the significance of these heritage items	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1, Table 13
NAH4	The project design would be developed with guidance from an appropriately qualified and experienced conservation architect.	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 5.2.1, Table 13
NAH5	Where heritage significant items or elements are to be retained within the operational area, an adaptive reuse strategy would be prepared by an appropriately qualified and experienced heritage architect.	Design/pre-construction	Section 5.2.5 Table 13
NAH6	A Heritage Interpretation Plan would be prepared to document the development of the Bankstown Line and detail the history of each station and its contribution to both the Bankstown Line and the surrounding suburbs. Appropriate heritage interpretation would be incorporated in the design and would provide legible connection between stations.	Design/pre-construction	Section 5.2.4 Table 13
NAH7	A moveable heritage item strategy would be prepared by an appropriately qualified and experienced heritage specialist in consultation with Sydney Trains, and would include a comprehensive record of significant railway elements to be impacted. This would include items contained within station and platform buildings as well as of any other significant equipment within the curtilage of the heritage railway stations. The moveable heritage item strategy would form part of the broader interpretation strategy.	Design/pre-construction	Section 5.2.6, Table 13
NAH8	Where significant buildings are to be re-purposed or refreshed: <ul style="list-style-type: none"> the inherent character of the building should be retained with new additions, including form, palette and materiality, sympathetic to its heritage values a suitably qualified and experienced heritage architect should advise on appropriate materials and finishes which would be sympathetic to the heritage values of each individual station the internal layout of the building should be retained where possible, and rooms should not be subdivided unless it can be completed without adverse 	Design/pre-construction	This Project's scope does not include design. This requirement was fulfilled during the design phases of the Sydenham to Bankstown project. Section 2.1 Section 5.2.1 Section 5.2.7

REMM No.	REMM Requirement	Timing	Document Reference
	<p>impact and/or is reversible without any long term adverse impact</p> <ul style="list-style-type: none"> • a significant element register should be prepared by a suitably qualified and experienced heritage architect. The register should list significant fabric, assess its condition, tolerance for change and recommend retention or salvage • where fabric of high significance is to be removed, adequate assessment should be carried out that outlines impact and justification in accordance with the Statements of Heritage Impact guidelines (NSW Heritage Council 2002) 		<p>Table 13</p> <p>A statement of heritage impact has been completed during design stage along with a significant elements register to satisfy this requirement.</p>
NAH9	<p>The design and materials used for the construction of new access stairs, concourses, canopies and lift shafts should be as sympathetic as possible to the existing character of the stations with the aim of minimising visual impacts.</p> <p>The design should use unobtrusive, modern, lightweight materials such as glass panelling and slim frame elements. The Design Review Panel should be consulted in regard to the design, form and material of these additions.</p>	Design/pre-construction	<p>This Project's scope does not include design.</p> <p>This requirement was fulfilled during the design phases of the Sydenham to Bankstown project.</p> <p>Section 5.2.1</p> <p>Table 13</p>
NAH10	<p>Where platforms are re-levelled, door thresholds and steps should be accessible without raising or relocation of entries. Sub-floor ventilation should remain open to avoid long term impacts to the structures.</p>	Design/pre-construction	<p>This Project's scope does not include design.</p> <p>This requirement was fulfilled during the design phases of the Sydenham to Bankstown project.</p> <p>Section 5.2.1.,</p> <p>Table 13</p>
NAH11	<p>A landscape scheme would be prepared for the Old Sugarmill to re-instate planting within and close to the curtilage of the item. The scheme would consider appropriate period plants and trees. Any boundary wall treatment would be designed in consultation with a heritage architect.</p>	Design/pre-construction	<p>Section 5.1.14</p> <p>Section 5.2.2</p>
NAH12	<p>The archaeological research design, including any mitigation measures identified in the Archaeological Assessment and Research Design report, would be implemented.</p>	Design/pre-construction	<p>Section 5.3.3</p>
NAH13	<p>Photographic archival recording would be carried out in accordance with the 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).</p>	Design/pre-construction	<p>Section 5.2.3</p> <p>Table 13</p>
NAH14	<p>An unexpected finds procedure would be developed and included in the construction heritage management plan.</p>	Design/pre-construction	<p>Section 5.1.3</p>

REMM No.	REMM Requirement	Timing	Document Reference
			Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
NAH15	Methodologies for the removal of existing structures and construction of new structures would be developed and implemented during construction to minimise direct and indirect impacts to other elements within the curtilages of the heritage items, or to heritage items located in the vicinity of works.	Construction	Section 5.2.8 Table 13
NAH16	All retained heritage buildings, structures, fabric and moveable heritage items would be protected to avoid damage during works in the vicinity of these items, including from vibration. Retained significant buildings or elements susceptible to damage would be protected by hoardings or screens.	Construction	Section 5.2.10 Table 13
NAH17	Prior to construction commencing, a detailed inventory of all buildings, structures, fabric, spaces and vistas of heritage significance that are to be retained or removed would be prepared by appropriately qualified and experienced heritage specialists. The inventory must provide an assessment of the heritage impact based on the significance of each element and sub-element that comprises it and include recommendations for protection and conservation relative to the identified level of heritage significance.	Construction	Section 2.1 Section 5.2.7
NAH18	In the event that unexpected archaeological remains, relics, or potential heritage items are discovered during construction, all works in the immediate area would cease, and the unexpected finds procedure would be implemented.	Construction	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
NAH19	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Transport for NSW Exhumation Management Plan would be implemented.	Construction	Section 5.1.3 Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
NAH20	All works to conserve, protect or remove significant heritage fabric would be undertaken by skilled tradespeople with experience working on heritage sites, in consultation with an appropriately qualified conservation heritage architect.	Construction	Section 5.2.9 Table 13
NAH23	Prior to the removal of the Bankstown Parcels Office (former), a heritage salvage and moveable heritage register should be prepared, identifying those significant elements which can be removed and retained for potential reuse.	Design/pre-construction	The removal of Bankstown Parcels Office is not within this scope of this Project (previously completed). This REMM is not relevant to this Plan.
Aboriginal Heritage			

REMM No.	REMM Requirement	Timing	Document Reference
AH1	Aboriginal stakeholder consultation would continue to be undertaken in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECC, 2010).	Pre-construction	Consultation with RAPs was undertaken during concept design as part of the Sydney Metro Sydenham to Bankstown EIS and also during preparation of the ACHAR RAPs would be involved if Aboriginal objects were identified during excavations. Section 1.4 Section 5.1.5 Section 5.5 Section 6 Table 13
AH2	The Aboriginal Cultural Heritage Assessment Report would be implemented.	Pre-construction	
AH3	Archaeological test excavation (and salvage if required) would be carried out at S2B PAD02 at Punchbowl Station. Excavations would be conducted in accordance with the methodology outlined by the Aboriginal cultural heritage assessment report.	Pre-construction	S2B PAD02 is not within the Project area therefore this measure is not relevant to this current scope of works and Plan.
AH4	Appropriate Aboriginal heritage interpretation would be incorporated into the design in consultation with Aboriginal stakeholders.	Pre-construction	Section 5.2.4
AH5	If potential Aboriginal items are uncovered during the works, all works in the immediate area would cease, and the unexpected finds procedure included in the construction heritage management plan would be implemented. During pre-work briefings, employees would be made aware of the unexpected finds procedures and obligations under the National Parks and Wildlife Act 1974.	Construction	Section 5.1.3 Sydney Metro Unexpected Finds Procedure (Appendix D)

Construction Environmental Management Framework requirements relevant to the development of this Plan

CEMF Section	CEMF Requirement	Document Reference
10.1(a)	<p>The following heritage management objectives will apply to construction:</p> <p>Embed significant heritage values through any architectural design, education or physical interpretation.</p> <p>Minimise impacts on items or places of heritage value.</p> <p>Avoid accidental impacts on heritage items.</p> <p>Maximise worker’s awareness of indigenous and non-indigenous heritage</p>	<p>Significant heritage values have been embedded in the heritage interpretation design development of the Project.</p> <p>Section 1.3</p> <p>Section 5.2.4</p> <p>Section 5.2.10</p> <p>Section 5.2.11</p> <p>Section 5.3.2</p> <p>Section 5.4</p>
10.2(b)	The Contractor’s regular inspection will include checking of heritage mitigation measures	Section 7
10.2(c)	Compliance records will be retained by the Contractor. These will include:	-
i.	Inspections undertaken in relation to heritage management measures	Section 7
ii.	Archival recordings undertaken of any heritage item	Section 5.2.3
iii.	Unexpected finds and stop work orders	<p>Section 5.1.3</p> <p>Section 5.3.5</p> <p>Sydney Metro Unexpected Finds Procedure (Appendix D)</p>
iv.	Records of any impacts avoided or minimised through design or construction methods	<p>Section 7</p> <p>Section 8</p>
10.3(a)	Examples of heritage mitigation measures include:	-
i.	Any heritage item not affected by the works will be retained and protected throughout construction.	Section 5.2.10
ii.	During construction undertake professional archaeological investigation, excavation, and reporting of any historical Indigenous heritage sites of state significance which will be affected. Reporting may be completed as construction progresses	<p>Section 5.1</p> <p>Section 5.3</p>
iii.	Undertake archival recordings of all non-Indigenous heritage items affected by the works prior to commencement of works	Section 5.2.3
iv.	Implement unexpected heritage find procedures for Indigenous and non-Indigenous heritage items.	Section 5.1.3

CEMF Section	CEMF Requirement	Document Reference
		Section 5.3.5 Sydney Metro Unexpected Finds Procedure (Appendix D)
Table 17.4	<p>The design is sympathetic to the historic significance of existing stations, and where practicable, avoids and minimises impacts to heritage.</p> <p>The preferred project retains, and where possible, repurposes all heritage elements.</p> <p>The design and mitigation strategies are reviewed by the Sydney Metro Design Review Panel.</p> <p>Impacts on heritage are managed in accordance with relevant legislation, including the EP&A Act, the Heritage Act 1977, and relevant guidelines.</p> <p>Potential impacts are managed by the mitigation measures.</p>	<p>This Project works do not include design.</p> <p>This requirement was fulfilled during the design phases of the Sydenham to Bankstown project.</p> <p>Section 5.2.1 ,. Table 13 ,*</p>

Appendix B – Registered Aboriginal Parties

Note: RAPs will be involved if Aboriginal objects are identified during excavations.

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

Stakeholder
Aboriginal Archaeology Service INC
Bilinga Cultural Heritage Technical Services
DACHA
Darug Land Observations PTY LTD
Duncan Suey & Associates
Gandangara Local Aboriginal Land Council
Gundungurra Tribal Technical Services
Gunyu Cultural Heritage Technical Services
Kamilaroi-Yankuntjatjara Working Group
Metropolitan Local Aboriginal Land Council
Munyunga Cultural Heritage Technical Services
Murri Bidgee Mullangari Aboriginal Corporation
Murrumbul Cultural Heritage Technical Services
Tocomwall
Wingikara Cultural Heritage Technical Services
Woronora Plateau Gundangarra Elders Council



Appendix C – Consultation Register

SWM3 Consultation CoA C3

Submission date	Returned date	Agency	Key issues raised	section of plan referenced
26/07/2024	Did not assess and review in allocated timeframe prior to submission to DPHI.	Canterbury Bankstown City Council	<ol style="list-style-type: none"> 1. Report needs referral to the Aboriginal Liaison officer. 2. Recommend that the project have a dedicated heritage liaison officer with known contact details so if issues arise there is an accessible means of communication (like the Excavation Director). Like in Part 5.3.4 where the ED is nominated the Heritage Consultant, Conservation Architect and Heritage Engineer should be nominated . 3. Page 10 - The lists of Heritage Items etc. do not include the Hurlstone Park HCAs and items near the corridor. The corridor works need to be mindful of these. 4. NAH11-Landscape works should be undertaken in consultation with the owners of the Sugarmill and Council as well. 5. Council should be provided with a digital copy of the archival recording (see also Section 5.2.3) 6. As far as I am aware the parcels office has not been demolished – it was still there 	<ol style="list-style-type: none"> 1. Refer to S1.4. Consultation with Registered Aboriginal Parties (RAP) was undertaken during concept design as part of the Sydney Metro Sydenham to Bankstown EIS and also during the preparation of the Aboriginal Cultural Heritage Assessment Report (ACHAR). No further RAP consultation is required under the CoA or REMM in the preparation of this HMP. RAPs will be involved if Aboriginal objects were identified during excavations. 2. Refer to S8.1 for the Incident Management Procedure, S9.1 & Appendix D for project hold points including unexpected finds protocol. The ED is named in S5.3.4 as this position is a CoA E12. The commitment to have an Heritage Consultant advice is stated in S5.2.13. Furthermore NAH4 commits to appropriately qualified and experienced conservation architect, NAH 20 comits to All works to conserve, protect or remove significant heritage fabric would be undertaken by skilled tradespeople with experience working on heritage sites, in consultation with an appropriately qualified conservation heritage architect.

<p>recently. As such, this requirement is still valid.</p> <p>7. Table 7 does not list all heritage items in and near the Project area. For example, around Hurlstone Park the HCAs are missing, as is the former station master’s cottage on Floss Street (item 178).</p> <p>8. Figure 16 does not show all heritage items that are on this map.</p> <p>9. Figure 18 does not show all heritage items that are on this map.</p> <p>10. Figure 21 does not show all heritage items that are on this map.</p>	<p>3. Hurlstone Park Heritage Conservation Area added to page 10 and Table 7 to be consistent with Figures 11 & 12.</p> <p>4. Not relevant to SWM3 Scope of works as no trees have been impacted to the east of the Compound set up.</p> <p>5. Sydney Metro will provide digital copy of the archival recording to Council.</p> <p>6. The Bankstown Parcel office was approved for demolition as part of Mod-1 of CSSI 8256. The demolition was completed 25/08/24.</p> <p>7. Hurlstone Park Heritage Conservation Area added to page 10 and Table 7 to be consistent with Figures 11 & 12.</p> <p>8/9/10. All Figures include all items that are listed on the Canterbury-Bankstown Local Environmental Plan 2023, Part 2 Heritage conservation areas.</p>
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26/07/2024	15/08/2024	Inner West Council	<ul style="list-style-type: none"> • There does not appear to be a mechanism for reporting on the impacts on the Inner West Local Environmental Plan 2022 listed items of environmental heritage within the Inner West Local Government Area that might arise out of the works that form part of this package. • We acknowledge that the majority of impacts are to the station buildings identified within the Heritage Impact Statement reviewed. We are satisfied that the process of assessing heritage impact on these structures has been undertaken. A copy of the assessments on these station buildings should be provided to Council. 	<p>Refer to S 3.4 of the SWM3 CHMP</p> <ul style="list-style-type: none"> • All potential impact to heritage items have been assessed with in the CHMP, HIA and AMS based on the approved scope of works. No changes are anticipated at this point in time. Should there be any changes that may impact Inner West Local Environmental Plan 2022 listed items IWC will be notified by Sydney Metro. • Sydney Metro will provide a copy of the Heritage Impact Assessments to Inner West Council.
2/08/2024	13/08/2024	Heritage NSW Department of Climate Change, Energy, the Environment and Water As Delegate of the Heritage Council of NSW	<p>As delegate of the Heritage Council of NSW, I provide the following comments:</p> <ul style="list-style-type: none"> • the HMP has been developed in accordance with the CEMF and CEMP • the HMP complies with the Revised Environmental Mitigation Measures • provision of the HMP to Heritage NSW as part of a consultation process in accordance with condition C3 of the Sydenham to Bankstown project (SSI-8256) has been met. 	NA



Appendix D – 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
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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 2010*¹; 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 handcraft 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.

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 <i>Heritage Act 1977</i>
NPW Act	NSW <i>National Parks and Wildlife Act 1974</i>
OEH	Office of Environment and Heritage
SM	Sydney Metro
Relic (non-Aboriginal heritage)	<p>A relic means any deposit, artefact, object or material evidence that:</p> <ul style="list-style-type: none"> a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and b) is of State or local significance. <p>A relic may include items such as bottles, utensils, remnants of clothing, crockery, personal effects, tools, machinery and domestic or industrial refuse.</p>
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).

“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”³.

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

IMPORTANT!

All 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.

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.

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
<i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i>	Section 115ZB Giving of approval by Minister to carry out a project.
<i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i>	Requires heritage to be considered within the environmental impact assessment of projects. 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.
<i>Heritage Act 1977 (Heritage Act)</i>	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: <i>‘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.’</i> 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.

Relevant Requirement	Objectives and offences
<p>National Parks and Wildlife Act 1974 (NPW Act)</p>	<p>The NPW Act provides the basis for the care, protection and management of Aboriginal objects and places in NSW.</p> <p>An Aboriginal object is defined as: <i>‘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’.</i></p> <p>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).</p> <p>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.</p> <p>A person must notify OEH if a person is aware of the location of an Aboriginal object.</p> <p>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).</p>

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.

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)

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 that approval or permit. There is no further requirement to follow this procedure. If no , continue to next step.	Contractors Project Manager	
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. 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.	Contractors Project Manager, Excavation Director	
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)

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. <i>the item is not a 'relic', a 'heritage item' or an 'Aboriginal object'</i>). 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. <i>the item is not a 'relic' or a 'heritage item' or an 'aboriginal item'</i>). 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. 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.	Archaeologist/ Aboriginal heritage consultant/ Contractors Project Manager, Excavation Director	Proceed to Step 8 Refer to Appendix 1 (Identifying heritage items)

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.		

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		

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 <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> .
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

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 6 - 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).

