

# Appendix B6: Construction Cultural Heritage Management Sub-plan

## Construction Cultural Heritage Management Sub-plan

### M12 Motorway – East Package

July 2023

#### Document control

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#### Approval and authorisation

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## Glossary/Abbreviations

| Abbreviations         | Expanded text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACHAR                 | Aboriginal Cultural Heritage Assessment Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Aboriginal place      | An Aboriginal Place is an area declared by the Minister administering the Act to be of special significance with respect to Aboriginal culture                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Aboriginal objects    | Aboriginal objects include any deposit, object or material evidence (not being a handicraft made for sale), including Aboriginal remains, relating to the Aboriginal habitation of NSW, before or concurrent with occupation by Non-Aboriginal people, as defined in Section 5 of the NPW Act                                                                                                                                                                                                                                                                                                         |
| AHIMS                 | Aboriginal Heritage Information Management System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| AR                    | Amendment Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| ARSR                  | Amendment Report to the Submissions Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| ASO                   | Aboriginal Site Officers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| CA                    | Consistency Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CCHMP                 | Construction Cultural Heritage Management Sub-plan (this Plan)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CEMP                  | Construction Environmental Management Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CHRP                  | Cecil Hills Ridge PAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CNVMP                 | Construction Noise and Vibration Management Sub-plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Commonwealth CoA      | Federal Conditions of Approval under the EPBC Act                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Construction          | Includes all activities required to construct the CSSI as described in the documents listed in Condition A1, including commissioning trials of equipment and temporary use of any part of the CSSI, but excluding Low Impact Work which is carried out to complete prior to the approval of the CEMP, works approved under a Site Establishment Management Plan, approved under a Consistency Assessment, demolition of acquired residential houses, structures and sheds, and works specified in Appendix B and approved under an environmental management plan(s) in accordance with Condition A24. |
| CSSI                  | Critical State Significant Infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Cth                   | Commonwealth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| DCCEEW                | Commonwealth Department of Climate Change, Energy, Environment and Water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| DECCW                 | Former NSW Department of Environment, Climate Change and Water, now NSW Environment, Energy and Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Division 5.2 Approval | Approval issued by the NSW Minister for Planning and Public Spaces for the M12 Motorway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| DPE                   | NSW Department of Planning and Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| DUAP                  | Former Department of Urban Affairs and Planning, now DPE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| EAD                   | Environmental Assessment Documentation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| EDC                   | Elizabeth Drive connections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| EESG                  | Environmental, Energy and Science Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| EHG                   | Environment and Heritage Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EIS                   | Environmental Impact Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EMS                   | Environmental Management System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Abbreviations                                           | Expanded text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental Assessment Documentation, M7 EAD, M12 EAD | <p>The set of documents that comprise the Division 5.2 Approval of the M7 Widening:</p> <ul style="list-style-type: none"> <li>• Transport for NSW (August 2022) Westlink M7 Widening Modification Report</li> <li>• Transport for NSW (November 2022) Westlink M7 Widening Submissions report.</li> </ul> <hr/> <p>The set of documents that comprise the Division 5.2 Approval of the M12 Motorway:</p> <ul style="list-style-type: none"> <li>• Roads and Maritime Services (October, 2019) M12 Motorway, Environmental Impact Statement (EIS)</li> <li>• Transport for NSW (October, 2020) M12 Motorway, Submissions Report (the Submissions Report)</li> <li>• Transport for NSW (October, 2020) M12 Motorway, Amendment Report (AR)</li> <li>• Transport for NSW (December, 2020) M12 Motorway, Amendment Report submissions report (ARSR)</li> <li>• Transport for NSW (March, 2021) The M12 Motorway Amendment Report Submissions Report – Amendment (ARSR amendment)</li> <li>• WSP (October, 2021) M12 Motorway – West Package Detailed Design: Proposed changes between east of Badgerys Creek and The Northern Road Consistency Assessment</li> <li>• GHD (October, 2021) M12 Motorway – Central Package Detailed Design: Design and boundary changes between Cecil Park and east of Badgerys Creek Consistency Assessment</li> <li>• Arcadis (June, 2022) M12 Motorway – West and Central Package Sydney Water Pipeline Crossings: Proposed Sydney Water pipelines crossings for M12 West and Central Consistency Assessment</li> <li>• Arcadis (July, 2022) M12 Motorway – Design Boundary Changes: Proposed construction and operational design boundary changes for the M12 Project Consistency Assessment</li> <li>• Arcadis (August, 2022) M12 Central Boundary Changes: Proposed construction design boundary changes for M12 Central – Minor Change Consistency Assessment</li> <li>• WSP (in preparation) Proposed construction and operational design boundary changes for the M12 Project (East) Consistency Assessment.</li> </ul> <p>The documents that comprise the EPBC referral:</p> <ul style="list-style-type: none"> <li>• Submission #3486 – The M12 Motorway Project between the M7 Motorway, Cecil Hills and The Northern Road, Luddenham, NSW</li> <li>• Notification of referral decision and designated proponent - controlled action; date of decision 19 October 2018; ID: 2018-8286.</li> </ul> |
| Environmental Representative                            | A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. A key point of contact for the Planning Secretary in relation to environmental performance of the CSSI.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| EP&A Act                                                | <i>NSW Environmental Planning and Assessment Act 1979</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| EPA                                                     | NSW Environment Protection Authority                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EPBC Act                                                | <i>Commonwealth Environmental Protection and Biodiversity Conservation Act 1999</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| EPL                                                     | Environment Protection Licence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ER                                                      | Environmental Representative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| ESM                                                     | Transport for New South Wales Environment and Sustainability Manager                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Abbreviations                 | Expanded text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESR                           | John Holland Environmental Site Representative (refer to Section 5.1.1 of the CEMP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| EWMS                          | Environmental Work Method Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Federal Approval              | Approval (EPBC 2018/8286) for carrying out the M12 Project under Part 8 of the <i>Environmental Protection and Biodiversity Conservation Act 1999</i> subject to specific CoA as detailed in Annexure A of the approval.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Heritage Act                  | <i>NSW Heritage Act 1997</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Heritage item                 | A place, building, work, relic, archaeological site, tree, movable object or precinct of heritage significance, that is listed or may be eligible to be listed under one or more of the following registers: the State Heritage Register under the <i>Heritage Act 1977</i> (NSW), a state agency heritage and conservation register under Section 170 of the <i>Heritage Act 1977</i> (NSW), a Local Environmental Plan under the EP&A Act, the World, National or Commonwealth Heritage lists under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth), and/or an Aboriginal object or Aboriginal place as defined in section 5 of the <i>National Parks and Wildlife Act 1974</i> (NSW) |
| Heritage Council of Australia | Commonwealth Heritage Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| HIP                           | Heritage Interpretation Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Hold Point                    | A point beyond which a work process must not proceed without express written authorisation from Roads and Maritime                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Infrastructure Approval       | Approval (SSI 9364) for carrying out of the M12 Project under Section 5.19 of the Environmental Planning and Assessment Act 1979 subject to specific CoA as detailed in Schedule 2 of the approval.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| ISC                           | Infrastructure Sustainability Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ICOMOS                        | International Council on Monuments and Sites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| km                            | kilometre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| LALC                          | Local Aboriginal Land Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| LLEP                          | Liverpool Local Environmental Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| M7 CoA                        | Minster's Conditions of Approval for the M7 Motorway (Modification 6 Widening; SSI-663-Mod-6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| M7 Widening                   | M7 Motorway (Modification 6 Widening; SSI-663-Mod-6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| M12 CoA                       | Minister's Conditions of Approval for the M12 Motorway (CSSI 9364)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| M12 East package              | M12 Motorway – East package                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| MGA                           | Map Grid of Australia – MGA is a metric rectangular grid system (i.e. east and north)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Non-Aboriginal Work           | A non-Aboriginal building or standing structure. This may include tram tracks, kerbing, historic road pavement, fences, sheds or building foundations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| NPW Act                       | <i>National Parks and Wildlife Act 1974</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| NSW CoA                       | NSW Conditions of Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| OCCHMP                        | Overarching Construction Cultural Heritage Management Sub-Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| OCS                           | Overarching Communication Strategy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| OCEMP                         | Overarching Construction Environmental Management Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| OEH                           | NSW Office of Environment and Heritage, now Heritage NSW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Abbreviations             | Expanded text                                                                                                                                                                                                                                                                                                                                                |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PACHCI                    | Procedure for Aboriginal Cultural Heritage Consultation and Investigation (Roads and Maritime, 2011)                                                                                                                                                                                                                                                         |
| PAD                       | Potential Archaeological Deposit                                                                                                                                                                                                                                                                                                                             |
| Planning Secretary        | Secretary of the NSW Department of Infrastructure, Planning and Environment, or delegate                                                                                                                                                                                                                                                                     |
| PPV                       | Peak particle velocity                                                                                                                                                                                                                                                                                                                                       |
| Primary CoA/REMMs         | CoA/REMMs that are specific to the development of this Plan                                                                                                                                                                                                                                                                                                  |
| QA                        | Quality Assurance                                                                                                                                                                                                                                                                                                                                            |
| RAP                       | Registered Aboriginal Parties                                                                                                                                                                                                                                                                                                                                |
| REMM                      | Revised Environmental Management Measures                                                                                                                                                                                                                                                                                                                    |
| Relic                     | 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                                                                                                                         |
| Roads and Maritime        | Former NSW Roads and Maritime Services, Now Transport for NSW                                                                                                                                                                                                                                                                                                |
| SAP                       | Sensitive area plan                                                                                                                                                                                                                                                                                                                                          |
| Secondary CoA/REMMs       | CoA/REMMs that are related to, but not specific to, the development of this Plan                                                                                                                                                                                                                                                                             |
| SMART                     | Specific, Measurable, Achievable, Realistic and Timely                                                                                                                                                                                                                                                                                                       |
| SQP                       | Suitably qualified professional; this is an individual with formal Cultural Heritage Qualifications and a minimum of 5 years' experience                                                                                                                                                                                                                     |
| TfNSW                     | Transport for New South Wales                                                                                                                                                                                                                                                                                                                                |
| Unexpected heritage finds | A potential heritage item or place discovered but not identified in the documents listed in the Environmental Assessment Documentation, where assessment is required to determine if the item has heritage significance, or is an Aboriginal object or human remains. Unexpected heritage finds does not include confirmed human remains                     |
| Work                      | Any physical work to build or facilitate the building of the CSSI, including low impact work, environmental management measures and utility works.<br>However, it does not include activities that inform or enable detailed design of the CSSI and generate noise that is no more than 5 dB(A) above the rating background level at any sensitive receiver. |
| WSIA                      | Western Sydney International Airport                                                                                                                                                                                                                                                                                                                         |
| WSO Co                    | Western Sydney Orbital Company – joint venture between Transurban Group, Queensland Investment Corporation and Canada Pension Plan Investment Board                                                                                                                                                                                                          |