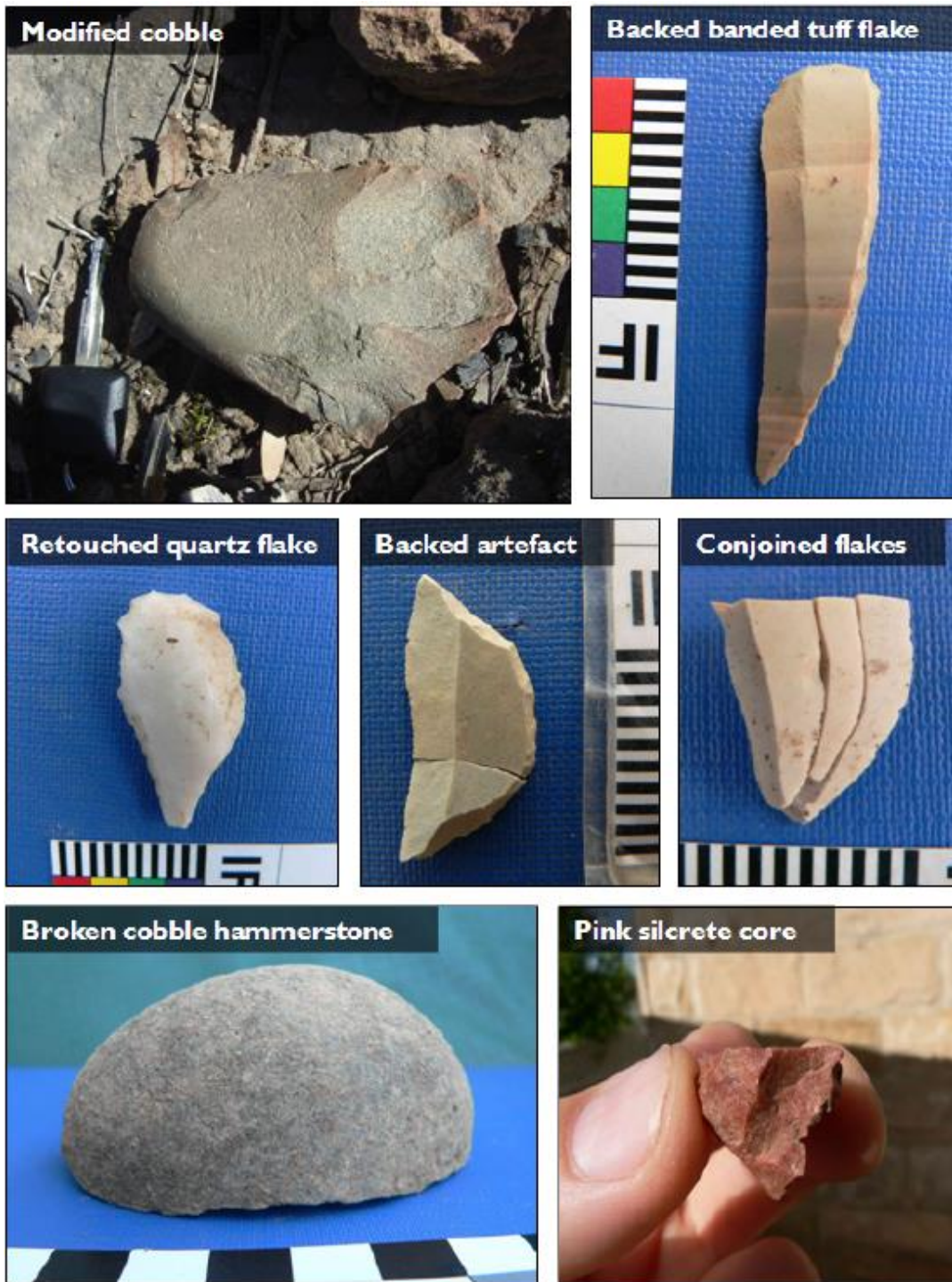


Photo 11 - Top left hand picture continuing clockwise: Stock camp remnants (Hume Highway Bypass at Tarcutta); Linear archaeological feature with post holes (Hume Highway Duplication), Animal bones (Hume Highway Bypass at Woomargama); Cut wooden stake; Glass jars, bottles, spoon and fork recovered from 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 <i>(What type of item is it likely to be? Tick the relevant boxes).</i>			
A. A relic	<input type="checkbox"/>	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'	<input type="checkbox"/>	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	<input type="checkbox"/>	An 'Aboriginal object' may include stone tools, stone flakes, shell middens, rock art, scarred trees and human bones	
D. Bone	<input type="checkbox"/>	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	<input type="checkbox"/>		
Provide a short description of the item <i>(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).</i>			

(Uncontrolled when printed)

<p>Sketch <i>(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 re-excavate it. In addition, please include details of the location and direction of any photographs of the item taken)</i></p>			
<p>Action taken (Tick either A or B)</p>			
<p>A. Unexpected item would not be further impacts on by the works</p>	<input type="checkbox"/>	<p>Describe how works would avoid impact on the item. (E.g. the rail tracks would be left in situ and recovered with paving).</p>	
<p>B. Unexpected item would be further impacted by the works</p>	<input type="checkbox"/>	<p>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.)</p>	
<p>Excavation Director</p>		<p>Signature</p>	
		<p>Signature</p>	

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 **inform the police by telephone** 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.

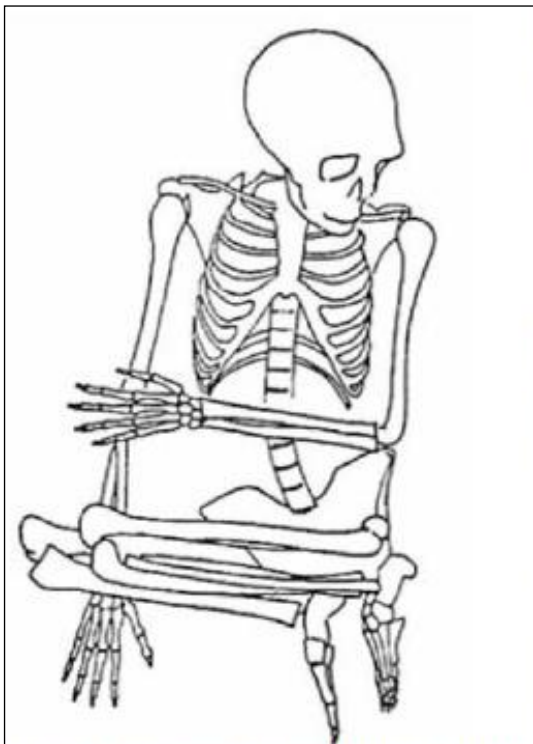


Figure 1: Schematic of a complete skeleton that is 'obviously' human¹².



Figure 2: Disarticulated bones that require assessment to determine species.

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

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.

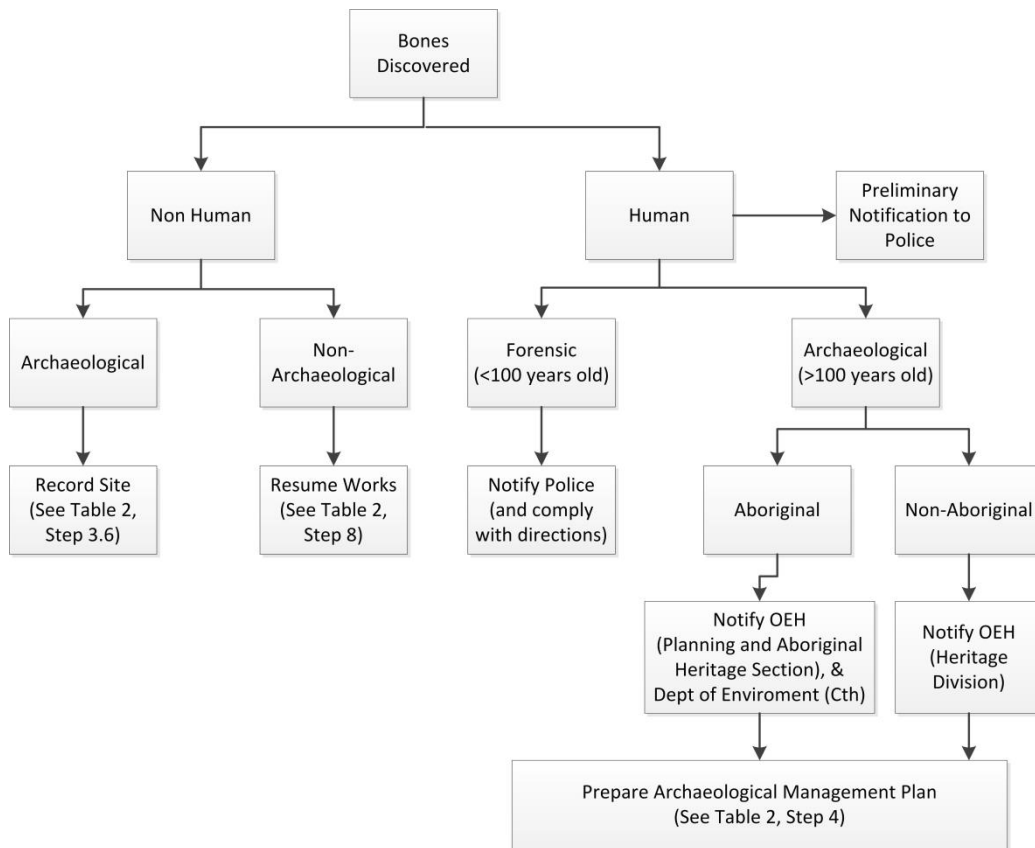


Figure 3 Overview of steps to be undertaken on the discovery of bones

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

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	

Appendix 6 - Template notification letter

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

XXX

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]

Appendix E – Example of Working Schedule

- Sydney Metro City and Southwest – Adaptive Reuse Strategy
- Sydney Metro City and Southwest – Moveable Heritage Strategy
- Sydney Metro City and Southwest – Heritage Salvage Strategy
- Sydney Metro City and Southwest – Dulwich Hill Station Significant Fabric Register

Bankstown Station
Stage 2 Schedule 202

Item #	Location	Item Description	Image	Priority	Level of Risk, when completed	Primary Report Action	Contract Status	Contract Details with SMCs	Final Measurement Action	Comments, close out action
BP0-1	Bankstown Parade Office (Bentley) Exterior of the building	Lower bricks relief tiling		High	Little to moderate	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Material in poor condition should be discarded. Items are to be labelled and stacked properly (SMT / paperwork) before handling to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location. Potential opportunities to repair within Bankstown Station interpretation and new site plan.				
BP0-2	Bankstown Parade Office (Bentley) Exterior of the building	Moulded and rounded / curved bricks		High	Little to moderate	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) before handling to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location. Material in poor condition should be discarded. Potential opportunities to repair within Bankstown Station interpretation and new site plan.				
BP0-3	Bankstown Parade Office (Bentley) Exterior of the building	Circular porthole windows (steel framing)		High	Little to moderate	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) before handling to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location. Potential opportunities to repair within Bankstown Station interpretation and new site plan.				
BP0-4	Bankstown Parade Office (Bentley) Exterior of the building	Horizontal orientated windows (steel framing)		High	Moderate	Reuse of this fabric within the 'window in steel' interpretation details. Reuse the existing material to maintain the window form. Final use for the project, window is to be salvaged and stored by Sydney Trains for future repair and maintenance of their assets. Items are to be labelled and stacked properly (SMT / paperwork) before handling to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location. Engage with Sydney Trains to agree and coordinate on the above matter.				
BP0-5	Bankstown Parade Office (Bentley) Exterior of the building	Decorative metal marking (Bankstown Parade Office)		Expansive	Moderate	Labels could be used to communicate the location of the demolished building within the new site plan. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location.				
BP0-6	Bankstown Parade Office (Bentley) Internal walls	Painted signage to walls, associated with the Person's Office (Person's Office, South, Area 2A)		Moderate	Little	Potential opportunities to repair within Bankstown Station interpretation and new site plan. Detail archival record to be taken, then dispose safely if not able to reuse on site.				
BP0-7	Bankstown Parade Office (Bentley) Internal of the building	Internal concrete slab, bearing, general signage to flooring associated with Person's Office function (barbaric locations related to the New South Wales Government and more...)		Moderate	Little	Potential opportunities to repair within Bankstown Station interpretation and new site plan. Detail archival record to be taken, then dispose safely if not able to reuse on site.				
BP0-8	Bankstown Parade Office (Bentley) Internal of the building	Large sliding door and associated hardware (signal or access equipment, within aluminium a replacement)		High	Little to moderate	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location. Potential opportunities to repair within Bankstown Station interpretation and new site plan.				
BP0-9	Bankstown Parade Office (Bentley) Internal of the building	Daylight window to double door (east elevation)		Moderate	Little to none	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location.				
BP0-10	Bankstown Parade Office (Bentley) Internal of the building	Timber doors to western elevation		Moderate	Little to none	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location.				
BP0-11	Bankstown Parade Office (Bentley) Internal of the building	Timber doors to internal stairs (Bentley) and signage		Moderate	Little to none	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location.				
BP0-12	Bankstown Parade Office (Bentley) Internal of the building	Sink fitting to bathroom		High	Little to moderate	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location.				
BP0-13	Bankstown Parade Office (Bentley) Internal of the building	Dark light switch coverings		Moderate	Little to none	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location.				
BP0-14	Bankstown Parade Office (Bentley) Modular bins	Painted metal unit (green interior)		Moderate	Moderate	Unengaged and stored by Sydney Trains for future repair and maintenance of their assets. Engage with Sydney Trains to agree and coordinate on the above matter. Items are to be labelled and stacked properly (SMT / paperwork) to protect from dust and debris and to grant a long term integrity before being handled to Sydney Trains. Items are to be stored in a lockable and weatherproof (with appropriate temperature and humidity and temporary) location.				

No significant fabric is proposed to be demolished or removed from any of the station or concourse buildings, or any other element of significance to the site occupying the platform discussed above according to Stage 2 findings. No salvage schedule has been prepared for the building on the Bakersdown Station platform or concourse.

Item #	Location	Item Description	Image	Significance	Significance of Fabric when removed	Salvage/Reuse Action	Current status	Current status with fabric	Final Management Action	Comments / Proposed actions
EW0212	Bakersdown Station Office	Orange hand Lamp		Moderate	Moderate	Salvaged and stored by Sydney Trains for future repair and maintenance and other assets. Engage with Sydney Trains to agree and incorporate in the above register. Item is to be labelled and standard generally used throughout Sydney Trains. Item is to be stored in a lockable and monitored (with appropriate temperature and humidity and temperature) location.				

Appendix F – SWM3 Heritage Impact Assessment and Archaeological Method Statement


Non-Aboriginal Heritage Impact Assessment and Archaeological Method Statement

Sydenham to Bankstown - Southwest
Metro Conversion and Station Works
Package 3

Report to JHLORJV

July 2024



 artefact

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1.0 INTRODUCTION

1.1 Project background

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

The Minister's Conditions of Approval (CoA) for SWM (CSSI-8256) were granted on 12 December 2018. On 22 October 2020 modifications to the Bankstown Station section of SWM (Mod 1) was approved and revised CoA were granted (CSSI 8256-Mod 1).

The John Holland Laing O'Rourke Joint Venture (JHLORJV) (the Proponent) are undertaking a package of works known as Southwest Metro Conversion and Station Works Package 3 (SWM3), which consists of construction works within the railway corridor and at several stations along the SWM alignment. The works would be undertaken within the curtilage of the state significant Marrickville Railway Station Group, Canterbury Railway Station Group and Belmore Railway Station Group, as well as adjacent to the state significant Old Sugarmill and within and adjacent to 19 other items listed on Section 170 Heritage and Conservation Register and relevant Local Environmental Plans (LEP). The works would also be undertaken within the areas of archaeological potential identified at Marrickville Station, Canterbury Station, Belmore Station and Lakemba Station.

In addition to activities along the SWM alignment, SWM3 will include works within Sydenham Station and the junction area to the southwest of the station. These areas are located outside of the SWM project boundaries and are instead part of the approved boundaries of the Sydney Metro City and Southwest – Chatswood to Sydenham Project (CSSI-7400). The Sydney Metro City – Chatswood to Sydenham Project was approved on 9 January 2017, and Modification 4, which assessed Sydenham Station and the rail junction to the southwest, was approved on 13 December 2017 (CSSI-7400-Mod-4) and revised CoA were granted. A Planning and Consistency Assessment (PACA) however has been prepared by Sydney Metro to allow for the necessary corridor works between Marrickville and Sydenham stations to connect works in project areas across both CSSI_7400 and CSSI_8256. These will be delivered as part of SWM3. The PACA was supported by a separate Aboriginal and non-Aboriginal Heritage Impact Assessment (HIA),¹ and therefore discussion of Sydenham Station is excluded from this report.

This HIA provides non-Aboriginal archaeological impact assessments for the affected areas of archaeological potential to provide archaeological mitigation measures for the works. This report also provides an impact assessment of the remaining heritage items that would be affected by SWM3 to inform the heritage and mitigation recommendations for the works. This report informs a Construction Heritage Management Plan (CHMP) that has been prepared as a sub-plan for the SWM3 Construction Environmental Management Plan (CEMP). An Archaeological Method Statement has been attached as an appendix where it is recommended as part of archaeological mitigation.

¹ Artefact, 2022. 'Southwest Metro: Corridor Works (Sydenham Station Junction): Aboriginal and Non-Aboriginal Heritage Impact Assessment'.

1.2 Report limitations

This heritage assessment is based on historical and archaeological research provided in the previously prepared heritage reports for the Sydney Metro City and Southwest Sydenham to Bankstown upgrade. The current assessment provides summaries of the historical and archaeological research prepared in these reports but does not reproduce the historical context for these reports. Impact assessments have been informed by the stage 3 detailed design HIAs that have been prepared for each station. Reports referenced in this assessment include:

- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade – Technical Paper No 3: Non-Aboriginal Heritage Impact Assessment (Artefact 2017)
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design (HAARD - Artefact 2018a)
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report, Non-Aboriginal Heritage Assessment (Artefact 2018b)
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Bankstown Station Modification Statement of Heritage Impact (May 2020)
- Sydney Metro City and Southwest - Bankstown Station Movable Heritage Strategy Report (January 2021)
- Sydney Metro City and Southwest - Final Moveable heritage strategy (March 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Bankstown Station (February 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Dulwich Hill Station (October 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Campsie Station (October 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Punchbowl Station (October 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Marrickville Station (April 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Canterbury Station (April 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Lakemba Station (April 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Hurlstone Plan Station (October 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Belmore Station (October 2021)
- Sydney Metro City and Southwest Heritage Impact Assessment Stage 3 Wiley Park Station (October 2021).