## 1. Introduction

### 1.1. Context

#### 1.1.1. M12 East package

This Construction Cultural Heritage Management Sub-plan (CCHMP or Plan) forms part of the Construction Environmental Management Plan (CEMP) for the M12 Motorway – East package (M12 East package).

This CCHMP has been prepared under the Overarching Construction Environmental Management Plan (OCEMP) and relevant sub-plans developed for M12 Motorway to address the requirements of the Commonwealth Conditions of Approval (Commonwealth CoA), the Minister's Conditions of Approval (M12 CoA), and the environmental management measures listed in the M12 Motorway Environmental Impact Statement (EIS), Amendment Report (AR), Amendment Report Submissions report (ARSR), ARSR Biodiversity Report, relevant subsequent consistency assessments, all applicable legislation and Transport for New South Wales (TfNSW) specifications.

#### 1.1.2. M7-M12 Integration project

The M12 Motorway Project (SSI 9364) will be delivered with the M7 Motorway (Modification 6 Widening; SSI-663-Mod-6) (M7 Widening) scope of work under what is referred to as the M7-M12 Integration project. The M7 Widening involves widening of approximately 26 kilometres of the M7 Motorway between Prestons and Oakhurst/Glendenning. The M7-M12 Integration project is being delivered by WSO Co and John Holland.

The M12 East package and M7 Widening have a complex interface in the vicinity of Cecil Hills and Cecil Park where the M7-M12 interchange is proposed.

Due to construction programming and development of the OCEMP, the CEMP and sub-plans will be prepared in a two-step process:

- M12 East package CEMP and Sub-plans (including this CCHMP)
- M7-M12 Integration project CEMP and Sub-plans.

This CCHMP focusses on the requirements of the M12 East package and will be updated in time to incorporate the relevant information and requirements of the M7 Widening. The re-branded M7-M12 Integration project CCHMP will also address the requirements of the M7 Widening CoAs and the REMMs listed in the Westlink M7 Widening Modification Report and Appendix B of the Westlink M7 Widening Submissions Report.

Once the M7-M12 Integration project CCHMP is approved, this M12 East CCHMP will be superseded. Construction of the M7 Widening Modification will not commence until the M7-M12 Integration project CCHMP is approved by the Planning Secretary.

### 1.2. Background

#### 1.2.1. M12 Motorway project

Transport for New South Wales (TfNSW) is constructing and will operate the M12 Motorway to provide direct access between the Western Sydney International Airport (WSIA) at Badgerys Creek and Sydney's motorway network. The M12 Motorway will run between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham for about 16 kilometres (km) and is expected to be opened to traffic prior to opening of the WSIA.

A detailed M12 Motorway Project description is provided in Section 5.1 of the CEMP.

#### 1.2.2. Statutory context

The M12 Motorway Project is subject to an approval under Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as Critical State Significant Infrastructure (CSSI). The M12 Motorway Project is also a controlled action under Section 75 of the *Environment Protection and Biodiversity*

*Conservation Act 1999* (EPBC Act), requiring a separate approval from the Australian Minister for the Environment.

The M12 Motorway Project was assessed as part of an EIS, Submission Report, Amendment Report, ARSR and ARSR Biodiversity Amendment and subsequent consistency assessments:

- WSP (October, 2021) M12 Motorway – West Package Detailed Design: Proposed changes between east of Badgerys Creek and The Northern Road Consistency Assessment
- GHD (October, 2021) M12 Motorway – Central Package Detailed Design: Design and boundary changes between Cecil Park and east of Badgerys Creek Consistency Assessment
- Arcadis (June, 2022) M12 Motorway – West and Central Package Sydney Water Pipeline Crossings: Proposed Sydney Water pipelines crossings for M12 West and Central Consistency Assessment
- Arcadis (July, 2022) M12 Motorway – Design Boundary Changes: Proposed construction and operational design boundary changes for the M12 Project Consistency Assessment
- Arcadis (August, 2022) M12 Central Boundary Changes: Proposed construction design boundary changes for M12 Central – Minor Change Consistency Assessment
- WSP (in preparation) Proposed construction and operational design boundary changes for the M12 Project (East) Consistency Assessment.

These documents are collectively referred to as the Environmental Assessment Documentation (EAD). The CSSI must also be carried out in accordance with all procedures, commitments, preventative actions, performance outcomes and mitigation measures set out in the EAD as required by NSW CoA A2.

Approval for the M12 Motorway Project under the EP&A Act was granted by the Minister for Planning on 23 April 2021 (CSSI 9364). Approval for the M12 Motorway Project under the EPBC Act was granted by the Australian Minister for the Environment on 3 June 2021 (EPBC 2018/8286).

This section will be updated to include the relevant M7 Widening information and requirements in the re-branded M7M12 Integration project CCHMP.

### **1.2.3. M12 Motorway delivery strategy**

The M12 Motorway Project will be constructed in separate stages or work packages:

- M12 West – between The Northern Road, Luddenham and about 250 metres east of Badgerys Creek
- M12 Central – between about 250 metres east of Badgerys Creek and the Western Sydney Parklands at Duff Road, Cecil Park
- M12 Central temporary roundabout installation (package delivered by TfNSW Sydney Roads Asset Performance Contractor)
- M12 East (the subject of this Plan) as part of the M7-M12 Integration project:
  - Elizabeth Drive connections (EDC) –connections between the M12 Motorway and Elizabeth Drive at Cecil Park
  - the M7/M12 interchange – a grade separated motorway to motorway connection between the M7 and M12 Motorways.

Each M12 Motorway package of works is to be delivered under separate contracts on behalf of the proponent, TfNSW. There will be periods during which the works associated with the M12 Central and M12 East packages will overlap. Coordination between the contractors will be required to manage cumulative impacts. Refer to Section 1.5.3 and Section 5.4 for additional information.

### 1.3. Scope of this Plan

The scope of this CCHMP is to describe how potential impacts to Aboriginal and non-Aboriginal heritage will be managed during construction of the M12 East package. This Plan has been prepared under and is consistent with the OCCEMP, in particular the Overarching Construction Cultural Heritage Management Sub-Plan (OCCHMP) considering relevant heritage items, archaeological potential and package specific construction activities. SMART (Specific, Measurable, Achievable, Realistic and Timely) principles are to be considered and applied during the preparation and ongoing implementation of this Plan.

This Plan is applicable to all activities during construction of the M12 East package, including all areas where physical works will occur or areas that may otherwise be impacted by the construction works, and are under the control of John Holland. All John Holland staff and sub-contractors are required to comply with the requirements of this Plan and related environmental management plans, over the full duration of the construction program.

The scope of this CCHMP will be updated to also include the relevant M7 Widening information and requirements in the re-branded M7-M12 Integration project CCHMP (refer also to Section 1.1.2).

Operational Aboriginal and non-Aboriginal heritage impacts and operation measures do not fall within the scope of this CCHMP and therefore are not included within the processes contained herein.

A copy of this CCHMP will be kept on the premises for the duration of construction.

### 1.4. Environmental Management System overview

The Environmental Management System (EMS) for the M12 East package is described in Section 3 of the CEMP. The EMS is consistent with the overarching EMS described in Section 3 of the OCCEMP.

To achieve the intended environmental performance outcomes, John Holland have established, implemented, maintained and continually improved an EMS in accordance with the requirements of ISO14001:2015. The John Holland EMS will be adopted as the guiding environmental management framework for the M12 East package.

The EMS consists of governance documentation, incorporating environmental management plans, policies, procedures and tools including:

- **John Holland Environment Policy.** Outlines the commitments and intentions established by John Holland as a business to ensure environmental performance and targets are achieved. The John Holland Environment Policy applies to the M12 East package. (Appendix A3 of the CEMP)
- **M12 East package CEMP.** Details the processes and procedures to be implemented during construction to comply with applicable CoA, REMMs, Environment Protection Licence (EPL), legislative obligations and contractual requirements. The relevant compliance obligations are detailed in CEMP Appendix A1, with a cross reference to where they are met in this Plan
- **Environmental Management Sub-plans.** These documents describe procedures and controls for specific environmental aspects requiring more rigorous management strategies
- **Aboriginal Cultural Heritage Assessment Report.** Details the methodology and results of the Aboriginal heritage detailed salvage program including consultation with Registered Aboriginal Parties (RAPs)
- **Archival Recording Heritage Report.** Provides the results of the non-Aboriginal heritage investigations and archival recordings
- **Sensitive Area Plans (SAPs).** A series of maps providing key features of the alignment and relevant environmental constraints. Features include waterways, heritage, biodiversity contamination and sensitive receivers amongst other site relevant features
- **Environmental Work Method Statements.** Management measures identified in this Plan may also be incorporated into site or activity specific Environmental Work Method Statements (EWMS) for activities assessed as having high environmental risk or other activities as required in TfNSW Specification D&C G36. EWMS incorporate appropriate mitigation measures and controls and identify key procedures to be

used concurrently with this Plan. Construction personnel undertaking a task governed by an EWMS must undertake the activity in accordance with the mitigation and management measures identified in the EWMS. EWMS will be reviewed by WSO Co/TfNSW Environment and Sustainability Manager (ESM) (or delegate) and independent Environmental Representative (ER) before the commencement of the construction activities to which they apply. See Section 3.3.3 of the CEMP for details of the EWMS preparation and approval requirements

- **Procedures, strategies and protocols.** Detailed procedures for inclusion in work packs. Detailed procedures, strategies and protocols have been and will be developed as required. Procedures, strategies and protocols relevant to the Plan include:
  - TfNSW Unexpected Heritage Finds and Human Remains Procedure
  - Aboriginal Cultural Salvage Strategy (Kelleher Nightingale Consulting Pty Ltd, 2021).

#### **1.4.1. CCHMP preparation, endorsement and approval**

The OCCHMP has been prepared to satisfy the NSW CoA in relation to the management of Aboriginal and non-Aboriginal heritage during construction of the M12 Motorway Project, particularly NSW CoA C4(f) and subsequently approved by the Planning Secretary. This stage specific CCHMP for the M12 East package has been developed under, and is consistent with the approved OCCHMP.

This CCHMP will be reviewed by WSO Co and the TfNSW ESM (or delegate) and the independent ER to confirm they are consistent with, and incorporate, all relevant elements of the approved OCCEMP prior to submission to the Planning Secretary for information.

Construction of the M12 East package will not commence until this CCHMP is endorsed by the ER and provided to the Planning Secretary for information.

#### **1.4.2. Interactions with other management plans and documents**

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

- Construction Noise and Vibration Management Plan (Appendix B2 of the CEMP) detailing the assessment and monitoring of potential vibration impacts, including on heritage structures
- Heritage sites to be retained in close proximity to M12 East package construction worksites are included on the Sensitive Area Plans detailed in Appendix A6 of the CEMP
- Sustainability Management Plan which provides a framework to achieve the nominated sustainability rating including heritage relevant targets
- M7-M12 Communication Management Plan, which was developed under, and is consistent with the Overarching Communication Strategy (OCS), details the procedures and processes for community notification, consultation, and complaints management.
- Unexpected Heritage Finds and Human Remains Procedure
- Results of non-Aboriginal heritage investigations and archival recordings will be included in the Archival Recording Heritage Report
- Results of the Aboriginal heritage detailed salvage program will be included in the Aboriginal Cultural Heritage Report.

### **1.5. Consultation**

#### **1.5.1. Consultation for preparation of the OCCHMP**

TfNSW consulted with the following government agencies and stakeholders through the development of the OCCEMP and OCCHMP in accordance with NSW CoA C4 (f):

- Heritage Council of NSW
- Heritage NSW
- WaterNSW

- Fairfield City Council
- Penrith City Council
- Liverpool City Council
- Registered Aboriginal Parties (RAPs).

Additionally, TfNSW provided the Unexpected Heritage Finds and Human Remains Procedure to RAPs for review and comment.

Key matters raised by stakeholders and how they have been addressed are outlined in the OCCHMP including consultation evidence in accordance with NSW CoA C4 and A5. This CCHMP has been written under, and is consistent with the OCCHMP and no further external consultation was required for its development.

### **1.5.2. Consultation for preparation of the M7-M12 Integration project CCHMP**

As described in Section 1.1.2, the CEMP will be developed in a two-step process. The M12 East package CEMP will be updated to incorporate the relevant information and requirements of the M7 Widening. The relevant Sub-plans of the re-branded M7-M12 Integration project CEMP will be subject to consultation requirements as identified in the M7 Widening CoA C4 and C9.

In accordance with M7 Widening CoA C4, the M7-M12 Integration project CCHMP will be prepared in consultation with NSW Heritage and WaterNSW.

### **1.5.3. Ongoing consultation during construction**

Ongoing consultation between John Holland, WSO Co, TfNSW, neighbouring Project packages, other construction projects, stakeholders, the community, and relevant agencies regarding the management of impacts on Aboriginal and non-Aboriginal heritage values (including an awareness of any exclusion zones or sensitive areas, as necessary) will be undertaken during the construction of the M12 East package as required. The process for the consultation will be consistent with the OCS and as described in the M7-M12 Integration project Communication Management Plan.

The M7-M12 Integration project Communication Management Plan has been prepared under, and is consistent with the M12 Motorway Overarching Communication Strategy (OCS). All works will be undertaken in accordance with the OCS until such time as the M12 East package components of the M7-M12 Integration project Communication Management Plan have been approved. References are made throughout this Plan to both the M12 Motorway OCS and the M7-M12 Integration project Communication Management Plan. The M7 Widening components of the M7-M12 Integration project Communication Management Plan require the Planning Secretary's approval prior to the commencement of work for M7 Widening.

Further consultation will also be carried out with relevant stakeholders, including Heritage NSW and project RAPs where relevant, in the event of an unexpected find in accordance with the TfNSW Unexpected Heritage Finds and Human Remains Procedure.

## 2. Purpose and objectives

### 2.1. Purpose

The purpose of this CCHMP is to describe how Aboriginal and non-Aboriginal heritage will be protected and managed during construction of the M12 East package.

### 2.2. Objectives

The key objective of the CCHMP is to ensure that Aboriginal and non-Aboriginal cultural heritage impacts are managed appropriately throughout the construction of the M12 East package. To aid in achieving this objective this CCHMP incorporates the relevant heritage management requirements from the following sources:

- Environmental Assessment Documentation (EAD) for the M12 Motorway
- NSW Infrastructure Approval CoA (SSI 9364) granted on 23 April 2021
- Commonwealth CoA granted on 3 June 2021
- TfNSW specifications
- Relevant legislation and other requirements described in Section 3.1 of this Plan.