1.3 Authorship

This report was prepared by Samuel Sammut (Heritage Consultant) and Jayden van Beek (Technical Specialist). Dr Sandra Wallace (Director), Scott MacArthur (Conservation Architect), and Dr Iain Stuart (Excavation Director) provided management input and review.

2.0 SWM3 SCOPE OF WORKS

2.1 Project location and works

Sydney Metro City & Southwest is a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024/5 with the capacity to run a metro train every two minutes each way through the centre of Sydney. The Sydney Metro City & Southwest comprises of two components:

- Chatswood to Sydenham project
- Sydenham to Bankstown upgrade, now known as Southwest Metro (SWM).

The SMC works will include critical enabling activities for SWM. The SMC works are located on the T3 Bankstown line between Sydenham and Bankstown, NSW.

As outlined in the introduction the SWM3 works will include activities within both project areas but will primarily be within the SWM corridor, which is the focus of this report. SWM3 works will occur predominantly within the rail corridor however they will also involve works within station catchments where necessary. SWM3 is expected to be finished in 2025.

Below is a description of the construction scope for the Project.

2.2 Permanent works

Bankstown Station and Precinct Works: New, and modification to existing, infrastructure and systems to facilitate a new cross-corridor plaza between The Appian Way (north of the rail corridor) and Restwell Street (south of rail corridor) retail facilities and Station Precinct and Public Domain improvements.

Divided into four Stages of delivery to facilitate:

- **Stage 1: Sydney Trains Bankstown Works** (To enable Sydney Trains 4-Car operation)
Separation of the current Sydney Trains line at Bankstown into sections for Sydney Metro and Sydney Trains
- **Stage 2: Sydney Metro Turn back, fencing and rail adjustment** to enable dynamic testing in the Sydney Metro portion
- **Stage 3: Sydney Trains Bankstown Works** (To enable Sydney Trains 8-Car operation)
 - Bankstown Station Works: extension of the existing platforms further west, a new eastern entrance to Bankstown Station with Gatelines and back of house operational spaces
 - Sydney Trains Corridor: track adjustments, new diamond crossing (or alternative equivalent), OHWS and signalling and rail systems infrastructure to accommodate the modifications to Bankstown Station and continued operations between Bankstown and Yagoona stations
- **Stage 3: Bankstown Metro Works**
 - Bankstown Metro Station Works
 - Bankstown Metro Corridor Works

- **Stage 4: all remaining Bankstown Station and Precinct Works**, to achieve the final station and precinct configuration

Southwest Station Work

- Remaining (S2B works from SWMC, BEW, SWM1, SWM2)
- Additional (SWM3)

Southwest Corridor Works

- Corridor access stairs
- Screens fixed to CSR on bridges
- Veg management
- Acoustic treatment
- Boundary fencing
- Track monitoring

Asset Upgrades

- Infringement and track rectification
- Bridge upgrades renewals
- Civil asset upgrade renewal

Final Conversions

- Sydenham junction final track configuration, fencing, wayfinding & signage (all stations), BMCS and lift conversions (Marrickville Station to Punchbowl Station)
- Earthing bonding, alteration works, insulated rail joints, redundant asset works
- Clean up work (final rail grind, final rail tamp, station refresh/deep clean)
- Station meal room alterations at 9 stations (excluding Bankstown)
- Fixed gap filler works

ARTC Works

Temporary and permanent adjustments to ARTC operated and maintained infrastructure.

Utility works

- Qenos Pipe removal
- Non Sydney Trains (ST) or Sydney Metro (SM) assets (typically non-contestable works)

Local area works

Modification, reinstatement of public space, roads and pedestrian way, required for, or as a consequence of the SWM3 Contractor's Activities.

Property works

The Property Works comprises permanent adjustments to existing private properties required for, or as a consequence of the SWM3 Works and Temporary Works.

2.2.1 Temporary works

The SWM3 temporary works will include:

- Temporary arrangements to divert and control pedestrians, public transport users, cyclists, public transport and traffic and to provide public access, amenity, security and safety during all stages of design and construction of the Works
- Temporary arrangements for people and vehicles to safely access all property, including publicly accessible space affected by the Contractor's Activities
- Temporary arrangements for people and vehicles to safely access the Site
- Temporary access stairs, walkways and platforms within the Site
- Temporary construction hoardings, fencing, noise walls, access gates, barriers and signage on and around the Site
- All environmental safeguards and measures necessary to mitigate environmental effects which may arise during the design and construction of the Works
- Cleaning, maintenance, repair, replacement and reinstatement, as required, of all areas occupied by the Contractor during design and construction of the Works
- Temporary site facilities and compounds required for design and construction of the Works (i.e. Canterbury Bowls Club and North Terrace at Bankstown), including set-up and operation
- Temporary infrastructure, safety screens and ground support installed or erected to undertake design and construction of the Works
- Temporary arrangements for Utility Services including water, electricity, stormwater, sewerage, gas and electronic communications
- Temporary power for stations
- Temporary works and measures required as a consequence of requirements arising from the stakeholder and community liaison process
- All other temporary works and measures required for the construction of the Works
- Investigation works including services searching and geotechnical investigations along the full alignment from Sydenham to Bankstown.

Temporary construction facilities to facilitate construction of the Project would be located at the locations outlined in Table 1.

Table 1: Planned temporary construction facilities

Temp facility	SPIR reference or applicable CoA	Location	Existing use
A17 Way Street Ancillary Facility and Laydown	A17	August 2024	Laydown, August 2024
A19 Belmore Triangle Minor Ancillary Facility	A19	Currently not in use, however maybe reapplied for as required	Currently not in use, however maybe reapplied for as required
A19 Punchbowl Minor Ancillary Facility (Access from The Boulevard, Punchbowl)	A19	Currently not in use, however maybe reapplied for as required	Currently not in use, however maybe reapplied for as required
A17 Carrington Road Ancillary Facility and Laydown	A17	August 2024	Laydown until August 2024
A17 Belmore Triangle (Upper) Ancillary Facility and Laydown	A17	September 2025	Laydown until September 2025
A19 Hurlstone Park MSB Ancillary Facility (with caravan)	A19	December 2024	Laydown until December 2024
A19 Belmore MSB Ancillary Facility (with caravan)	A19	August 2025	Laydown until August 2025
A19 Wiley Park MSB Ancillary Facility (with caravan)	A19	August 2025	Laydown until August 2025
A16 Marrickville Station Metro Services Building (MSB) (with caravan)	C1	EIS Approved	Laydown until project end
A16 Dulwich Hill Station MSB (with caravan)	C3	EIS Approved	Laydown until project end
A16 Lakemba Station MSB (with caravan)	C15	EIS Approved	Laydown until project end
A16 Campsie Station MSB (with caravan)	C9	EIS Approved	Laydown until project end
A16 Punchbowl Station MSB (with caravan)	C20	EIS Approved	Laydown until project end

3.0 ARCHAEOLOGICAL ASSESSMENT

3.1 Introduction

Assessments of archaeological potential and archaeological management strategies have been sourced from the HAARD.³

3.2 Marrickville Station

3.2.1 Potential archaeological remains at Marrickville Station

The HAARD predicted archaeological remains of local significance to be present at Marrickville Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 2 and the location of these archaeological resources is provided in Figure 1.

Table 2: Summary of areas with potential for significant archaeological remains for Marrickville Station⁴

Phase	Archaeological Resource	Potential	Significance
1 (1788-1850s)	<ul style="list-style-type: none"> Archaeological features associated with land clearance such as tree boles, evidence of dairy farming and market gardening including fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters 	Nil-low	Unlikely to reach the threshold for local significance
2 (1850s – 1890s)	<ul style="list-style-type: none"> Archaeological features associated with farming such as fence or shed postholes, field drains and isolated artefacts, drains or culverts associated with the former creek 	Nil-low	Unlikely to reach the threshold for local significance
3 (1890s – 1920s)	<ul style="list-style-type: none"> Archaeological remains associated with the early phase of railway infrastructure such as culverts, ceramic service pits, utilities such as woodstave sewer or ceramic pipes; brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. Identified remains of original stone copings, earlier alignment of platforms, footscrapers, buried services, original lever set, footings of former platform stairs, platform brick dwarf walls, and building footings Moderate potential for footings of former platform canopies Low potential for former level crossing at the current Illawarra Road overbridge Archaeological remains of the former Earlwood tram line that ran across Illawarra Road overbridge such as tram tracks and associated infrastructure 	Moderate-high	Local
	<ul style="list-style-type: none"> Low potential for footings of former coal loading and storage facilities 	Low	Unlikely to reach the threshold for

³ Artefact 2018a

⁴ Artefact 2018a: Table 3-4.

Phase	Archaeological Resource	Potential	Significance
	<ul style="list-style-type: none"> Low potential for archaeological remains of the former sleeper bridge such as bridge footings 		local significance
4 (1930s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage Footings associated with the commuter car parking structure and the Illawarra Road footbridge Footings of signalling huts and boxes 	Moderate-high	Unlikely to reach the threshold for local significance
	<ul style="list-style-type: none"> Archaeological remains associated with the WWII air raid shelter such as the cut of the pit, sandbags, iron, concrete sandbags, roofing, drainage infrastructure, and associated artefacts 	Moderate	Local

3.2.2 Archaeological management strategy for works at Marrickville Station

The *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design* has assessed potential impacts to archaeological resources at Marrickville Station from the works required as part of the project. The archaeological management policies for these works are outlined in Table 3 and the location of the archaeological management zones are illustrated in Figure 2.

Table 3: Summary of archaeological management requirements at Marrickville Station Catchment⁵

Phase	Potential Archaeology	Management Zone	Mitigation
1 (1788-1850s)	Nil to low potential for archaeological features associated with land clearance such as tree boles, evidence of dairy farming and market gardening including fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters. Unlikely to reach the threshold for local significance.	3	<ul style="list-style-type: none"> Unexpected Finds Procedure
2 (1850s – 1890s)	Nil to low potential for archaeological features associated with farming such as fence or shed postholes, field drains and isolated artefacts, drains or culverts associated with the former creek. Unlikely to reach the threshold for local significance.	3	<ul style="list-style-type: none"> Unexpected Finds Procedure
3 (1890s – 1920s)	Moderate to high potential for potentially local significant archaeological remains associated with the early phase of railway infrastructure such as culverts, ceramic service pits, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. Identified remains of original stone copings, earlier alignment of platforms, footscrapers, buried services, original lever set, footings of former platform stairs, platform brick dwarf walls, and building footings.	1	<ul style="list-style-type: none"> AMS Salvage excavations

⁵ Artefact 2018a: Table 8-2.

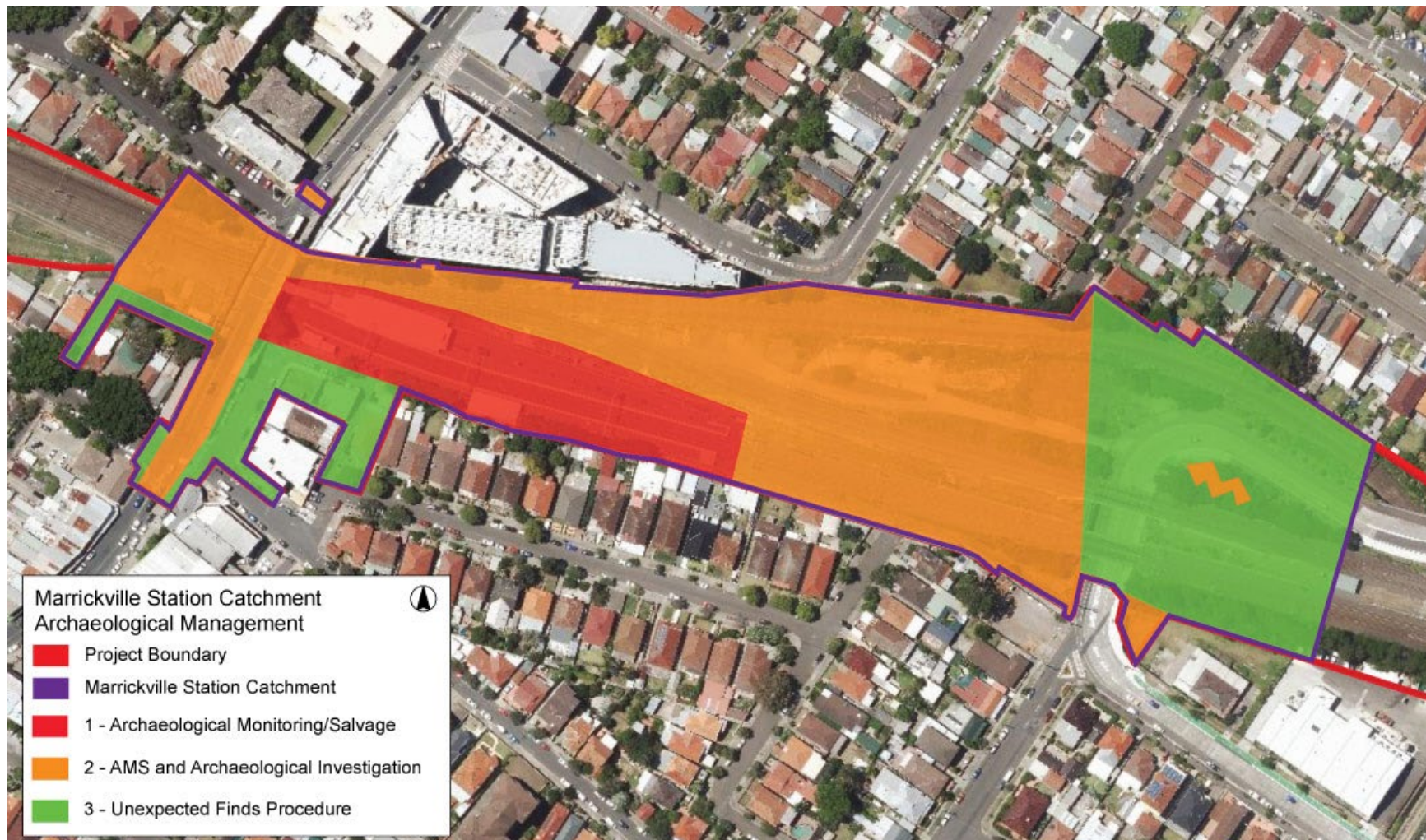
Phase	Potential Archaeology	Management Zone	Mitigation
4 (1930s – present)	Moderate potential for footings of former platform canopies Low potential for former level crossing at the current Illawarra Road overbridge. Moderate potential for archaeological remains of the former Earlwood tram line that ran across Illawarra Road overbridge such as tram tracks and associated infrastructure		
	Low potential for footings of former coal loading and storage facilities Low potential for archaeological remains of the former sleeper bridge such as bridge footings.	3	<ul style="list-style-type: none"> • Unexpected Finds Procedure
	Moderate to high potential for archaeological remains associated with upgrades such as utilities and drainage, footings of signalling huts and boxes, and footings associated with the commuter car parking structure and the Illawarra Road footbridge. Unlikely to reach the threshold for local significance.	3	<ul style="list-style-type: none"> • Unexpected Finds Procedure
	Moderate potential for locally significant archaeological remains associated with the WWII air raid shelter such as the cut of the pit, sandbags, iron, concrete sandbags, roofing, drainage infrastructure, and associated artefacts.	2	<ul style="list-style-type: none"> • AMS • Test/Salvage Excavations

Figure 1: Archaeological potential for Marrickville Station Catchment⁶



⁶ Artefact 2018a: Figure 3-23.

Figure 2: Marrickville Station Catchment archaeological management zones⁷



⁷ Artefact 2018a: Figure 8-1.

3.3 Canterbury Station

3.3.1 Potential archaeological remains at Canterbury Station

The HAARD predicted archaeological remains of State and local significance to be present at Canterbury Station (including the Canterbury Construction Site). A summary of the archaeological potential and significance of predicted remains is provided in Table 4, and the location of these archaeological resources is provided in Figure 3 and Figure 4.

Table 4: Summary of areas with potential for significant archaeological remains for Canterbury Station⁸

Phase	Archaeological Resource	Potential	Significance
1 (1788-1841)	<ul style="list-style-type: none"> Archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. 	Nil-low	Unlikely to reach the threshold for local significance
2 (1841 – 1855)	<ul style="list-style-type: none"> Archaeological remains of timber slab huts, outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Australasian Sugar Company works Archaeological remains of the outbuildings such as footings, timber slabs remnants, stone fireplaces, underfloor deposits, post holes, artefact deposits, cess pits, wells, cisterns, fencelines, and yard surfaces Evidence of small scale mining activities Archaeological evidence of farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters Archaeological remains of early residential cottages including wells, cisterns and refuse pits 	Moderate to High	Potentially State
3 (1855 – 1895)	<ul style="list-style-type: none"> Archaeological remains of early residential cottages including wells, cisterns and refuse pits Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Blakett and Co Canterbury Engineering Works 	Moderate to High	Potentially local
4 (1895-1943)	<ul style="list-style-type: none"> Archaeological remains and evidence of early railway construction including rails, refuse pits, drains and timber sleepers Archaeological remains of former platform structures Archaeological remains of the former race platform and retaining wall Archaeological remains of the storage sidings for the Canterbury Racecourse special trains and the shunting of the local goods sidings Archaeological remains of early infrastructure such as culverts, tanks, drains (brick, stone or concrete), electrical conduits and pits, sleepers, signalling equipment and rail track Archaeological remains associated with the early phase of minor railway buildings (such as toilets) 	Moderate	Potentially local

⁸ Artefact 2018a: Table 4-3.

Phase	Archaeological Resource	Potential	Significance
	<p>prior to track realignment such as postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track</p> <ul style="list-style-type: none"> It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades. 		
5 (1943-present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate to high	Unlikely to reach the threshold for local significance

3.3.2 Archaeological management strategy for works at Canterbury Station

The *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design* has assessed potential impacts to archaeological resources at Canterbury Station from the works required as part of the project. The archaeological management policies for these works are outlined in Table 5 and the location of the archaeological management zones are illustrated in Figure 5.

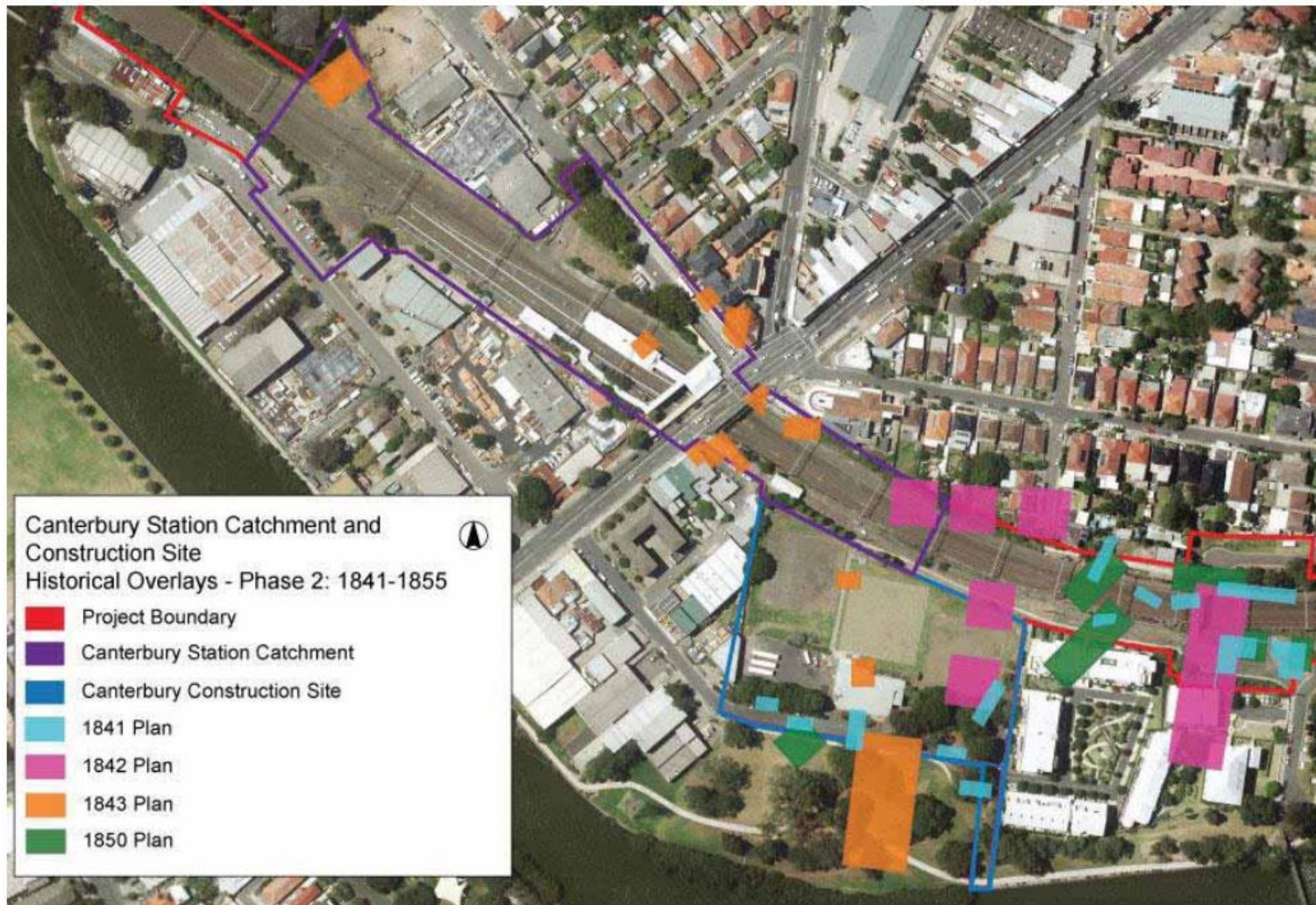
Table 5: Summary of archaeological management requirements at Canterbury Station Catchment⁹

Phase	Potential Archaeology	Management Zone	Mitigation
1 (1788-1841)	Nil to low potential for archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. Unlikely to reach the threshold for local significance	3	<ul style="list-style-type: none"> Unexpected Finds Procedure
2 (1841 – 1855)	Moderate to high potential for potentially State significant archaeological remains of timber slab huts, outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Australasian Sugar Company works. Archaeological remains of the outbuildings such as footings, timber slabs remnants, stone fireplaces, underfloor deposits, post holes, artefact deposits, cess pits, wells, cisterns, fence lines, and yard surfaces. Evidence of small scale mining activities, archaeological evidence of farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters. Archaeological remains of early residential cottages including wells, cisterns and refuse pits.	1	<ul style="list-style-type: none"> AMS Salvage excavations
3 (1855 – 1895)	Moderate to high potential for potentially locally significant archaeological remains of early residential cottages including wells, cisterns and refuse pits. Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural	1	<ul style="list-style-type: none"> AMS Salvage excavations

⁹ Artefact 2018a: Table 8-3.

Phase	Potential Archaeology	Management Zone	Mitigation
	remains associated with the Blackett and Co Canterbury Engineering Works.		
4 (1895-1943)	<p>Moderate potential for locally significant archaeological remains and evidence of early railway construction including rails, refuse pits, drains and timber sleepers. Archaeological remains of former platform structures. Archaeological remains of the former race platform and retaining wall.</p> <p>Archaeological remains of the storage sidings for the Canterbury Racecourse special trains and the shunting of the local goods sidings. Archaeological remains of early infrastructure such as culverts, tanks, drains (brick, stone or concrete), electrical conduits and pits, sleepers, signalling equipment and rail track.</p> <p>Archaeological remains associated with the early phase of minor railway buildings (such as toilets) prior to track realignment such as postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades.</p>	2	<ul style="list-style-type: none"> AMS Test/Salvage Excavations
5 (1943-present)	<p>Moderate to high potential for archaeological remains associated with upgrades such as utilities and drainage. Unlikely to reach the threshold for local significance.</p>	3	<ul style="list-style-type: none"> Unexpected Finds Procedure

Figure 3: Location of the former historical structures within the Canterbury Station Catchment, including the Canterbury Construction Site¹⁰



¹⁰Artefact 2018a: Figure 4-20.

Figure 4: Archaeological potential for Canterbury Station Catchment¹¹



¹¹Artefact 2018a: Figure 4-22.

Figure 5: Canterbury Station Catchment archaeological management zones¹²



¹² Artefact 2018a: Figure 8-2.

3.4 Belmore Station

3.4.1 Potential archaeological remains at Belmore Station

The HAARD predicted archaeological remains of local significance to be present at Belmore Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 6 and the location of these archaeological resources is provided in Figure 6.

Table 6: Summary of areas with potential for significant archaeological remains for Belmore Station¹³

Phase	Archaeological Resource	Potential	Significance
1 (1788-1880s)	<ul style="list-style-type: none"> Archaeological features associated with low intensity land use such as grazing and farming including tree boles, fence line postholes, field drains and isolated artefact scatters 	Nil-low	Unlikely to reach the threshold for local significance
2 (1880s – 1920s)	<ul style="list-style-type: none"> Archaeological features associated with continued grazing and farming including fence line and shed postholes, field drains, isolated artefact scatters and drain culverts Archaeological remains of early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track Archaeological remains associated with the railway station goods shed and goods platform occupying land to near today's Wortley Avenue and a goods platform to the south near Bridge Road, such as rail tracks, timber sleepers, footings of the platform, engine pit and other rail infrastructure Archaeological remains located on the 1925 plan such as converter room, coal bin, ash pit, lamp shed, auto box, land agent, boot maker, toilets and brick culvert. Archaeological remains could include footings, cuts of the pit, drains, ceramic service pipes and the brick culvert Archaeological remains of former platform structures Archaeological remains located within the platform structure such as footings of former footbridge, fences, and footings of the building that was originally located under the stairs Archaeological remains of tank located to the north of the station 	Nil-low	Potentially Local
3 (1930s – present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate	Unlikely to reach the threshold for local significance

3.4.2 Archaeological management strategy for works at Belmore Station

The *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design* has assessed potential impacts to archaeological resources at

¹³ Artefact 2018a: Table 5-3.

Belmore Station from the works required as part of the project. The archaeological management policies for these works are outlined in Table 7 and the location of the archaeological management zones are illustrated in Figure 7.

Table 7: Summary of archaeological management requirements at Belmore Station Catchment¹⁴

Phase	Potential Archaeology	Management Zone	Mitigation
1 (1788-1880s)	Nil to low potential for archaeological features associated with low intensity land use such as grazing and farming include tree boles, fence line postholes, field drains and isolated artefact scatters. Unlikely to reach the threshold for local significance.	3	<ul style="list-style-type: none"> • Unexpected Finds Procedure
2 (1880s – 1920s)	Low to moderate potential for Archaeological features associated with continued grazing and farming include fence line and shed postholes, field drains, isolated artefact scatters and drains or culverts. Archaeological remains of early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. Archaeological remains associated with the railway station goods shed and goods platform occupying land to the near today's Wortley Avenue and a goods platform to the south near Bridge Road, such as rail tracks, timber sleepers, footings of the platform, engine pit, and other rail infrastructure. Archaeological remains located on the 1925 plan such as converter room, coal bin, ash pit, lamp shed, auto box, land agent, boot maker, toilets, and brick culvert. Archaeological remains could include footings, cuts of the pit, drains, ceramic service pipes, and the brick culvert. Archaeological remains of former platform structures. Archaeological remains located within the platform structure such as footings of former footbridge, fences, and footings of the building that was originally located under the stairs. Archaeological remains of tank located to the north of the station. Archaeological remains of the early goods shed and siding have the potential to reach local significance.	2	<ul style="list-style-type: none"> • AMS • Monitoring or test / salvage excavations
3 (1930s – present)	Moderate potential for archaeological remains associated with upgrades such as utilities and drainage. Unlikely to reach the threshold for local significance.	3	<ul style="list-style-type: none"> • Unexpected Finds Procedure

¹⁴ *Ibid* Table 5-4.

Figure 6: Archaeological potential for Belmore Station Catchment¹⁵



¹⁵Artefact 2018a: Figure 5-10.

Figure 7: Belmore Station Catchment archaeological management zones¹⁶



¹⁶ Artefact 2018a: Figure 8-3.

3.5 Lakemba Station

3.5.1 Potential archaeological remains at Lakemba Station

The HAARD predicted archaeological remains of local significance to be present at Lakemba Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 8 and the location of these archaeological resources is provided in Figure 8.

Table 8: Summary of areas with potential for significant archaeological remains for Lakemba Station¹⁷

Phase	Archaeological Resource	Potential	Significance
1 (1788-1880s)	<ul style="list-style-type: none"> Initial land owners associated with moderately sized land grants used for agricultural and pastoral purposes Archaeological features associated with low intensity land use such as timber getting, grazing and farming including tree boles, fence line postholes, field drains and isolated artefact scatters 	Nil-low	Unlikely to reach the threshold for local significance
2 (1880s – 1909)	<ul style="list-style-type: none"> Establishment of the Taylor House (Lakemba). Stables and potential outbuildings Archaeological features associated with farming activities, domestic and agricultural structures, refuse pits and drains or culverts 	Low	Potentially Local
3 (1909 – 1919)	<ul style="list-style-type: none"> Archaeological remains associated with the first timber island platform and initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, timber footings and postholes, sleepers and rail track 	Low - Moderate	Potentially Local
4 (1919 – present)	<ul style="list-style-type: none"> Archaeological remains associated with station and rail corridor upgrades such as utilities and drainage 	Moderate	Unlikely to reach the threshold for local significance

3.5.2 Archaeological management strategy for works at Lakemba Station

The HAARD has assessed potential impacts to archaeological resources at Lakemba Station from the works required as part of the project. The archaeological management policies for these works are outlined in Table 9 and the location of the archaeological management zones are illustrated in Figure 9.

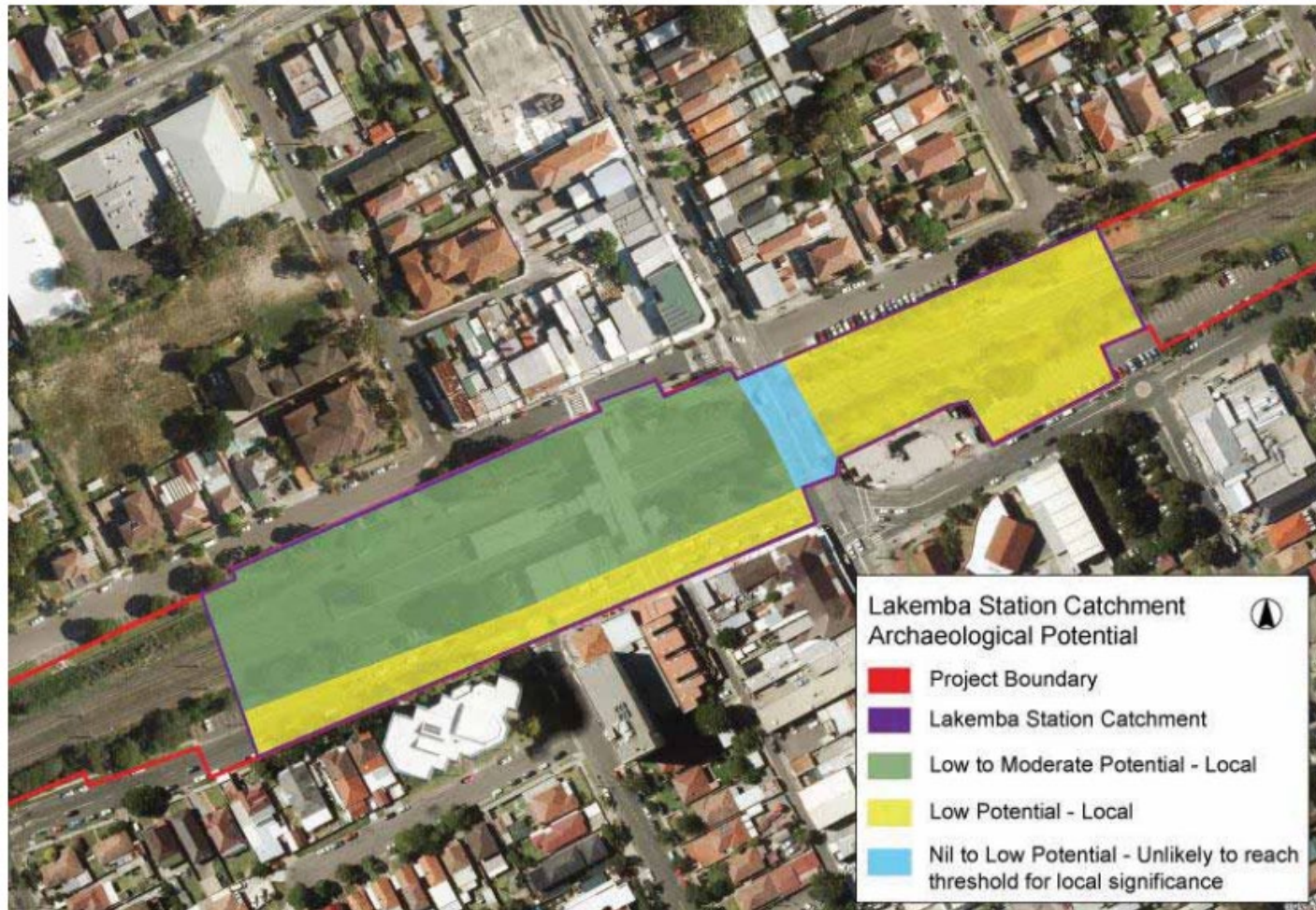
¹⁷ Artefact 2018a: Table 6-3.

Table 9: Summary of archaeological management requirements at Lakemba Station Catchment¹⁸

Phase	Potential Archaeology	Management Zone	Mitigation
1 (1788-1880s)	Nil to low potential for archaeological remains associated with the initial land owners associated with moderately sized grants used for agricultural and pastoral purposes. Archaeological features associated with low intensity land use such as timber getting, grazing and farming include tree boles, fence line postholes, field drains and isolated artefact scatters. Unlikely to reach the threshold for local significance.	3	<ul style="list-style-type: none"> • Unexpected Finds Procedure
2 (1880s – 1909)	Low potential for locally significant archaeological remains associated with the establishment of the Taylor House (Lakemba), stables and potential outbuildings. Archaeological features associated with farming activities, domestic and agricultural structures, refuse pits and drains or culverts.	3	<ul style="list-style-type: none"> • Unexpected Finds Procedure
3 (1909 – 1919)	Low to moderate potential for locally significant archaeological remains associated with the first timber island platform and initial railway infrastructure such as brick drainage pits, electrical conduits and pits, stanchion bases, timber footings and postholes, sleepers and rail track.	2	<ul style="list-style-type: none"> • AMS • Monitoring or test / salvage excavation
4 (1919 – present)	Moderate potential for archaeological remains associated with station and rail corridor upgrades such as utilities and drainage. Unlikely to reach the threshold for local significance	3	<ul style="list-style-type: none"> • Unexpected Finds Procedure

¹⁸ Artefact 2018a: Table 5-4.