### 2.3. Targets

Targets for the management of Aboriginal and non-Aboriginal cultural heritage impacts during the M12 East package include:

- Ensure full compliance with the relevant legislative requirements, CoA and environmental management measures
- Avoid or minimise disturbance, possible damage to heritage items or loss of Aboriginal and non-Aboriginal heritage cultural heritage
- Follow correct procedures and ensure notification of any Aboriginal heritage objects/places uncovered during construction of the M12 East package
- Ensure training is provided in the form of inductions to all Project personnel on heritage items, protection measures and unexpected heritage items procedures before they begin work on site
- Ensure appropriate controls and procedures are implemented during construction activities to avoid or minimise potential adverse impacts to Aboriginal and non-Aboriginal heritage
- Minimise impacts on, and complaints from, the community and stakeholders.

### 2.4. Performance objectives

Performance outcomes identified in Table 4-1 of Appendix A of the M12 Motorway EIS that are relevant to the management of Aboriginal and non-Aboriginal heritage during construction of the M12 East package are identified in Table 2-1.

Table 2-1: Performance outcomes relevant to the M12 East package

| Performance outcome                                                                                                                                        | How performance outcome will be addressed                                                                                                                                                                                 | Source                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Do not destroy, modify or otherwise cause direct or indirect damage to the Upper Canal System, including the Cecil Hills Tunnel and Tunnel Shafts 3 and 4. | Implement this CCHMP, particularly the management measures in Section 6, which have been developed to consider the requirements in Section 3.2 and Section 3.3.                                                           | NSW CoA E82               |
| Damage to features of heritage conservation significance from vibration is minimised                                                                       | Undertake training, monitoring and inspections as summarised in Section 7.2 and Section 7.3.<br>Undertake mitigation, including vibration monitoring, identified in the Construction Noise and Vibration Management Plan. | EIS, Appendix A Table 4-1 |

### 3. Environmental requirements

#### 3.1. Relevant legislation and guidelines

##### 3.1.1. Legislation

Legislation considered during the development of this Plan includes:

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

Relevant provisions of the above legislation are identified in the register of legal requirements included Appendix A1 of the CEMP.

##### 3.1.2. Guidelines and standards

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

- TfNSW Specification D&C G36 – Environmental Protection
- *Procedure for Aboriginal Cultural Heritage Consultation and Investigation* (Roads and Maritime Services, 2011)
- *Cultural Heritage Guidelines* (Roads and Maritime, November 2015)
- *Standard Management Procedure: Unexpected Heritage Items* (Roads and Maritime, November 2015)
- *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* (Department of Sustainability, Environment, Water, Population and Communities, 2013)
- *Commonwealth Heritage Management Principles* (Department of the Environment and Water Resources, 2007)
- *NSW Government Policy on Aboriginal Participation in Construction* (released 1 May 2015, updated 1 August 2016)
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Office of Environment and Heritage (OEH), 2010)
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH, 2010)
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011)
- *Altering Heritage Assets* (Heritage Office and DUAP, 1996)
- *Archaeological Assessment Guidelines* (NSW Heritage Office and NSW Department of Urban Affairs and Planning, 1996)
- *Assessing Heritage Significance* (NSW Heritage Office, 2001)
- *Assessing Significance for Historical Archaeological Sites and “Relics”* (NSW Heritage Branch, Department of Planning, 2009)
- *Photographic Recording of Heritage Items Using Film or Digital Capture* (Heritage Branch, 2006)
- *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance* (2013)
- *How to prepare archival records of heritage items* (NSW Heritage Office, 1998)
- *Infrastructure Sustainability Council of Australia Technical Manual version 1.2* (ISCA, 2016)
- *Upper Canal Pheasants Nest to Prospect Reservoir Conservation Management Plan* (NSW Public Works Governments Architect’s Office, 2016)
- *Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines* (WaterNSW, 2020).

### 3.2. Ministers Conditions of Approval

The primary NSW CoA relevant to the development of this Plan are listed in Table 3–1. Secondary conditions relevant to this Plan have been listed in Appendix A. A cross reference is also included to indicate where the CoA is addressed in this Plan or other project management documents.

Table 3–1: Primary CoA

| CoA no. | Condition requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Document reference                                                                   |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| C4      | The following CEMP Sub-plans must be prepared in consultation with the relevant government and other agencies identified for each CEMP Sub-plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP Sub-plan, including copies of all correspondence from those agencies as required by Condition A5.<br>(f) Heritage (including Aboriginal and non-Aboriginal) – Heritage Council of NSW, Heritage NSW, WaterNSW and relevant Council(s). | OCCHMP<br>Section 1.5.1                                                              |
| C5      | The CEMP Sub-plans must state how:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                      |
|         | (a) The environmental performance outcomes identified in the documents listed in Condition A1 will be achieved;                                                                                                                                                                                                                                                                                                                                                                                                                                         | Section 2.2<br>Section 2.3<br>Section 2.4<br>Section 3.2<br>Section 3.3<br>Section 6 |
|         | (b) The mitigation measures identified in the documents listed in Condition A1 will be implemented;                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Section 3.3<br>Section 6<br>Appendix A                                               |
|         | (c) The relevant terms of this approval will be complied with; and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section 3.2<br>Appendix A                                                            |
|         | d) Issues requiring management during construction (including cumulative impacts), as identified through ongoing environmental risk analysis, will be managed through SMART (Specific, Measurable, Achievable, Realistic and Timely) principles.                                                                                                                                                                                                                                                                                                        | Section 1.3<br>Section 8                                                             |
| E31     | An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds in accordance with any guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW. The Procedure must be prepared in consultation with heritage NSW and form part of the Heritage CEMP Sub-plan required by Condition C4.                                                                                                                                                                                           | OCCHMP<br>Section 6.3<br>Appendix B                                                  |

| CoA no. | Condition requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Document reference                          |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| E32     | The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Work.<br>Note: Human remains that are found unexpectedly during the carrying out of Work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.                                                                                                                                                                       | OCCHMP<br>Section 6.3<br>Appendix B         |
| E33     | Where previously unidentified Aboriginal objects are discovered, all work must immediately stop in the vicinity of the affected area. Works potentially affecting the previously unidentified objects must not recommence until Heritage NSW has been informed. The measures to consider and manage this process must be specified in the Unexpected Heritage Finds and Human Remains Procedure required by Condition E31 and include registration in the Aboriginal Heritage Information Management System (AHIMS). | OCCHMP<br>Section 6.3<br>Appendix B         |
| E81     | The Proponent must have regard to the Upper Canal Pheasants Nest to Prospect Reservoir Conservation Management Plan (NSW Public Works Governments Architect's Office, 2016) and Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines (WaterNSW, 2020) when constructing the CSSI.                                                                                                                                                                                                         | Section 5.3<br>Section 6.2.5<br>Section 6.4 |
| E82     | Construction and operation of the CSSI must not destroy, modify or otherwise cause direct or indirect damage to the Upper Canal System, including the Cecil Hills Tunnel, and Tunnel Shafts 3 and 4.                                                                                                                                                                                                                                                                                                                 | Section 5.3<br>Section 6.4                  |

### 3.3. Revised environmental management measures

The primary REMMs relevant to the development of this Plan are listed in Table 3–2 below. Secondary REMMs relevant to this Plan are listed in Appendix A. A cross reference is also included to indicate where the REMM is addressed in this Plan or other project documents.

Table 3–2: Primary REMMs

| ID   | Measure/requirement                                                                                                                                                                                                                                                                                                                                                                               | Timing                | Document reference                                                           |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------|
| AH01 | A Construction Cultural Heritage Management Plan (CCHMP) will be developed for the project in consultation with the project RAPs and EESG. The CCHMP will include:                                                                                                                                                                                                                                | Prior to construction | OCCHMP<br>This CCHMP<br>Section 1.5.1                                        |
|      | <ul style="list-style-type: none"> <li>An unexpected finds procedure for the discovery of Aboriginal ancestral remains, Aboriginal objects or new Aboriginal sites consistent with TfNSW Standard Management Procedure Unexpected Heritage Items (Roads and Maritime, 2015). This procedure will also outline requirements to manage unexpected human remains finds in accordance with</li> </ul> |                       | OCCHMP<br>Appendix B - Unexpected Heritage Finds and Human Remains Procedure |