Figure 8: Archaeological potential for Lakemba Station Catchment¹⁹



¹⁹Artefact 2018a: Figure 6-18.

Figure 9: Lakemba Station Catchment archaeological management zones²⁰



²⁰ Artefact 2018a: Figure 8-4.

4.0 HERITAGE IMPACT ASSESSMENT

4.1 Heritage items

The SWM3 works will primarily be limited to the rail corridor although some works will be undertaken at the station catchments such as platform works at Bankstown Station, and meal room alterations at the other nine stations. These works would also be undertaken in the vicinity of a number of nearby heritage items, however, the majority of these items would not be directly impacted by the proposed works.

A list of the heritage items that are located within or adjacent to the SWM3 project boundary and expected work areas is provided in Table 10, and the location of the heritage curtilages are illustrated in Figure 23. It is noted that the register listing details for some items have changed since the EIS and SPIR assessments were prepared due to changes to Local Government Area boundaries and government agency registers, such as the Transport Asset Holding Entity (formerly Railcorp) Section 170 Heritage and Conservation Register. The current item details are provided.

Table 10: Heritage listed Items in and near the SWM3 project area

Item	Listings	Significance
Sewage Pumping Station 271	<ul style="list-style-type: none"> State Heritage Register (SHR) (01342) Sydney Water s170 Heritage and Conservation Register (4571727) Inner West LEP 2022 (I1233) 	State
Stone house, including interiors	<ul style="list-style-type: none"> Inner West LEP 2022 (I1270) 	Local
Marrickville Railway Station Group	<ul style="list-style-type: none"> SHR (01186) TAHE s170 Heritage and Conservation Register (4801091) Inner West LEP 2022 (I1241) 	State
South Dulwich Hill Heritage Conservation Area	<ul style="list-style-type: none"> Inner West LEP 2022 (C107) 	Local
Dulwich Hill Railway Station Group	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (4801909) Inner West LEP 2022 (I1024) 	State
Turpentine - Ironbark Forest Understorey	<ul style="list-style-type: none"> Inner West LEP 2022 (I1222) 	Local
Hurlstone Park Railway Station Group	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (4802051) Canterbury-Bankstown LEP 2023 (I175) 	Local
Hurlstone Park Railway Underbridge	<ul style="list-style-type: none"> TAHE s170 Heritage and Conservation Register (4805737) Canterbury-Bankstown LEP 2023 (I181) 	Local

Item	Listings	Significance
Old Sugarmill	<ul style="list-style-type: none"> • SHR (00290) • Canterbury-Bankstown LEP 2023 (I105) 	State
Canterbury Railway Station Group	<ul style="list-style-type: none"> • SHR (01109) • TAHE s170 Heritage and Conservation Register (4801100) • Canterbury-Bankstown LEP 2023 (I90) 	State
Inter-War Hotel (former Hotel Canterbury)	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I91) 	Local
Federation Post Office Building (former Canterbury Post Office)	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I89) 	Local
Electricity substation no. 275	<ul style="list-style-type: none"> • Ausgrid s170 Heritage and Conservation Register (3430425) 	Local
Canterbury (Cooks River) Underbridge	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4801568) • Canterbury-Bankstown LEP 2023 (I95) 	Local
Canterbury (Cooks River/Charles St) Underbridge – Main Line	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (5062566) 	Local
Campsie Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4801101) • Canterbury-Bankstown LEP 2023 (I63) 	Local
Belmore Railway Station Group	<ul style="list-style-type: none"> • SHR (01081) • TAHE s170 Heritage and Conservation Register (4801084) • Canterbury-Bankstown LEP 2023 (I33) 	State
Federation House (former station master's cottage)	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I32) 	Local
Post-war bus shelter and public lavatories	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I51) 	Local
Lakemba Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4801916) • Canterbury-Bankstown LEP 2023 (I208) 	Local
Wiley Park Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4801946) • Canterbury-Bankstown LEP 2023 (I236) 	Local

Item	Listings	Significance
Lakemba Water Pumping Station (WP0003)	<ul style="list-style-type: none"> • Sydney Water s170 Heritage and Conservation Register (4570136) • Canterbury-Bankstown LEP 2023 (I235) 	Local
Punchbowl Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage and Conservation Register (4802067) • Canterbury-Bankstown LEP 2023 (I226) 	Local
Bankstown Railway Station Group	<ul style="list-style-type: none"> • TAHE s170 Heritage Inventory Register (4802067) • Canterbury-Bankstown LEP 2023 (I12) 	Local
Bankstown Parcels Office (former)	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I11) 	Local
Shop	<ul style="list-style-type: none"> • Canterbury-Bankstown LEP 2023 (I13) 	Local

Figure 10: Heritage curtilage – stone house including interiors



Figure 11: Heritage curtilage – Marrickville Railway Station Group



Figure 12: Heritage curtilage – South Dulwich Hill Conservation Area



Figure 13: Heritage curtilage Dulwich Hill Railway Station Group and Turpentine - Ironbark Forest Understory (I1222). Note: Turpentine - Ironbark Forest Understory (I1222) was not a listed item at the time of the Project approval



Figure 14: Heritage curtilage Hurlstone Park Railway Station Group



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Figure 15: Heritage curtilage Hurlstone Park Railway Underbridge

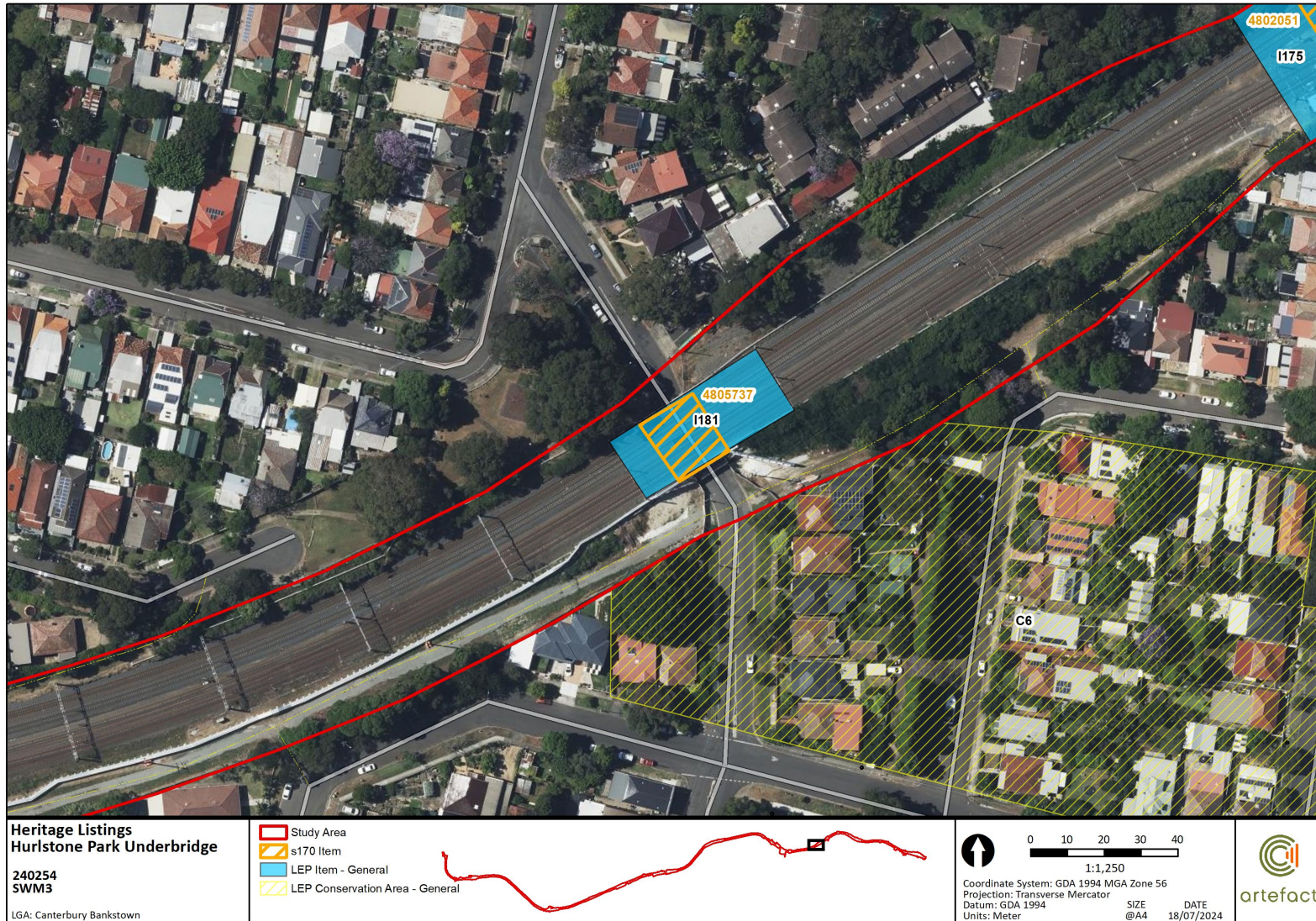


Figure 16: Heritage curtilage Canterbury Railway Station Group and nearby heritage items



Figure 17: Heritage curtilage Canterbury Old Sugar Mill. Note: The LEP curtilage of Old Sugar Mill has been reduced since the time of Project approval



Figure 18: Heritage curtilage Canterbury (Cooks River/Charles St) Underbridge – Main Line

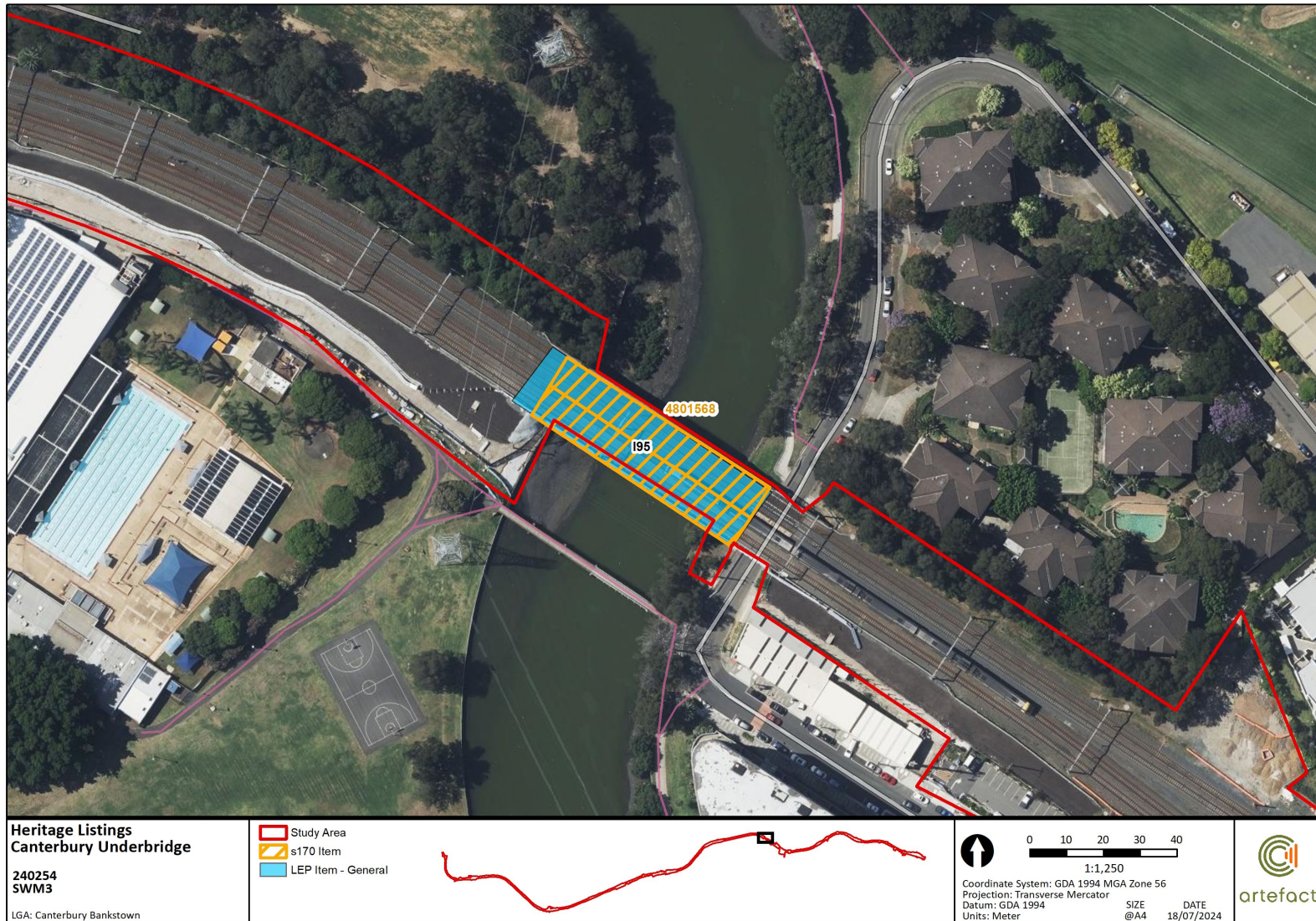


Figure 19: Heritage curtilage Campsie Railway Station Group



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Figure 20: Heritage curtilage Belmore Railway Station Group



Figure 21: Heritage curtilage Lakemba Railway Station Group

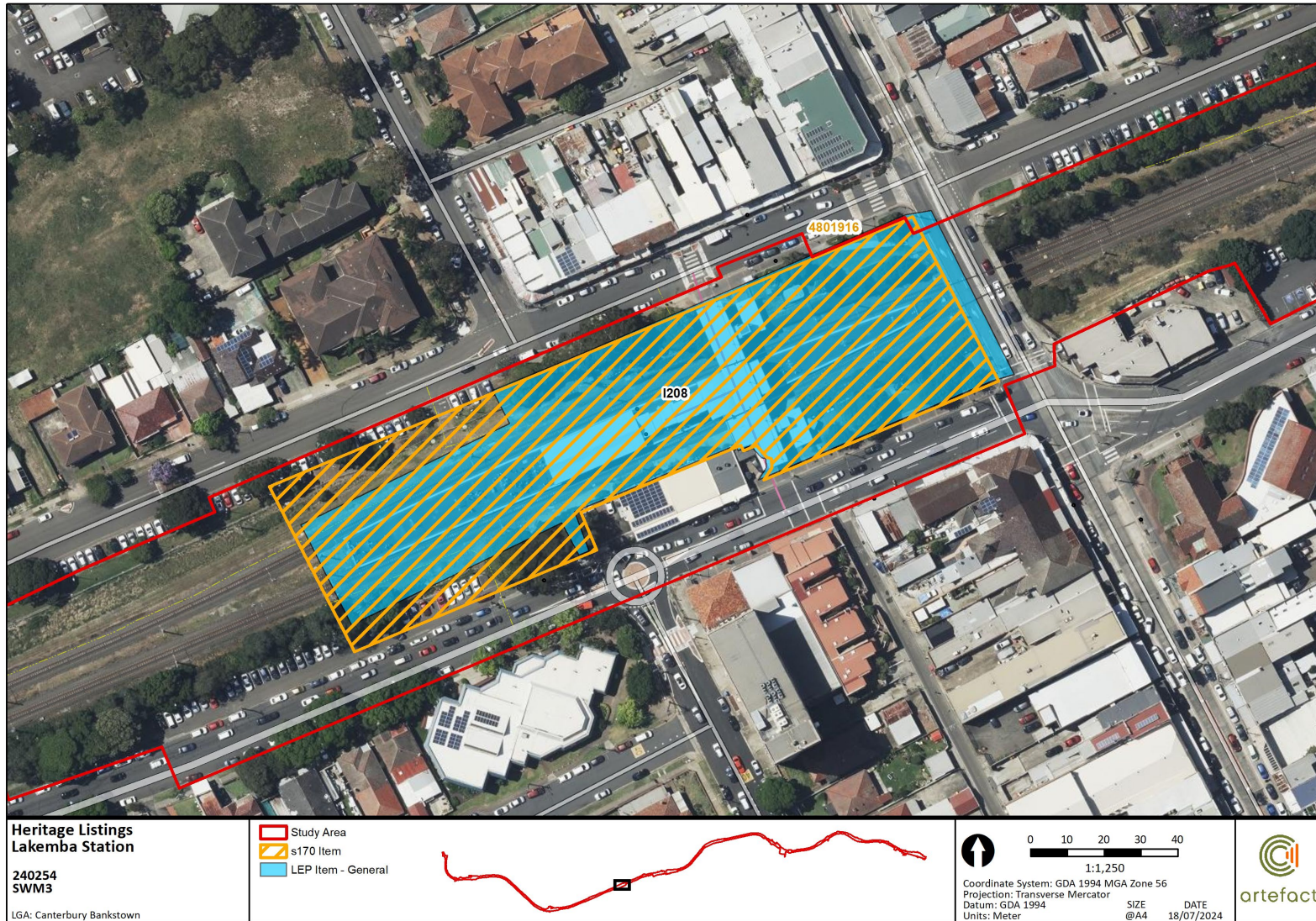


Figure 22: Heritage curtilage Wiley Park Railway Station Group



Figure 23: Heritage curtilage Punchbowl Railway Station Group



Figure 24: Heritage curtilage Bankstown Railway Station Group



4.2 Heritage item impact assessment

A discussion and assessment of the direct and indirect (visual) impacts that the SWM3 works would have on the listed heritage items within and adjacent to the SWM alignment is provided in Table 11. Assessments for the stations have primarily been informed by the stage 3 detailed design HIAs that have been previously prepared for each station.