| ID    | Measure/requirement                                                                                                                                                                                                                                                                                    | Timing                | Document reference                                                 |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------|
|       | NSW statutory requirements, and relevant guidelines and standards prepared by EESG. The Procedure will outline the process for consulting with the RAPs in the event that previously unidentified Aboriginal heritage is discovered.                                                                   |                       |                                                                    |
|       | <ul style="list-style-type: none"> <li>Procedures for the management and curation of salvaged Aboriginal objects</li> </ul>                                                                                                                                                                            |                       | OCCHMP<br>Aboriginal Cultural Salvage Strategy                     |
|       | <ul style="list-style-type: none"> <li>Detailed locations and installation procedures for fencing and protective coverings</li> </ul>                                                                                                                                                                  |                       | Table 6–1<br>Section 6.4                                           |
|       | <ul style="list-style-type: none"> <li>Details of permissible activities inside protected Aboriginal areas</li> </ul>                                                                                                                                                                                  |                       | Section 6.4                                                        |
|       | <ul style="list-style-type: none"> <li>Procedures for consideration of heritage aspects within site inductions and toolbox talks for construction workers and supervisors.</li> </ul>                                                                                                                  |                       | Section 7.2                                                        |
| NAH01 | A Construction Cultural Heritage Management Plan (CCHMP) will be prepared for the project as part of the CEMP in consultation with Heritage NSW. The CCHMP will include as a minimum:                                                                                                                  | Prior to construction | OCCHMP<br>This CCHMP<br>Section 1.5.1                              |
|       | <ul style="list-style-type: none"> <li>A list, plan and maps with GIS layers showing the location of identified heritage items both within, and near, the construction footprint</li> </ul>                                                                                                            |                       | Section 4.2<br>CEMP Appendix A6                                    |
|       | <ul style="list-style-type: none"> <li>A significance assessment and statement of significance for each item</li> </ul>                                                                                                                                                                                |                       | Section 4.2                                                        |
|       | <ul style="list-style-type: none"> <li>Protocols and procedures including inductions and toolbox talks for all contractors and sub-contractors working in the area to be informed of all exclusion zones, the elements and their significance, to prevent accidental damage or encroachment</li> </ul> |                       | Section 7.2                                                        |
|       | <ul style="list-style-type: none"> <li>Protocols and procedures to be implemented during construction to avoid or minimise impacts on items of heritage significance including protective fencing</li> </ul>                                                                                           |                       | Table 6–4<br>Section 6.2<br>Section 6.4                            |
|       | <ul style="list-style-type: none"> <li>The TfNSW <i>Unexpected Heritage Items Procedure</i> (Roads and Maritime, 2015) which will be followed in the event that unexpected heritage finds are uncovered during construction.</li> </ul>                                                                |                       | Appendix B - Unexpected Heritage Finds and Human Remains Procedure |

### 3.4. TfNSW specifications

The TfNSW specifications set out the minimum requirements for the detailed outcomes in terms of quality or performance expected in the finished product for construction projects and are relevant to various construction activities on work sites to minimise impacts to the environment. The TfNSW Specifications are contract documents and are not publicly accessible.

The TfNSW specifications that are relevant to this Plan are:

- TfNSW Specification D&C G36 – Environmental Protection
- TfNSW Specification D&C G40 – Clearing and Grubbing.

### 3.5. Key reference documents

The key reference documents for Aboriginal and non-Aboriginal heritage within and adjacent to the M12 East package corridor are:

- Aboriginal heritage Environmental Assessment Documentation specifically:
  - Exhibited EIS Section 7.5 and Appendix I – Technical working paper: Aboriginal Cultural Heritage Assessment Report
  - AR – Appendix E Aboriginal Heritage Supplementary Technical Memorandum
- Non-Aboriginal heritage Environmental Assessment Documentation specifically:
  - Exhibited EIS Section 7.6 and Appendix J – Technical working paper: Non-Aboriginal Heritage Assessment Report
  - AR – Appendix F – Non-Aboriginal Heritage Supplementary Technical Memorandum.
- M12 CoA E81 reference documentation specifically:
  - *Upper Canal Pheasants Nest to Prospect Reservoir Conservation Management Plan* (NSW Public Works Governments Architect's Office, 2016)
  - *Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines* (WaterNSW, 2020)

The Project boundary and relevant heritage data is shown on the Sensitive Area Plans included in Appendix A6 of the CEMP.

#### 3.5.1. Additional heritage assessments

Particular heritage items were not previously captured within the Environmental Assessment Documentation, following adjustments to the construction footprint. Additional heritage assessments and investigations have therefore been undertaken following the EIS and Amendment Report exhibitions:

- M12, Upper Canal System Shaft 3: Stage 2 Investigation Results (January, 2022).
- M12EDC Detailed Design and Conservation Policies of the Upper Canal System Conservation Management Plan M12EDD-WSP-ALL-EN-MEM-000005 (13 October, 2022).

### 3.6. Sustainability commitments

John Holland is targeting a sustainability rating under the Infrastructure Sustainability Council (ISC) rating system, using the ISC manual version 1.2. Through best practice in assessing, managing and monitoring heritage, **Level 2** for **Her-1** (with a stretch target of Level 3), and **Level 3** for **Her-2** is being targeted. The locations within this CCHMP (and other relevant management documents) where these particular credit levels are targeted and addressed are summarised in Appendix C – ISC Manual v1.2 compliance table.

John Holland is aiming to maximise sustainability benefits of the M12 East package, enhance heritage values and leave a lasting legacy through the measures listed below:

- Minimise adverse impacts to heritage during construction and operation through identification and implementation and follow up (where required) by Suitably Qualified Professionals (SQPs)
- Ensure that community heritage values have been considered through heritage studies, and/or through ongoing consultation and integration into future studies (if additional studies are required). Consultation commitments are described further in Section 1.5
- Ensure that community and key stakeholders have participated in the heritage studies
- Ensure that heritage values beyond those listed in government registers have been identified, considered and addressed, such as the Cecil Park School, Post Office and Church Site
- Promote local heritage values through interpretation, including both Aboriginal (refer Section 6.1.2) and non-Aboriginal Heritage (refer Section 6.2.2)
- Explore and identify opportunities to enhance heritage values and implement them where possible
- Monitor heritage at appropriate intervals during construction, including vibration monitoring and safe working distances (refer Section 6.5), and ongoing environmental and heritage management inspections (refer Section 8 of the CEMP). This monitoring will be with the intention of maintaining heritage values, with the enhancement of heritage values to be targeted through additional measures such as interpretation and knowledge sharing.

## 4. Existing environment

The following section summarises the heritage values within and adjacent to the Project corridor, based on information contained in the Environmental Assessment Documentation and Heritage assessments as detailed in Section 3.5.1.

### 4.1. Aboriginal cultural heritage

#### 4.1.1. Aboriginal cultural heritage sites

Field surveys and test excavations carried out to inform the Environmental Assessment Documentation determined there is a continuous but variable distribution of Aboriginal objects across the M12 Motorway construction footprint and detailed investigation area. One Aboriginal cultural heritage site (CHRP) was identified within the M12 East package construction footprint, and is listed in Table 4–1.

Most of the Aboriginal cultural heritage sites identified across the length of the M12 Motorway corridor, consist of broad distributions of Aboriginal stone artefacts associated with major creeks; these watercourses provided water, food sources, and cultural significance for Aboriginal groups. These sites are expected to extend well into comparable landscapes outside of the construction footprint.

The assessment significance criteria used to determine the significance for each Aboriginal cultural heritage site was based Australia International Council on Monuments and Site (ICOMOS) Burra Charter (Australia ICOMOS, 2000) in the Environmental Assessment Documentation. The criterion includes:

- Social value
- Historical value
- Scientific value
- Aesthetic value
- Spiritual value.

These values together, provided an “overall statement of significance” for the Aboriginal cultural heritage site as detailed in Table 4–1.

An additional unnamed Aboriginal sensitive area has also been identified in the OCCHMP figures, but not described in the text of the OCCHMP. It is noted the footprint of the site has not been identified in the EIS or Amendment Report. TfNSW is currently confirming with WSP and the Aboriginal heritage consultant the status of the site to guide whether further mitigation is required. Once finalised, the CCHMP will be updated with the relevant information.

Table 4–1: Aboriginal cultural heritage sites located in the M12 East package construction footprint

| Site name                                  | AHIMS site ID                      | Description                                                                                                                                                              | Overall statement of significance |
|--------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Cecil Hills Ridge PAD (CHRP)               | 45-5-4935 (M12-AS-03)<br>45-5-5300 | Excavation area across site on high hillslope and ridgetop above the M7 Motorway. Incorporates 45-5-4935.                                                                | High                              |
| Unnamed Aboriginal heritage sensitive area | TBC                                | Located adjacent to the western boundary of AF17 and intersects a small portion of the northern construction boundary for re-aligned Wallgrove Road. Subsumes 45-5-2563. | TBC                               |

As part of the EIS, a ‘site complex’ indicated a group of sites that occur in close proximity and as part of a continuous area of landscape. The Cecil Hills complex consists of CHRP (partially within the M12 East package construction footprint) and PCP8 (within the M12 Central package construction footprint). No mitigation measures specific to the Cecil Hills complex, as a whole, were identified in the Environmental Assessment Documentation. Mitigation measures specific to the site CHRP are discussed in Section 6.1.1.

Additional Aboriginal cultural heritage sites are located adjacent to the M12 East package construction footprint. These sites are listed in Table 4–2 and visually represented in Figure 4-1. The significance of these sites was not assessed (excluding PAD-OS-7), and they will not be impacted upon by construction.

*Table 4–2: Aboriginal cultural heritage sites located outside of the M12 East package construction footprint*

| Site name | Description                                                                       |
|-----------|-----------------------------------------------------------------------------------|
| PAD-OS-5  | Stone artefact site: initially a PAD with artefacts discovered in test excavation |
| PAD-OS-7  | Stone artefact site: initially a PAD with artefacts discovered in test excavation |
| DLC 2     | Stone artefact site                                                               |

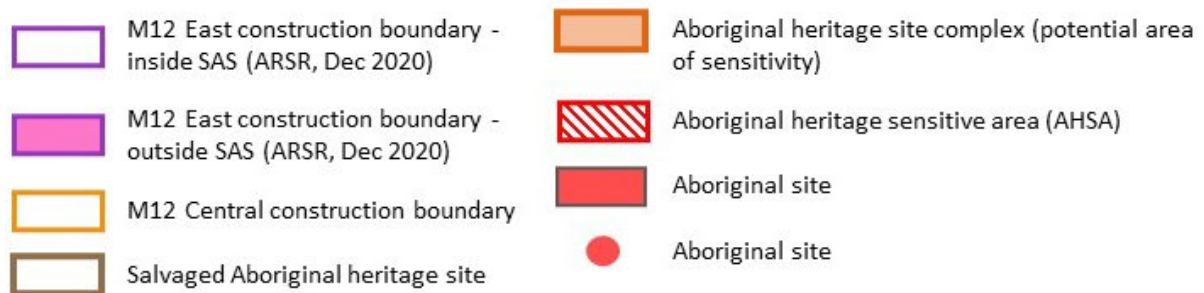
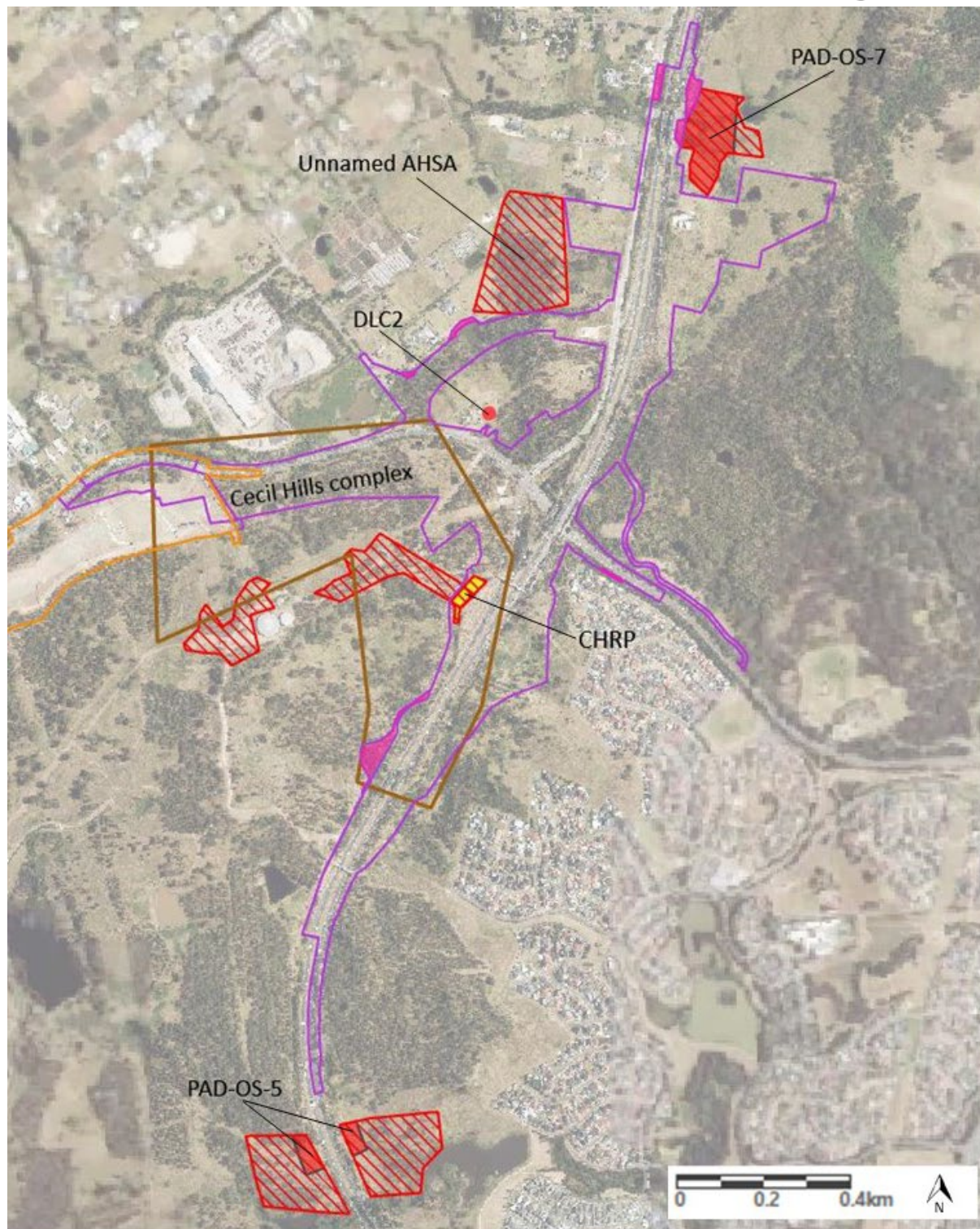


Figure 4-1: Location of Aboriginal heritage sites near the M12 East package

## 4.2. Non-Aboriginal cultural heritage

### 4.2.1. Non-Aboriginal heritage items

Three registered or potential heritage sites (Item 4, Item 8 and Item 13) were identified within the M12 East package portion of the M12 Motorway corridor assessed in the EIS.

Following a significance assessment, comparative analysis and test excavations, it was determined that two items (Item 4 and Item 8) within or adjacent to the M12 East package construction boundary were assessed as having either local or local and State (Item 4) heritage significance. Item 13 was assessed as having no significance.

Through further heritage assessments, an additional heritage item (Item 4a) was investigated and has been included in Table 4–3 below. Non-Aboriginal heritage items of significance within or adjacent to the M12 East package construction footprint are listed in Table 4–3 and mapped in Figure 4-2.

*Table 4–3: Description of heritage items of significance, within and immediately adjacent to the M12 East package*

#### Heritage items associated with the M12 East package

##### Item 4: Upper Canal System (Pheasants Nest Weir to Prospect Reservoir) (SHR 01373)

The Upper Canal System bisects the study area in the southwestern and northeast corner of the Elizabeth Drive and M7 interchange on Lot 1 DP 603946 and Lot 51 DP811015. The heritage item is partly located inside the construction footprint. It was surveyed on 1-2 March 2018 (Survey Area Nos. 36 and 42).

While the canal itself is about 32 metres underground (in tunnel), the Tunnel Shaft 4 is located at the surface within the study area. The shaft was observed from The M7 eastern road reserve within the median of the M7 Motorway.

The Upper Canal System is assessed as being of State significance and is a listed heritage item of local significance in the Liverpool Local Environmental Plan 2008.



*View of surface over northeast section of the pipeline, facing northeast*



*Tunnel Shaft 4 as viewed from eastern road reserve, facing southwest*

##### Item 4a: Upper Canal System, (Pheasants Nest Weir to Prospect Reservoir), Air Shaft 3 (SHR 01373)

The Upper Canal System is located south-west of the intersection of Wallgrove Road and Elizabeth Drive, Cecil Hill on Lot 21 DP 1109551.

Dilapidation survey and 3D laser survey of the canal and ground penetrating radar of the calculated position of Shaft No. 3 has been completed. Further investigations were detailed in M12 Project, Upper Canal System Shaft 3: Stage 2 Investigation Results (Artefact 2022), which described the investigations of the potential archaeological remains associated with Shaft 3. The investigation found no intact structural remains associated with Shaft 3, and no evidence of the actual shaft itself. The archaeological remains found were limited to the wider construction cut and fill around Shaft 3.