Table 11: Heritage impact assessment for listed heritage items

Item	Discussion of impacts	Direct impact	Indirect impact
Marrickville Station	<p>Direct: Works within the SHR curtilage of the station would include wayfinding, landscaping, platform surface works, removal of redundant assets, meal room alterations, installation of gap fillers, fence installation, awning modifications, bird proofing, secondary egress route and shared path work, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Marrickville Station detailed design HIA, these works would result in a range of physical impacts that would typically be neutral to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Marrickville Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places. Although some features would be consistent with existing station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the overall visual character of the station. As assessed in the Marrickville Station detailed design HIA, these works would result in a range of visual impacts that would typically be negligible to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Marrickville Station.</p>	<p>Minor Negligible (vibration)</p>	<p>Minor</p>

Item	Discussion of impacts	Direct impact	Indirect impact
Dulwich Hill Station	<p>Direct: Works within the curtilage of the station would include wayfinding, landscaping, platform surface works, removal of redundant assets, meal room alterations, installation of gap fillers, fence installation, awning modifications, equitable canopies and lift works, bird proofing, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Dulwich Hill detailed design HIA, these works would result in a range of physical impacts that would typically be neutral to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Dulwich Hill Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places, such as the equitable lift. Although some features would be consistent with existing station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the overall visual character of the station. The lift may overshadow existing views and vistas. As assessed in the Dulwich Hill Station detailed design HIA, these works would result in a range of visual impacts that would typically be negligible to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Dulwich Hill Station.</p>	<p>Minor Negligible (vibration)</p>	<p>Minor</p>
Hurlstone Park Station	<p>Direct: Works within the curtilage of the station would include wayfinding, landscaping, platform surface works, removal of redundant assets, throw screen installation on Duntroon Street, meal room alterations, installation of gap fillers, fence installation, platform re-roofing, equitable canopy and lift covers, secondary egress works, bird proofing, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Hurlstone Park Station detailed design HIA, these works would result in a range of physical impacts that would typically be neutral to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Hurlstone Park Station.</p>	<p>Minor Negligible (vibration)</p>	<p>Minor</p>

Item	Discussion of impacts	Direct impact	Indirect impact
	<p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places (such as on Duntroon Street). Although some features would be consistent with existing station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the low-elevation and early twentieth century built character of the station. As assessed in the Hurlstone Park Station detailed design HIA, these works would result in a range of visual impacts that would typically be negligible to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Hurlstone Park Station.</p>		
Canterbury Station	<p>Direct: Works within the SHR curtilage of the station would include wayfinding, installation of glazed canopy on Platform 2, landscaping, platform surface works, platform stair balustrade modifications, removal of redundant assets, meal room alterations, installation of gap fillers, fence installation, concourse and platform re-roofing, footbridge redecking, equitable canopy and lift covers, bird proofing, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Canterbury Station detailed design HIA, these works would result in a range of physical impacts that would typically be neutral to moderate in nature. Overall, it is assessed that the SWM3 works would result in a moderate physical impact to the heritage significance of Canterbury Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places. Although some features would be consistent with existing</p>	Moderate Negligible (vibration)	Moderate

Item	Discussion of impacts	Direct impact	Indirect impact
	<p>station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the overall visual character of the station. As assessed in the Canterbury Station detailed design HIA, these works would result in a range of visual impacts that would typically be negligible to moderate in nature. Overall, it is assessed that the SWM3 works would result in a moderate visual impact to the heritage significance of Canterbury Station.</p>		
Campsie Station	<p>Direct: Works within the curtilage of the station would include wayfinding, completion of concourse and plaza works, platform surface works, removal of redundant assets, meal room alterations, installation of gap fillers, fence installation, power provisions to ticket gates, secondary egress route, heavy vehicle mitigation works, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Campsie Station detailed design HIA, these works would typically result in minor physical impacts. As a result, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Campsie Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places. While some features would be consistent with existing station elements or railway infrastructure, the continued changes at the station would alter the overall visual character of the station. Although it is noted that the station has already been subject to a number of changes over time. As assessed in the Campsie Station detailed design HIA, these works would typically result in minor visual impacts. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Campsie Station.</p>	<p>Minor Negligible (vibration)</p>	<p>Minor</p>
Belmore Station	<p>Direct: Works within the SHR curtilage of the station would include wayfinding, new door installations and modifications, landscaping, platform surface works, removal of redundant assets, meal room alterations, installation of gap fillers, bird proofing, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station.</p>	<p>Minor Negligible (vibration)</p>	<p>Minor</p>

Item	Discussion of impacts	Direct impact	Indirect impact
	<p>As assessed in the Belmore Station detailed design HIA, these works would result in a range of physical impacts that would typically be neutral to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Belmore Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places. Although some features would be consistent with existing station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the overall visual character of the station. As assessed in the Belmore Station detailed design HIA, these works would result in a range of visual impacts that would typically be negligible to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Belmore Station.</p>		
Lakemba Station	<p>Direct: Works within the curtilage of the station would include wayfinding, removal of concourse balustrade, installation of anti-throw screens on Haldon Street overbridge, landscaping, platform surface works, removal of redundant assets, meal room alterations, installation of gap fillers, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Lakemba Station detailed design HIA, these works would result in a range of physical impacts that would typically be negligible to minor in nature. As a result, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Lakemba Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p>	<p>Minor Negligible (vibration)</p>	<p>Minor</p>

Item	Discussion of impacts	Direct impact	Indirect impact
	<p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places. While some features would be consistent with existing station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the overall visual character of the station. As assessed in the Lakemba Station detailed design HIA, these works would result in a range of visual impacts that would typically be negligible to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Lakemba Station.</p>		
Wiley Park Station	<p>Direct: Works within the curtilage of the station would include wayfinding, platform building re-roofing, equitable lift canopies, landscaping, platform surface works, removal of redundant assets, meal room alterations, installation of gap fillers, fence installation, secondary egress routes, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Wiley Park Station detailed design HIA, these works would result in a range of physical impacts that would typically be neutral to minor in nature. As a result, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Wiley Park Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places. While some features would be consistent with existing station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the overall visual character of the station. As assessed in the Wiley Park Station detailed design HIA, these works would result in a range of visual impacts that would typically be neutral to minor in nature. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Wiley Park Station.</p>	<p>Minor Negligible (vibration)</p>	<p>Minor</p>

Item	Discussion of impacts	Direct impact	Indirect impact
Punchbowl Station	<p>Direct: Works within the curtilage of the station would include wayfinding, northern plaza redevelopment, switchback ramp demolition and redevelopment, footpath establishment, platform re-roofing, equitable lift canopies, landscaping, handrail modifications, platform surface works, removal of redundant assets, meal room alterations, installation of gap fillers, and other minor station finishing and conversion works. These works would involve the removal and/or modification of a range of significant and non-significant fabric at the station. As assessed in the Punchbowl Station detailed design HIA, these works would result in a range of physical impacts that would typically be negligible to minor in nature. As a result, it is assessed that the SWM3 works would result in a minor physical impact to the heritage significance of Punchbowl Station.</p> <p>Some of the works would involve the use of vibration intensive plant, such as excavations within the rail corridor. The works would be undertaken within proximity to heritage significant fabric and the use of vibration intensive plant may result in vibration impacts. However, considering the relatively minor nature of the works that would use vibration intensive plant, the risk of vibration impacts would be low would be reduced through the implementation of mitigation measures. As a result, any potential vibration impacts would likely be negligible.</p> <p>Indirect: The SWM3 works would modify existing significant elements within the station group and introduce new material that would be located in visible places. While some features would be consistent with existing station elements or railway infrastructure, the accumulation of new and modern structural elements would negatively alter the overall visual character of the station. As assessed in the Punchbowl Station detailed design HIA, these works would typically result in minor visual impacts. Overall, it is assessed that the SWM3 works would result in a minor visual impact to the heritage significance of Punchbowl Station.</p>	<p>REFER TO APPENDIX G OF THIS HMP FOR REVISED IMPACT POST STAGE 3 DESIGN</p> <p>Minor Negligible (vibration)</p> <p>MODERATE</p>	<p>Minor</p> <p>MODERATE</p>
Sewage Pumping Station 271	<p>Direct: The SHR item is located 5m south of the SWM3 works area. However, the works would be limited to minor railway infrastructure works within the rail corridor and will not directly impact the heritage item.</p> <p>Indirect: Works in the vicinity of the item would be limited to minor railway infrastructure works within the rail corridor and the installation of fencing along the rail corridor. However, the works will not result in visual changes and the new fencing along the rail corridor will be obscured by the existing vegetation alongside the rail corridor. As a result, there would be no visual impacts to the SHR item.</p>	<p>Neutral</p>	<p>Neutral</p>

Item	Discussion of impacts	Direct impact	Indirect impact
Stone house, including interiors	<p>Direct: The LEP item is located about 20m south of the SWM3 works area and will not be directly impacted.</p> <p>Indirect: Works in the vicinity of the item would be limited to the installation of fencing and CSR. These works would be consistent with existing rail corridor infrastructure and would largely be obscured by existing vegetation. As a result, any visual impact would be minimal</p>	Neutral	Negligible
South Dulwich Hill Heritage Conservation Area	<p>Direct: Works within the heritage item would involve the installation of new segregation fencing, CSR, and bridge remediation works including the installation of throw screens on the Albermarle Street bridge. The works would largely be within and along the railway corridor which is not considered to be significant fabric, and the Albermarle Street bridge also is not considered to be significant fabric. The proposed works may result in impacts to the Great Depression era brick footpath though, which is a core heritage value/element within the conservation area. This would result in direct impacts to the conservation area. However, impacts to the brick footpath would be limited, if bricks need to be removed, they could largely be replaced after the works, and only a very small area of the overall conservation area would be impacted. As a result the direct impact to the overall conservation area would be minimal.</p> <p>Indirect: The proposed works within the conservation area would introduce new negative visual elements and result in direct impacts to significant fabric. However, the fencing, throw screens and CSR would be consistent with existing rail corridor infrastructure, and only a very small portion of the overall conservation area would be directly impacted.</p>	Negligible	Negligible
Turpentine - Ironbark Forest Understorey	<p>Direct: New segregation fencing would be installed within the curtilage of the heritage item. However, detailed design and construction planning will ensure that there are no impacts to the heritage item or the Threatened Ecological Communities within. Modification of sensitive vegetation as part of the SWM3 works is expected to be limited to minor tree trimming that would not cause lasting impacts. As a result, it is expected that there would be no permanent direct impacts to the heritage item.</p> <p>Indirect: The installation of new fencing within the heritage curtilage would result in visual impacts from the introduction of new material within the curtilage. However, the new fence would be consistent with existing rail infrastructure, there would be no direct impacts to significant vegetation, and views of the vegetation would be retained. As a result, visual impacts would be minimal.</p>	Neutral	Negligible

Item	Discussion of impacts	Direct impact	Indirect impact
Hurlstone Park Railway Underbridge	<p>Direct: New segregation fencing would be installed along the top of the bridge. Penetrations would need to be made into the bridge in order to secure the fence to it. This would result in direct impacts to the significant fabric of the bridge. Furthermore, although the redundant ARTC infrastructure that is proposed to be removed is not considered to be significant fabric, the removal of the infrastructure may result in some additional direct impacts where it is attached to the bridge. However, the direct impacts would only affect a fairly limited portion of the bridge and would not require larger sections of the bridge to be removed. As a result, the direct impacts to the bridge would be relatively limited and the overall impact would be minor.</p> <p>Indirect: The installation of new fencing on the bridge would result in visual impacts from the introduction of new material along the bridge and as a result of the direct impacts to the fabric of the bridge. However, the impacted fabric would be limited and the fencing would be consistent with existing rail corridor infrastructure.</p>	Minor	Negligible
Old Sugarmill	<p>Direct: The SHR item is located 20m south of the SWM3 works and will not be directly impacted. In accordance with Policy 6 of the Conservation Management Plan (CMP) for Old Sugarmill the works would not reduce the intactness of any remaining fabric of considerable significance. It is not expected that the works or vehicular traffic alongside the rail corridor will cause the northern retaining wall of Old Sugarmill to deteriorate during SWM3. However, it is recommended that the wall should be inspected during the works to ensure that there is no visible evidence of deterioration being caused by the works.</p> <p>Indirect: Works in the vicinity of the SHR items will include the installation of fencing along the rail corridor and bridge remediation works, including the installation of throw screens, on the Hutton Street rail bridge. Some trees may also be removed from the Canterbury Compound area. However, although the works would not compliment the style and form of the existing buildings of Old Sugarmill (CMP Policy 5), the fencing and bridge works would be consistent with existing rail corridor infrastructure to minimise visual changes and would be partially screened by plantings within the SHR curtilage. Because of the lower ground level of the Old Sugarmill compared to the bridge, any visual impacts resulting from the works would generally only be visible from the uppermost floor of the Sugarmill, and the works would not interrupt views towards the Sugarmill. In particular, in accordance with CMP Policy 12 the proposed works would not impact views from the Sugar House across to Cooks River. As a result, the impacts to the visual setting of the Sugarmill would be minimal. The trees within the Canterbury Compound are also outside of the SHR curtilage and do constitute a key component of the visual landscape character of the heritage item.</p>	Neutral	Negligible

Item	Discussion of impacts	Direct impact	Indirect impact
Inter-War Hotel (former Hotel Canterbury)	<p>Direct: The LEP item is located immediately adjacent to the SWM3 works area but will not be directly impacted. If the recommended physical exclusion zones are used during the works this would mitigate the risk of inadvertent impacts to the heritage item.</p> <p>Indirect: Works in proximity to the LEP item will be restricted to the installation of new fencing and the removal of redundant rail infrastructure. However, removing the redundant infrastructure would not result in any visual impacts and the fencing would be consistent with existing rail corridor infrastructure.</p>	Neutral	Negligible
Federation Post Office Building (former Canterbury Post Office)	<p>Direct: The LEP item is located about 20m north of the SWM3 works area and will not be directly impacted.</p> <p>Indirect: Works in proximity to the LEP item will be restricted to the installation of a new rail infrastructure, the removal of redundant infrastructure, minor station works, and lighting upgrades on Broughton Street. However, removing the redundant infrastructure would not result in any visual impacts and the new infrastructure would be consistent with existing rail corridor infrastructure. These works would largely be obscured by the existing vegetation and as a result would not be visually noticeable. Re-roofing of the station concourse on the opposite side of the road would not visually detract from the heritage item.</p>	Neutral	Neutral
Electricity substation no. 275	<p>Direct: The s170 item is located 5m north of the SWM3 works area but will not be directly impacted. If the recommended physical exclusion zones are used during the works this would mitigate the risk of inadvertent impacts to the heritage item.</p> <p>Indirect: Works in proximity to the LEP item will be restricted to the installation of new fencing and the removal of redundant rail infrastructure. However, removing the infrastructure would not result in any visual impacts and the fencing would be consistent with existing rail corridor infrastructure.</p>	Neutral	Negligible
Canterbury (Cooks River) Underbridge	<p>Direct: New segregation fencing would be installed along the top of the bridge. Penetrations would need to be made into the bridge in order to secure the fence to it. This would result in direct impacts to the significant fabric of the bridge. Furthermore, although the redundant ARTC infrastructure that is proposed to be removed is not considered to be significant fabric, the removal of the infrastructure may result in some additional direct impacts where it is attached to the bridge. However, the direct impacts would only affect a limited portion of the bridge and would not require larger sections of the bridge to be removed. As a result, the direct impacts to the bridge would be relatively limited and the overall impact would be minor.</p>	Minor	Negligible

Item	Discussion of impacts	Direct impact	Indirect impact
	<p>Indirect: The installation of new fencing on the bridge would result in visual impacts from the introduction of new material along the bridge and as a result of the direct impacts to the fabric of the bridge. However, the impacted fabric would be limited and the fencing would be consistent with existing rail corridor infrastructure.</p>		
<p>Canterbury (Cooks River/Charles St) Underbridge – Main Line</p>	<p>Direct: New segregation fencing would be installed along the top of the bridge. Penetrations would need to be made into the bridge in order to secure the fence to it. This would result in direct impacts to the significant fabric of the bridge. Furthermore, although the redundant ARTC infrastructure that is proposed to be removed is not considered to be significant fabric, the removal of the infrastructure may result in some additional direct impacts where it is attached to the bridge. However, the direct impacts would only affect a limited portion of the bridge and would not require larger sections of the bridge to be removed. As a result, the direct impacts to the bridge would be relatively limited and the overall impact would be minor.</p> <p>Indirect: The installation of new fencing on the bridge would result in visual impacts from the introduction of new material along the bridge and as a result of the direct impacts to the fabric of the bridge. However, the impacted fabric would be limited and the fencing would be consistent with existing rail corridor infrastructure.</p>	<p>Minor</p>	<p>Negligible</p>
<p>Federation House (former station master's cottage)</p>	<p>Direct: The LEP item is located about 30m northwest of the SWM3 works area and will not be directly impacted.</p> <p>Indirect: The closest works to the LEP item would be restricted to landscaping, minor station works, and minor rail infrastructure works. These would be in keeping with the current views and vistas of the heritage item and would not have a visual impact. The installation of any nearby utilities/ CSR would be sufficiently screened from view and therefore would not result in a visual impact.</p>	<p>Neutral</p>	<p>Neutral</p>
<p>Post-war bus shelter and public lavatories</p>	<p>Direct: The LEP item is located about 20m northeast of the SWM3 works area and will not be directly impacted.</p> <p>Indirect: The closest work to the LEP item would be limited to landscaping, minor station works, and minor rail infrastructure works. These would be in keeping with the current views and vistas of the heritage item and would not have a visual impact.</p>	<p>Neutral</p>	<p>Neutral</p>