The archaeological remains identified during the investigation were found to not reach the threshold of local significance. However, the investigation did confirm the suspected location of Shaft 3. As well as confirming

### Heritage items associated with the M12 East package

location, it noted that the actual shaft is likely to be about 500mm below the investigation depth, which was 1.5m below ground level.



*Predicted location of shaft 3, facing south-west*



*Cut and fill associated with Shaft 3, facing north*

### Item 8: Cecil Park School, Post Office and School Church

Cecil Park Public School is located on Lot 1 DP724970 and was surveyed on 1 March 2018 (Survey area no. 38) as well as on 1 August 2018. The heritage item is located inside the construction footprint.

During the field survey bricks pieces and rubble, large exotic trees, circular depressions, bottles, vehicles tracks, levelled areas, in-situ footings and large rubbish pile were noted.

The Cecil Park School site is considered to have local historical significance. Archaeological remains identified to date during archaeological monitoring undertaken for the M12 Motorway project have been assessed as not reaching the threshold of local significance.



*Metal object located centre, western side of property*



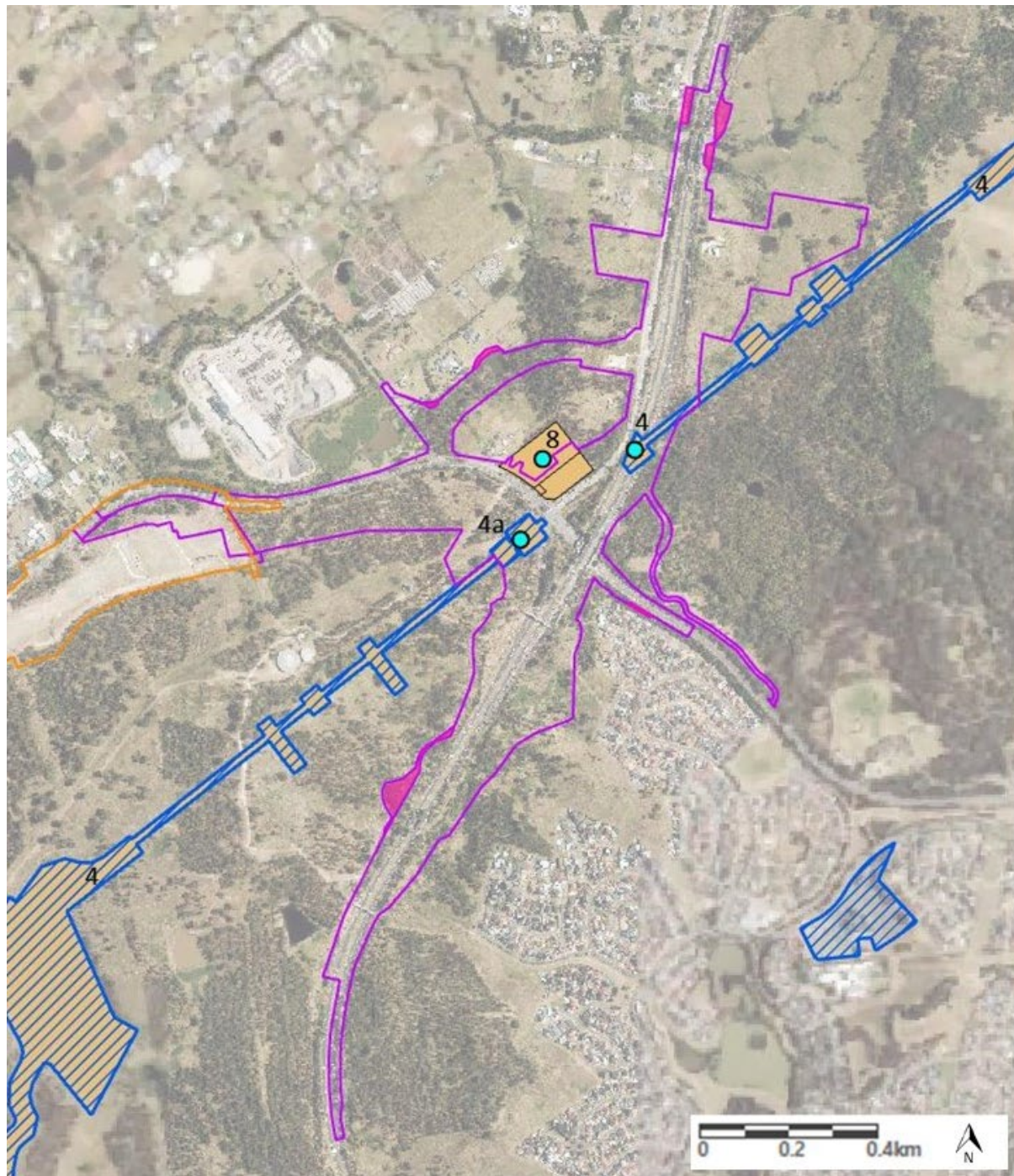
*Rubble mound in southwestern corner of property*



*Remains of c1898 Cecil Park school found during testing*



*Non-significant concrete slab remains found during monitoring undertaken for the M12 Motorway project*



- M12 East construction boundary - inside SAS (ARSR, Dec 2020)
- M12 East construction boundary - outside SAS (ARSR, Dec 2020)
- M12 Central construction boundary
- Heritage item curtilage
- State heritage curtilage
- Non-Aboriginal heritage item

| Item No. | Item name                                                                    |
|----------|------------------------------------------------------------------------------|
| Item 4   | Upper Canal System (Pheasants Nest West to Prospect Reservoir)               |
| Item 4a  | Upper Canal System (Pheasants Nest West to Prospect Reservoir - Air Shaft 3) |
| Item 8   | Cecil Park School, Post Office and Church Site                               |

Figure 4-2: Location of non-Aboriginal heritage sites and items

## 5. Environmental aspects and impacts

### 5.1. Construction activities

Key aspects of construction of the M12 East package that could result in adverse impacts to Aboriginal and non-Aboriginal heritage include:

- Low impact works including non-substantial construction activities such as services relocations
- Initial clearing and/or grubbing of vegetation
- Initial removal of topsoil
- Construction of ancillary facilities and site compounds and spoil/mulch and/or equipment stockpile areas
- Temporary access roads during construction
- Earthworks and excavations during construction
- Drainage infrastructure upgrades
- Bridge construction
- Demolition of existing structures
- Construction of pavements
- Cumulative impacts.

### 5.2. Aboriginal heritage impacts

One Aboriginal cultural heritage site (CHRP) is partially located within the M12 East package construction footprint. The part of this site that is located within the construction footprint has been salvaged by TfNSW under early works for the Project. The part of the site located outside of the construction boundary will remain in place directly adjacent to the construction footprint.

Additional sites are located adjacent to the M12 East package footprint. A summary of the impacts on the Aboriginal cultural heritage site located within the M12 East package construction footprint is provided in Table 5–1 below.

Table 5–1: Aboriginal heritage site impacts relevant to the M12 East package

| Site name                                                                                | AHIMS ID                | Registered AHIMS sites  | Assessed significance of site | Type of harm             | Degree of harm | Consequence of harm                                                                                                              |
|------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------------|--------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Sites within the construction footprint</b>                                           |                         |                         |                               |                          |                |                                                                                                                                  |
| CHRP                                                                                     | 45-5-4935               | 45-5-4935               | High                          | Directly harmed (0.4 ha) | Total          | Total loss of value – portion of site within construction boundary has already salvaged by TfNSW under early work program.       |
| Unnamed Aboriginal heritage sensitive area                                               | (not a registered site) | (not a registered site) | (not assessed)                | TBC                      | TBC            | To be confirmed as part of the consistency assessment including any final boundary.                                              |
| <b>Sites within the detailed investigation area (outside the construction footprint)</b> |                         |                         |                               |                          |                |                                                                                                                                  |
| CHRP                                                                                     | 45-5-4935               | 45-5-4935               | High                          | No harm (3.6 ha)         | None           | Will be protected by construction boundary fencing and on land that won't be impacted..                                          |
| PAD-OS-7                                                                                 | 45-5-2721               | 45-5-2721               | Low                           | No harm                  | None           | No loss of value as this site will be protected by an exclusion zone to avoid direct disturbance.                                |
| PAD-OS-5                                                                                 | 45-5-2723               | 45-5-2723               | (not assessed)                | No harm                  | None           | No loss of value as this site is about 200 metres from the construction footprint.                                               |
| DLC 2                                                                                    | 45-5-2563               | 45-5-2563               | (not assessed)                | No harm                  | None           | No loss of value as this site is about 50 metres from the construction footprint and on private property that won't be impacted. |

### 5.3. Non-Aboriginal heritage impacts

The Environmental Assessment Documentation found that one heritage item within or adjacent to the M12 construction boundary associated with the M12 East package is subject to physical impacts. Following the implementation of management measures, the M12 East package will have a major impact on one item:

- Item 8: Cecil Park School, Post Office and Church Site.