Item	Discussion of impacts	Direct impact	Indirect impact
Lakemba Water Pumping Station (WP0003)	<p>Direct: The heritage item is located at least 45m south of the SWM3 works area and will not be directly impacted.</p> <p>Indirect: The works in the vicinity of the heritage item on the south side of the station would primarily consists of minor landscaping works, platform egress works, and the installation of new fencing. These would all largely be in keeping with the current views and vistas of the heritage item and would not negatively visually impact the heritage item.</p>	Neutral	Neutral
Bankstown Station	<p>Direct: The demolition of the existing eastern portion of the station platform is required to facilitate the introduction of the cross corridor retail plaza, service structures, and the new Metro side platforms. The platform demolition would result in a moderate direct (physical) impact to the existing heritage fabric of the platform and associated coping, which are listed as elements of high significance. Impacts to significant platform fabric would only occur on the northern side where masonry is still present. The extension of the western end of both Sydney Trains platforms would require modification of the brick end of the platform retaining wall to develop the new interface. The extension of the western end of the platform would result in a minor direct impact.</p> <p>The demolition of the former Parcels Office involved the removal of an original and significant station building from the Bankstown Station Railway Group. The Parcels Office was considered to be an element of exceptional significance within the station group. The removal of this element resulted in a moderate direct impact to the overall Bankstown Station Railway Group.</p> <p>The canopy to the Sydney Trains station entrance adds a new and modern structural element to the Bankstown Station heritage item, which responds to the form and scale of the platform building, an element of exceptional significance. The new canopies would result in a minor direct impact.</p> <p>Works would be required in the rail corridor for the excavation and compaction related to the installation and construction of track slabs. This work would not impact fabric of significance.</p> <p>Garden landscaping, as well as existing amenities and toilet facilities located to the north and south of the railway corridor are not assessed as having heritage significance. The removal of the modern landscaping elements and trees in area around the station would result in a neutral direct (physical) impact to Bankstown Station overall. The removal of the small amenities/toilet building and partial demolition of the modern parking lot would not result in an adverse direct (physical) impact to Bankstown Station.</p>	Moderate Negligible (vibration)	Moderate

Item	Discussion of impacts	Direct impact	Indirect impact
	<p>Indirect: The canopy is visually distanced from the roof of the platform building, and the glazing allows the station building to be clearly seen through the Sydney Trains station entrance rather than being overshadowed or visually obstructed. This in conjunction with the separation of the new canopy from the existing awning minimises visual interruption caused by the interruption of this new element. Thus, existing view lines are not impeded by the new structure, which visually references the original platform building design. As a result, the new canopy to the Sydney Trains station entrance would result in a minor indirect (visual) impact to the heritage significance of Bankstown Station. The proposed canopy to the Sydney Metro station entrance (on the eastern side of the proposed plaza) would not adversely impact on any significant indirect (visual) view lines.</p> <p>The demolition of the former Parcels Office removed the element of exceptional significance from the station group. This altered the heritage character and setting of the station group. This has caused a moderate indirect (visual) impact to the heritage significance of the station overall.</p> <p>The removal of tracks as part of corridor works would be temporary and would have a neutral heritage impact.</p> <p>The demolition of a small amenities building would generate new visual relationships towards the station platform building. The removal of the amenities building would result in a neutral positive indirect (visual) impact to the heritage significance of Bankstown Station. The new garden landscaping and construction of the new services building along the rail corridor boundary would result in a minor indirect (visual) impact to the heritage significance of the station overall.</p> <p>The accumulation of new and modern structural elements (cross corridor plaza, extension of the station platforms, new station entrances) and the partial demolition of the heritage listed platform would noticeably alter the overall visual character of Bankstown Station. The existing station platform would effectively be separated through the introduction of the retail crossing, altering the original use of the platform and the visual relationship between the platform and the station buildings. The isolation of the platform building to the western end of the platform would result in adverse heritage impacts. Overall, the station works would result in a moderate visual impact to the heritage significance of Bankstown Station.</p>		
Bankstown Parcels Office (former) and Cross Corridor Plaza	<p>Direct: The demolition of the heritage listed former Bankstown parcels office (already completed as part of previous SWM works) involved the complete removal of all original and significant fabric. The demolition will result in the delisting of the item from the Canterbury-Bankstown LEP 2023. The demolition of the former Bankstown Parcels Office has caused a major direct impact to the LEP listed “Bankstown Parcels Office (Former)”.</p>	Major	Major

Item	Discussion of impacts	Direct impact	Indirect impact
	<p>Indirect: The demolition of the heritage listed former Bankstown Parcels Office has removed all visible evidence of the heritage item and caused a major indirect (visual) impact.</p>		
Shop	<p>Direct: The LEP item is located outside the SWM3 works area and will not be directly impacted.</p> <p>Indirect: The removal of the former Parcels Office has altered the visual relationships between the 'Shops' and the station, resulting in a negligible indirect (visual) impact to an item in the vicinity of Bankstown Station. Additionally, the removal of the tree line and introduction of a two storey services building to the south of the rail corridor, coupled with the eastern extension of the station platforms would result in a negligible indirect (visual) impact to the visual relationship between the station and the locally listed item.</p>	Neutral	Negligible

4.3 Archaeological impact assessment

An assessment of potential archaeological impacts for the identified station catchments are provided below. It is noted that at the time of the preparation of this HIA the exact location and extent of the excavation works is not confirmed. Therefore, assessments have been provided based on the general works that are anticipated.

4.3.1 Marrickville Station

Archaeological assessment at Marrickville Station has identified that there is primarily moderate to high potential for archaeological features dating to the third phase of development (1890s-1920s) that have the potential to be of local significance. Potential archaeological remains could include archaeological remains associated with the early phase of railway infrastructure such as earlier alignment of platforms, platform walls or footings, culverts, ceramic service pits, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track.

Excavation works at Marrickville Station would include activities such as NDD service investigations, installation of security fencing, removal of redundant services, installation of new utilities and CSR, OHW structure works, and landscaping. The impacts associated with these SWM3 works would generally be limited to narrow trenches and localised potholes and would primarily be limited to the rail corridor and in the vicinity of existing service corridors. As a result, the works would not have an extensive impact footprint. It is also noted that significant archaeological remains found to date at Marrickville Station have primarily been limited to the platform footprint.²¹

Overall, it is assessed that the SWM3 works would result in no more than minor impacts to potential archaeological remains within the Marrickville Station Catchment. It is noted that where works are largely limited to surface activities, such as stockpiling, or areas of previous disturbance it is unlikely that significant archaeological remains would be impacted.

The excavation areas are located within areas designated as AMZ1, AMZ 2, and AMZ 3 and would be managed accordingly per the management measures outlined in the HAARD. For excavations in AMZ 1 and AMZ 2 areas these would primarily be archaeologically managed through programs of archaeological monitoring (where required), and excavations in AMZ 3 areas are to be managed under the Sydney Metro Unexpected Heritage Finds Procedure. A brief AMS has been prepared to guide the archaeological management, which is attached as an appendix.

4.3.2 Canterbury Station

Archaeological assessment at Canterbury Station has identified that there is primarily moderate potential for archaeological features to remain dating to the fourth phase of development (1895-1943) that have the potential to be of local significance. Potential archaeological remains could include evidence of early railway construction and infrastructure including rail tracks, refuse pits, culverts, drains (brick, stone or concrete), tanks, electrical conduits and pits, signalling equipment and timber sleepers. Archaeological remains associated with the early phase of minor railway buildings (such as toilets) prior to track realignment may include postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track.

At the Canterbury Compound within the Canterbury Station Catchment the HAARD identified that there is moderate to high potential for archaeological features dating to the second phase of

²¹ Artefact Heritage, 2023. *Sydney Metro City & Southwest – Southwest Metro: Package 4 Historical Archaeological Report*. Report to Haslin Stephen Edwards Construction Joint Venture on behalf of Sydney Metro.

development (1841-1855) that have the potential to be of State significance. Potential archaeological remains could include archaeological remains and evidence of the Australasian Sugar Company works, including evidence of timber slab huts, outbuildings, landscape modifications, fence lines, drains, artefact deposits, cess pits, wells, cisterns, fencelines, yard surfaces, farming activities, residential cottages, and small-scale mining activities.

Excavation works within the Canterbury Station Catchment would include activities such as NDD service investigations, installation of security fencing, removal or relocation of services, installation of new utilities and CSR, OHW structure works, landscaping, clearing and grubbing, and ground disturbance at the Canterbury Compound as part of the site use and demobilisation. The impacts associated with these SWM3 works would generally be limited to narrow trenches and localised potholes and would primarily be limited to the rail corridor and in the vicinity of existing service corridors. As a result, the works would not have an extensive impact footprint. It is noted that significant archaeological remains found to date at Canterbury Station have primarily been limited to the platform footprint.²² Furthermore, archaeological testing undertaken at the Canterbury Compound as part of SWM did not identify any significant archaeological remains., and the archaeological potential was subsequently reassessed as being low.²³

Overall, it is assessed that the SWM3 works would result in no more than minor impacts to potential archaeological remains within the Canterbury Station Catchment. It is not expected that any State significant archaeological remains would be impacted.

The excavation areas are located within areas designated as AMZ1, AMZ 2, and AMZ 3 and would be managed accordingly per the management measures outlined in the HAARD. For excavations in AMZ 1 and AMZ 2 areas these would primarily be archaeologically managed through programs of archaeological monitoring (where required), and excavations in AMZ 3 areas are to be managed under the Sydney Metro Unexpected Heritage Finds Procedure. Based on the results of previous archaeological test excavation at the Canterbury Compound, no further archaeological test excavation is recommended. A brief AMS has been prepared to guide the archaeological management, which is attached as an appendix.

4.3.3 Belmore Station

Archaeological assessment at Belmore Station has identified that there is primarily low to moderate potential for archaeological features dating to the second phase of development (1880s-1920s) that have the potential to be of local significance. Potential archaeological remains could include archaeological remains associated with the early phase of railway infrastructure such as culverts, ceramic service pits, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers, rail track, goods shed, platform walls and footings, and other rail infrastructure such as a converter room, coal bin, ash pit, lamp shed, auto box, land agent, boot maker, toilets and tank.

Excavation works within the Belmore Station Catchment would include activities such as NDD service investigations, installation of security fencing, removal or relocation of services, installation of new utilities and CSR, OHW structure works, and landscaping. The impacts associated with these SWM3 works would generally be limited to narrow trenches and localised potholes and would primarily be limited to the rail corridor and in the vicinity of existing service corridors. As a result, the works would

²² Artefact, 2023. *Sydney Metro City & Southwest – Southwest Metro: Package 4 Historical Archaeological Report*. Report to Haslin Stephen Edwards Construction Joint Venture on behalf of Sydney Metro.

²³ Artefact 2021. Preliminary Archaeological Results: Canterbury Compound Test Excavation. Report to JHLORJV

not have an extensive impact footprint. It is noted that significant archaeological remains found to date at Belmore Station have all been limited to the platform footprint.²⁴

Overall, it is assessed that the SWM3 works would result in no more than minor impacts to potential archaeological remains within the Belmore Station Catchment.

The excavation areas are located within areas designated as AMZ 2 and AMZ 3 and would be managed accordingly per the management measures outlined in the HAARD. For excavations in AMZ 2 these would primarily be archaeologically managed through programs of archaeological monitoring (where required), and excavations in AMZ 3 areas are to be managed under the Sydney Metro Unexpected Heritage Finds Procedure. A brief AMS has been prepared to guide the archaeological management, which is attached as an appendix.

4.3.4 Lakemba Station

Archaeological assessment at Lakemba Station has identified that there is primarily low to moderate potential for archaeological features dating to the third phase of development (1909-1919) that have the potential to be of local significance. Potential archaeological remains could include evidence of early railway construction including brick platform footings and walls, drainage pits, electrical conduits and pits, stanchion bases, timber footings and postholes, sleepers and rail track. Archaeological remains associated with earlier phases could include evidence of farming activities including domestic and agricultural structures, refuse pits and drains or culverts. Notable features in this location include two structures located on the north side of the tracks to the west of the pedestrian footbridge, which are visible in 1943 aerial photographs of the station.

Excavation works within the Lakemba Station Catchment would include activities such as NDD service investigations, installation of security fencing, removal or relocation of services, installation of new utilities and CSR, OHW structure works, landscaping, and clearing and grubbing. The impacts associated with these SWM3 works would generally be limited to narrow trenches and localised potholes and would primarily be limited to the rail corridor and in the vicinity of existing service corridors. As a result, the works would not have an extensive impact footprint. It is noted that significant archaeological remains found to date at Lakemba Station have all been limited to the platform footprint.²⁵

Overall, it is assessed that the SWM3 works would result in no more than negligible impacts to potential archaeological remains within the Lakemba Station Catchment.

The excavations will be located within areas designated as AMZ 2 and AMZ 3 and would be managed accordingly per the management measures outlined in the HAARD. For excavations in AMZ 2 these would primarily be archaeologically managed through programs of archaeological monitoring (where required), and excavations in AMZ 3 areas are to be managed under the Sydney Metro Unexpected Heritage Finds Procedure. A brief AMS has been prepared to guide the archaeological management, which is attached as an appendix.

²⁴ Artefact, 2024. *Sydney Metro City & Southwest – Southwest Metro: Package 5&6 Historical Archaeological Report*. Report to Downer Group on behalf of Sydney Metro.

²⁵ Artefact, 2023.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The SWM3 works would result in the following impacts:

- Moderate direct and indirect (visual) impacts to Canterbury Station and Bankstown Station
- Minor direct and indirect (visual) impacts to the remaining eight stations along the alignment
- Generally neutral to negligible direct and indirect (visual) impacts to other listed heritage items within and immediately adjacent to the SWM3 works area
- Demolition of the heritage listed Bankstown Parcels Office at Bankstown Station (already completed) has resulted in major direct and indirect (visual) impacts on the significance of the LEP heritage item. This will result in Bankstown Parcels Office (former) being removed from the Canterbury-Bankstown LEP (I11)
- Excavation works at Marrickville, Lakemba, Canterbury, and Belmore Stations are expected to result in no more than minor impacts to archaeological remains of local significance. No impacts to archaeological remains of State significance are expected
- The impacts identified are consistent with the detailed design impact assessments for the station and the HAARD.

5.2 Heritage and archaeological management recommendations

- To mitigate the risk of impacts to heritage items and significant fabric it is recommended that physical exclusion zones in the form of protective barriers/blankets (or similar) are set up during works which are undertaken within 5m or less of a heritage item/significant fabric of a heritage item. This includes the following heritage items:
 - All railway stations, where works are undertaken within/adjacent to station building elements or in the rail corridor adjacent to the platforms
 - South Dulwich Hill Heritage Conservation Area, to protect the significant Depression era brick pavement
 - Hurlstone Park Railway Underbridge
 - Inter-War Hotel (former Hotel Canterbury)
 - Electricity substation no. 275
 - Canterbury (Cooks River) Underbridge
 - Canterbury (Cooks River/Charles St) Underbridge – Main Line
 - Turpentine-Ironbark Forest Understorey
- Exclusion zones for the remaining heritage items would be limited to identifying the location of the heritage items on the environmental control maps. The requirements for exclusion zones when working in the vicinity of the heritage items would be included in site inductions and toolbox meetings

- The following mitigation measures should be undertaken during works within and adjoining the Turpentine-Ironbark Forest Understorey to prevent impacts to sensitive vegetation:
 - The Turpentine-Ironbark Forest Understorey is to be labelled on environmental control maps
 - Ensure that the works do not permanently impact any significant vegetation (including trees and grasses) through planning, site-specific inductions and physical protection measures
 - Where trimming of sensitive vegetation is required, advice should be sought from a qualified Ecologist/Arborist (where appropriate)
 - Implement any additional environmental controls necessary to protect the endangered ecological community and in accordance with best practice guidelines²⁶
 - Maintain any existing Sydney Trains grass 'no-mow' zones in the vicinity of the works
- Where there is a risk that the station works could result in vibration impacts to heritage significant fabric due to the use of vibration intensive plant in close proximity, such as hammering out redundant Sydney Trains infrastructure adjacent to platforms and station buildings within station curtilages, it is recommended that vibration monitoring is undertaken in accordance with the Construction Noise and Vibration Management Sub-plan
- Although it is not expected to be impacted by the SWM3 works, the northern retaining wall of Old Sugarmill should be monitored during the works to ensure that vehicular movement adjacent to the railway corridor is not causing the wall to deteriorate
- As archival recordings have already been undertaken for the impacted heritage items as part of previous management for SWM, no further archival recording is currently recommended as part of SWM3
- As the works would result in direct impacts to rail bridges, a Heritage Engineer may need to be consulted with if the works would present any structural issues to the following heritage items:
 - Station overbridges
 - Hurlstone Park Railway Underbridge
 - Canterbury (Cooks River) Underbridge
 - Canterbury (Cooks River/Charles St) Underbridge – Main Line
- As the works would result in direct impacts to significant fabric, in accordance with REMM NAH20 the works undertaken at the following heritage items should be conducted by skilled tradespeople in consultation with a Conservation Architect where there would be impacts:
 - All heritage listed stations
 - South Dulwich Hill Heritage Conservation Area
 - Hurlstone Park Railway Underbridge

²⁶ Department of Environment & Climate Change NSW, 2008. *Best practice guidelines: Sydney Turpentine-Ironbark Forest*. Accessed online at: <https://www.environment.nsw.gov.au/resources/threatenedspecies/08528tsdssydturpironforestbpg.pdf>.

- Canterbury (Cooks River) Underbridge
 - Canterbury (Cooks River/Charles St) Underbridge – Main Line
- If the Depression era brick paving within South Dulwich Hill Heritage Conservation Area is required to be modified, it is recommended that the significant brick pavement be carefully removed and the brick pavement reinstated following the completion of the works. If any bricks are damaged during the proposed works a suitable like-for-like replacement should be selected in discussion with the Conservation Architect
- Any new infrastructure installed within or in the vicinity of heritage items should be consistent with existing rail infrastructure to reduce visual impacts resulting from SWM3
- Where feasible new conduit routes should be buried below-ground rather than installed above-ground in GST in order to reduce visual impacts resulting from SWM3
- Where GST is installed within the visual catchment of the heritage stations, it should be painted to reduce reflective glare in order to reduce visual impacts resulting from SWM3. This would be subject to detailed design
- Where cable trays/ladders are proposed to be attached directly to significant structural fabric, such as to footbridges, overbridges or platforms, they should be attached with mechanical (non-chemical) anchors rather than chemical anchors to minimise impacts to fabric resulting from the future removal of the cable trays/ladders. All impact points should be made good when the anchors are removed
- A short AMS is attached as an Appendix, which has been prepared according to the methodology outlined in Section 7.3 of the HAARD for the project²⁷
- In accordance with the AMS archaeological monitoring of excavations is to be undertaken within AMZ 1 and AMZ 2 areas where recommended by the Excavation Director. Excavations within the remaining areas are to be managed under the Sydney Metro Unexpected Heritage Finds Procedure. No further archaeological test excavation is recommended for the AMZ 1 area of Canterbury Compound
- In accordance with the stage 3 detailed design HIA, future advertising should not obscure significant fabric or significant views at Bankstown Station, opportunities should be explored for the interpretation of significant and locally listed parcels office being demolished, and signage and wayfinding should not obstruct view lines towards significant fabric
- In accordance with the stage 3 detailed design HIA, the Bankstown Station work should incorporate the following recommendations:
 - Existing penetrations into original fabric should be utilised where introduced fabric is to be located. Any existing penetrations that would not be utilised for new works should be repaired and made good. A suitably qualified heritage tradesperson should be engaged to complete these works

²⁷ Artefact 2018a, p128.

- If significant fabric is damaged during the course of works, work should be halted, and a suitably qualified heritage architect should be engaged to inspect and assess any damage and to propose appropriate remedial measures
 - New paint colours should match the existing paint scheme, or if a new paint scheme is proposed it should be in accordance with Rail Heritage Conservation Guides: Station Building Painting Conservation Guide and Heritage paint schemes.
- In accordance with the stage 3 detailed design HIA, the Bankstown Station platform works should incorporate the following recommendations:
 - The extension of the platform to the east should minimise the removal of any existing heritage fabric and all brick platform retaining walls should be conserved
 - Works to the extant platform ramp at the western end of the platform (under the Bankstown City Plaza overbridge) should ensure that no brickwork on the country end is impacted, and that the form of the ramps is exposed in the new design
 - New platform extensions should be materially sympathetic to existing platform retaining wall structures while also ensuring that they are clearly distinguishable as new work. Design materials for the platform extension could include whole brick (matched in colour, texture and bond to existing platform retaining wall work) with a concrete spacing or separator to distinguish between original and new fabric
 - Platform modification works should not impact, cover or remove any existing subfloor ventilation vents. Should platform grading be proposed which would cover over these vents, small spacings should be kept open
- SWM3 works should adhere to all additional station specific mitigation measures that have been identified as part of the stage 3 detailed design HIAs for the remaining stations
- Where works at the stations would require the removal and/or relocation of moveable heritage items that have been identified as part of SWM, these must be managed in accordance with the methods outlined in the *City and Southwest Movable Heritage Strategy*
- Remaining heritage interpretation work is to be completed in accordance with the detailed designs, SWM3 Heritage Interpretation Strategy, and the individual station Heritage Interpretation Plans
- All relevant personnel and contractors involved in the SWM3 works will be advised of the mitigation measures and recommendations in this HIA.

6.0 APPENDIX: ARCHAEOLOGICAL METHOD STATEMENT

Project: Sydenham to Bankstown – Southwest Metro Conversion and Station Works Package 3	Date: 23 July 2024
Project site: Marrickville, Canterbury, Belmore and Lakemba Stations	Author: Jayden van Beek (Technical Specialist)
Client: JHLORJV	Contact: Lucas Dobrolot

Background

JHLOR (the Proponent) are planning to undertake a package of works known as SWM3, which include excavations at Marrickville, Canterbury, Belmore and Lakemba Stations. Marrickville Station, Canterbury Station and Belmore Station are listed on the SHR, the TAHE Section 170 Heritage and Conservation Register, and relevant LEPs as items of State heritage significance, and Lakemba Station is listed on the TAHE Section 170 Heritage and Conservation Register and relevant LEP. The four stations, as well as the Canterbury Compound, have also been assessed as areas with potential for significant archaeological remains. The proposed works would be undertaken as part of the Construction phase under an approved CEMP.

An assessment was prepared by Artefact (2024), which has found that the proposed SWM3 excavation works would generally result in no more than minor impacts to significant archaeological remains within the four Archaeological Investigation Zones (AIZ).

This Archaeological Method Statement (AMS) has been prepared in accordance with Revised Environmental Mitigation Measure (REMM) NAH12 and outlines the archaeological methodology to manage the construction works to mitigate impacts to significant archaeological remains for Marrickville, Canterbury, Belmore and Lakemba Stations and Canterbury Compound. Heritage items, including archaeological sites, relics and Aboriginal objects, cannot be impacted prior to approval of the CEMP and heritage sub-plan in accordance with the Minister's Conditions of Approval for the Sydney Metro City & Southwest – Sydenham to Bankstown project.

The AMS is consistent with the methodologies outlined in the HAARD.²⁸

The HAARD requires the nomination of an Excavation Director who complies with the Heritage Council of NSW's Criteria for Assessment of Excavation Directors (July 2011). Details on the nominated Excavation Director who meets this requirement, and archaeological team have been provided.

This AMS should be read in conjunction with the assessment to which it is appended (Artefact 2024). All project information, assessment of archaeological potential and significance and impact assessment are included in the assessment document.

²⁸ Artefact 2018a

Archaeological methodology

The heritage assessment for the SWM3 works recommended that archaeological monitoring is undertaken for ground disturbing works within AMZ 1 and AMZ 2 at the Marrickville, Canterbury, Belmore and Lakemba Station Catchments. This may include the following activities:

- NDD service investigations and potholing
- Excavations for the installation or relocation of utilities, where excavations would be located outside of existing service corridors
- Excavations for OHW structures
- Piling for installation of security fencing.

The extent of archaeological monitoring required however would also be informed by the results of previous works/archaeological investigations and updated assessments of archaeological potential. For example, previous archaeological test excavation at the Canterbury Compound did not identify any significant archaeological remains and the archaeological potential was subsequently reassessed as being low. Furthermore, most of the significant archaeological remains that have been found within the station catchments as part of SWM works to date have been located within or in the immediate vicinity of the platform footprints. Archaeological remains within the rail corridor further away from the platforms have generally been limited to minor and non-significant features. Based on this information, archaeological management of excavations for SWM3 would primarily consist of the following:

- Archaeological monitoring of the above works where they are located in close proximity to the station platforms or specific historical features (as advised by the Excavation Director)
- Archaeological monitoring of works at Canterbury Compound only in areas that have not been cleared by previous archaeological test excavations
- Archaeological monitoring of excavations in proximity to any unexpected finds that have been identified (where advised by the Excavation Director)
- Remaining areas would largely be managed under the Sydney Metro Unexpected Heritage Finds Procedure, including areas within AMZ 1 and AMZ 2.

Excavations which are shallow in nature and limited to rail corridor formation layers, or that are limited to existing service corridors/heavily disturbed ground, are not expected to impact any significant archaeological remains. Therefore, these works could be conducted under the Sydney Metro Unexpected Heritage Finds Procedure, including areas within AMZ 1 and AMZ 2. This would include the following activities:

- Landscaping
- Clearing and grubbing
- Stockpiling
- Sediment fence installation.

Works may proceed under on call provisions if approved to do so by the Excavation Director. If significant archaeological remains are encountered during works, they would need to be investigated and documented prior to impacts occurring in accordance with the Sydney Metro Unexpected Heritage Finds Procedure.

It is noted that additional excavations to those outlined above may be required within the AIZs. As the location of any excavations are confirmed, they would be assessed against the methodology outlined in this AMS to identify if further archaeological management may be required. Where necessary this AMS will be updated to address the additional scope.

Contractor

The contractor would set up site and then operate under the direction of the archaeologists during archaeological monitoring and salvage excavation, as appropriate. This would involve:

- Set out and secure the work area for the construction and archaeological team
- Provide a site induction to contractors in consultation with the Excavation Director
- Assist with the mechanical removal of non-significant overburden under the direction of the archaeologists, where appropriate.

Historical archaeological monitoring

Due to the potential for archaeological resources to be located within the SWM3 area, the main form of archaeological management for excavations within the sensitive areas of AMZ 1 and AMZ 2, as outlined above, would be archaeological monitoring.

Archaeological monitoring is where an archaeologist is in attendance and supervising construction excavation work with potential to expose or impact archaeological remains. Monitoring is generally undertaken where there is lower potential for significant archaeological remains and/or where minor excavation work is in an area of archaeological sensitivity.

If archaeological remains are identified during archaeological monitoring, they would be recorded, protected, and assessed to determine their heritage significance and if further investigation is required. Localised stoppages in the construction work would be required to facilitate this process. Works would not recommence until the monitoring archaeologist has completed the recording and is satisfied that further investigation is not required. Where feasible options should be considered for redesigning around significant archaeological remains to avoid impacts.

If needed, works would be relocated around any archaeological remains, as appropriate for the design.

A record of archaeological monitoring would be made in accordance with the methodology outlined in the HAARD. This would include digital photography, in RAW format, using photographic scales and photo boards where appropriate. A photographic record of all phases of the work on site would be undertaken. Archaeological recording including the locations, dimensions and characteristics of all archaeological features and deposits will be recorded on a sequentially numbered context register.

Should hazardous materials or contaminants be identified during archaeological monitoring, ground excavation would cease until appropriate controls or remediation is conducted by the contractor.

If significant archaeological remains are encountered during the archaeological monitoring and impacts to the remains are unavoidable, then further investigation would be required prior to construction impacts. This may include a program of archaeological salvage excavation to investigate and document the nature and extent of the remains.

Historical archaeological test excavations

The HAARD assessed that the Canterbury Compound has moderate to high potential to contain State significant archaeological remains associated with the Australasian Sugar Company works. Due to the potential for significant archaeological resources to be located within the Canterbury Compound, the HAARD recommended a program of archaeological test excavation. However, test excavations at the Canterbury Compound have already been completed as part of SWM, and no further test excavation was recommended.²⁹ As a result, no further archaeological test excavation is proposed as part of SWM3.

Archaeological salvage excavations

Archaeological salvage generally refers to open-area archaeological excavation under the control of the Excavation Director. Salvage includes the archaeological excavation of the entire historical archaeological site. It is undertaken following demolition and prior to bulk excavation. Open area salvage excavation is a method of archaeological investigation in which the full horizontal extent of a site is investigated and cleared, whilst preserving the stratigraphic record.

It involves removal of modern fills and disturbance to the top of archaeological layers by machine under archaeological supervision. On the identification of any historical / archaeological fills, salvage excavation would commence. This investigation would be undertaken using hand tools, by a qualified archaeological team. The archaeological remains are then cleaned by hand, investigated (excavated) and recorded in detail by the archaeological team. In urban archaeological sites careful machine excavation may also be employed to assist the detailed archaeological excavation process.

Salvage excavations would be undertaken within the Marrickville, Canterbury, Belmore and Lakemba Station Catchments if the archaeological monitoring identifies substantial and intact significant archaeological remains in areas of construction impact. Due to the more limited scale and localised nature of the proposed excavation works within the station corridors though, where significant archaeological remains are encountered within areas of construction impact a more localised salvage excavation may be undertaken to investigate and document the archaeological remains.

The extent of the archaeological salvage area would be determined by the Excavation Director based on the nature and extent of the archaeological remains and the construction impacts. Construction works would not proceed until the salvage excavation is completed and the Excavation Director has provided clearance.

Archaeological recording

The archaeological archival recording would be undertaken in accordance with best practice and Heritage NSW, DCCEEW guidelines. The level of recording detail would be in accordance with the significance of the archaeological remains. State significant remains would require more detailed recording, in particular photographic recording, survey and photogrammetry.

The recording methodology includes the following:

- A site datum would be established

²⁹ Artefact, 2021.

- A standard context recording system would be employed. The locations, dimensions in plan and characteristics of all archaeological features and deposits would be recorded on a sequentially numbered register
- Significant archaeological structural remains, deposits and features would be recorded on context sheets
- Photographic recording of all phases of the work on site would be undertaken
- Digital photography, in RAW format, using photographic scales and photo boards where appropriate. A photographic record of all phases of the work on site would be undertaken.
- Detailed survey and/or measured drawings would be prepared and include location of remains within the overall site
- Significant artefacts would be collected by context for later analysis
- Building material, soil and pollen samples would be collected for further analysis (as appropriate)
- Registers of contexts, photos, samples and drawings would be kept.

Underfloor and cesspit / well deposits

Underfloor deposits

Underfloor deposits may be present within the footprints of the former structures in the Canterbury Compound, although it is noted that none have been identified to date. Underfloor deposits may provide particularly useful archaeological information in the context of domestic or industrial / manufacturing spaces.

Intact underfloor deposits would be excavated in a grid system, either 50 centimetre or 1 metre depending on extent of deposit. Excavation would be by context if stratigraphic layers are identifiable. If the deposit is homogenised excavation would proceed in 5 or 10 centimetre spits. Excavated material would be wet sieved, or dry sieved if possible.

Cesspit / well deposits

Accumulated material at the base of cesspits, wells and even drains can also contain archaeological material of high research value. Stratified well and cesspit backfills or deposits would be excavated by context. Homogenised deposits and fills would be excavated in spits (10 or 20 centimetre spits for example). The material would be sample sieved or 100% sieved depending on the significance of the deposit. Excavated material would be wet sieved, or dry sieved if possible. It is noted that the excavation of wells may pose safety risks due to the depths required. Normal archaeological excavation techniques may need to be altered to include staged mechanical excavation and benching.

Sieving strategy

The range and percentage of archaeological material collected from sieving would be in accordance with a sieving strategy developed by the Excavation Director and artefact specialist. The strategy would consider research agendas and potential interpretation outcomes.

Artefacts

Artefacts are likely to be uncovered during excavations and are an integral part of archaeological investigations and datasets. The archaeological team would include an artefact specialist to advise the excavation team on artefact retention strategies.

Artefacts from significant and *in situ* contexts would be collected and recorded (by context). Retrieval of artefacts should focus on those whose analysis would contribute to research agendas, or would be representative of the site, which warrant archiving or consideration for interpretative displays or similar heritage interpretation.

Retention of all artefacts from archaeological investigations in urban and industrial contexts is neither possible nor expected in current historical archaeological practice. Large amounts of fill and disturbed material is common on urban sites. Whilst these layers can provide important archaeological information regarding site formation and phasing, the material often contains artefacts of unknown provenance and limited research value. Potentially significant deposits such as occupation-related material within former structures could contain numerous artefacts of varying levels of significance or value.

Should diagnostic or significant artefacts be present within the fill layers (out-of-context), a sample may be retained to inform the research agenda, consideration in interpretation and as part of the archaeological record. Alternatively, minor and isolated deposits/finds may be documented as part of the context recording but would not be collected.

Retained artefacts would be cleaned, processed, catalogued, and analysed by an archaeologist experienced in historical artefact assemblages. Artefact analysis would include production of a database in accordance with best practice archaeological data recording. The resulting information would be included in the final excavation report.

Artefacts recovered from the archaeological investigations would be the property of Sydney Metro and would be securely stored by them following completion of post-excavation analysis.

Preliminary results reporting

A preliminary archaeological findings reports would be prepared following completion of archaeological investigation stages outlined in this AMS in accordance with the ARD.³⁰ This report would outline the main archaeological findings, post excavation and analysis requirements, and would also include any further archaeological investigation requirements for a particular site or future construction task. The preliminary results report would also identify if the findings should be considered for public interpretation. If archaeological remains are not located during the archaeological monitoring program, the preliminary findings report may be in the form of email advice.

If State significant archaeological remains are identified Heritage NSW, DCCEEW would be notified under s146 of the NSW Heritage Act.

Post-excavation analysis and final report

Following the completion of on-site archaeological works, post-excavation analysis of the findings would be undertaken. This would include artefact analysis, environmental and building material sample analysis (where applicable), stratigraphic reporting and production of Harris Matrices, production of detailed site survey plans, illustrations and interpretative drawings, generation of catalogues, data records and site registers.

A final excavation report detailing the archaeological program and results would be prepared. The report would be prepared in accordance with the project conditions of approval and standard conditions of archaeological permits issued under the Heritage Act. It would include the results of the archaeological excavation and analysis, additional historical information if needed, photographs, illustrations and plans, catalogue and analysis of artefacts, and also respond to the research

³⁰ Artefact 2018a

questions. The report would also include a reassessment of archaeological significance based on the investigation results. Opportunities for archaeological interpretation would also be included in the final report.

Team and timing

Archaeological team

The Artefact archaeological team would comprise:

- Primary Excavation Director – Dr Iain Stuart (Principal)
- Secondary Excavation Director – Jayden van Beek (Technical Specialist)
- Archaeologists – Jonny Love (Heritage Consultant), Pedro Silva (Heritage Consultant) and other archaeologists as needed.
- Archaeological Surveyor – Guy Hazell (ArcSurv).

Excavation timing

The excavation works would be monitored by an archaeologist as required under the direction of the Excavation Directors.

The Excavation Directors would be on call (where required) during the excavation works to oversee responses to unexpected finds.

If programs of archaeological salvage excavation are required, the program time would be dependent on the scale and complexity of the salvage excavation. The salvage excavation would be undertaken by a team of archaeologists and directed by the Excavation Directors as required. If State significant archaeological remains are identified that require investigation, the excavation would be directed by the Primary Excavation Director.

References

Artefact 2018a Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design.

Artefact 2019 Non-Aboriginal Heritage Impact Assessment and Archaeological Method Statement.



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Appendix G: Punchbowl Heritage Impact Assessment

Available up request

Appendix H: Sydney Trains Bungalows Heritage Impact Assessment

Available on request

Appendix I: Internal Fit out Station Buildings Heritage Impact Assessment

Available upon request

Appendix J: Station Heritage Maps based on T2M Stage 3 Heritage Impact Assessments