The Project was assessed as having a negligible impact on the following:

- Item 4: Upper Canal System
- Item 4a: Upper Canal System – air shaft 3.

Table 5–2 includes a summary of the anticipated impacts to non-Aboriginal heritage items resulting from the M12 East package.

Table 5–2: Summary of potential impacts on non-Aboriginal heritage items

| Item                       | Listing         | Significance                                                                | Proposed activities                                                                       | Potential impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Heritage significance and implications |
|----------------------------|-----------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Item 4: Upper Canal System | SHR 01373, LLEP | Listed under State Heritage Register as State<br>Listed under LLEP as Local | Construction of grade-separated interchanges including associated ramps, with M7 Motorway | <p>Works will be undertaken in close proximity to the Upper Canal System with the potential for indirect vibration impacts. No direct impacts to the Upper Canal System are anticipated.</p> <p>Under CoA E82 The Project will not destroy, modify or otherwise cause direct or indirect damage to the Upper Canal System including the Cecil Hills Tunnel and Tunnel Shafts 3 &amp; 4.</p> <p>The Project will consider the <i>Upper Canal Pheasants Nest to Prospect Reservoir Conservation Management Plan</i> (NSW Public Works Governments Architect's Office, 2016) and <i>Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines</i> (WaterNSW, 2020). This includes working closely to the Upper Canal and Warragamba Pipelines. No sections of pipeline that are located underground will be impacted.</p> <p>The Tunnel Shaft 4, located in the M7 central road median, will not be impacted as this location will not be subject to works.</p> <p>4a Air Shaft 3: The Project will not destroy any sections of tunnel that is located underground. Impact to Air Shaft 3, located in the south-west will be avoided through design modification, as required.</p> | <b>Negligible impact</b>               |

| Item                                                   | Listing | Significance                                                           | Proposed activities                                                                       | Potential impacts                                                                                                           | Heritage significance and implications                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------|---------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item 8: Cecil Park School, Post Office and Church Site | N/A     | Not currently listed but assessed as local for the purpose of this EIS | Construction of grade-separated interchanges including associated ramps, with M7 Motorway | The Project will physically disturb and destroy the area of archaeological potential through ground disturbance activities. | <p><b>Major impact</b></p> <p>The proposed works within the Cecil Park historical complex will result in complete removal of Cecil Park school, post office and teacher residence therefore significantly impacting Item 8.</p> <p>As the construction will remove most/all of the archaeological aspects of the heritage item, it will no longer be of significance and will therefore not be subject to further operational impacts. The level of impact on the heritage item overall will be major.</p> |

## 5.4. Cumulative impacts

Cumulative Aboriginal and non-Aboriginal heritage impacts may arise from the interaction of construction and operation activities of the M12 East package and other approved or proposed projects in the area. When considered in isolation, specific impacts may be considered minor. These minor impacts may be more substantial however, when the impact of multiple projects on the same receivers is considered.

Cumulative Aboriginal heritage impacts during construction of the M12 include the disturbance of 40 ha of archaeologically sensitive South Creek alluvium which occurs along waterways. This may cause moderate impact to Aboriginal objects, site complexes and cultural landscapes. This area also contains a large cultural value to the Darug people. The Aboriginal Heritage Interpretation Plan, to be prepared by TfNSW, will consider cumulative Aboriginal heritage impacts. Cumulative non-Aboriginal impacts during construction, although transformative, are considered relatively minor as they are addressed and managed through the implementation of a range of environmental mitigation measures. These measures are outlined in Section 6 of the OCCHMP and Section 6 of this Plan.

Cumulative non-Aboriginal impacts during construction although transformative, are considered relatively minor as they are addressed and managed through the implementation of a range of environmental mitigation measures in Section 6 of this Plan.

The M7 Motorway (Mod 6 Widening) project is closely aligned with the M12 East package and is also being delivered by John Holland as part of the M7-M12 Integration project. This CCHMP will be updated to also include relevant M7 Widening information and requirements in the re-branded M7-M12 Integration project CCHMP (refer also to Section 1.1.2).

Interagency communication between government departments, stakeholders and RAPs undertaking Work in the area will be managed by TfNSW with the aim of combining messages when possible and minimising heritage impacts to the local community.

Consultation will be undertaken with neighbouring properties and with personnel who will be undertaking work on other projects within the vicinity of the M12 East package to ensure they are aware of any exclusion zones or sensitive areas identified for the M12 East package. Any exclusion zones required for M12 East package would be maintained in the project GIS database and would be included in relevant sensitive area maps, as required.

## 6. Environmental mitigation and management measures

Environmental mitigation and management measures for the management of cultural heritage on the M12 East package are to be managed through application of SMART (Specific Measurable, Achievable, Realistic and Timely) principles.

### 6.1. Aboriginal heritage

Aboriginal heritage sites relevant to the M12 East package will be managed as outlined in Table 6–1. Refer to the following sections for further detail on each management strategy. TfNSW is currently confirming with WSP and the Aboriginal heritage consultant the status of the site to guide whether further mitigation is required. Once finalised, the CCHMP will be updated with the relevant information.

Table 6–1: Management strategies for Aboriginal heritage sites relevant to the M12 East package

| Management strategy | Strategy description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Sites relevant to M12 East                                                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Active avoidance    | Carry out investigations during detailed design to maximise the retention of intact cultural deposits, particularly those within the CHRP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• CHRP (refer Section 6.1.1)</li> <li>• Unnamed Aboriginal heritage sensitive area where it falls within footprint.</li> </ul>                                    |
| Passive avoidance   | <p>No active protection measures required due to a lack of direct impacts or low archaeological significance.</p> <p>Sites nominated for passive avoidance do not require specific management measures because they are located at sufficient distance outside of the construction footprint.</p>                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>• DLC2</li> </ul>                                                                                                                                                 |
| Active protection   | <p>Protection provided in the form of fencing along the edge of the construction footprint closest to the site with signage notifying construction personnel to avoid ground impacts.</p> <p>PAD-OS-5 is located outside of the construction footprint. A portion of CHRP located outside of the construction footprint remains in situ. Fencing / signage will be installed along the edge of the construction footprint closest to this in situ site.</p> <p>If practical, the Unnamed Aboriginal heritage sensitive area will be avoided and protection in the form of fencing along the edge of the area within the construction footprint will be installed.</p> | <ul style="list-style-type: none"> <li>• PAD-OS-5</li> <li>• CHRP (portion of CHRP that remains in situ)</li> <li>• Unnamed Aboriginal heritage sensitive area</li> <li>• (Refer Section 6.4)</li> </ul> |
| Active protection   | AHIMS site 45-5-2721 (PAD-OS-7) occurs outside the construction footprint. Protection measures will include installation of temporary fencing along the edge of the construction footprint near the site and erection of signage for construction personnel to avoid ground disturbance.                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>• AHIMS site 45-5-2721 (PAD-OS-7)</li> <li>• (Refer Section 6.4)</li> </ul>                                                                                       |
| Salvage collection  | <p>Salvage collection is warranted at those Aboriginal cultural heritage sites in the construction footprint where stone artefacts were recorded on the surface. Salvage collection is to record MGA coordinates of each artefact by GPS and relevant artefact attributes consistent with the broader archaeological salvage analysis.</p> <p>Salvage collection has been carried out by a suitably qualified archaeologist.</p>                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>• CHRP</li> <li>• (Refer Section 6.1.1)</li> </ul>                                                                                                                |

| Management strategy            | Strategy description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Sites relevant to M12 East                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Salvage excavation             | Salvage excavation is warranted at those Aboriginal cultural heritage sites that were assessed as having high scientific and high overall significance.<br><br>Salvage excavation has been carried out by a suitably qualified archaeologist.                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>• CHRP</li> <li>• (Refer Section 6.1.1)</li> </ul> |
| Archaeological test excavation | If construction restrictions result in impacts to area of PAD associated with AHIMS site 45-5-2721 (PAD-OS-7), archaeological test excavation is required, to be conducted in accordance with Requirement 16a of the <i>Code of Practice for Investigation of Aboriginal Objects in NSW</i> (DECCW 2010), <i>Stage 2 Aboriginal Cultural Heritage Consultation and Investigation (PACHCI)</i> (Roads and Maritime 2011) and in consultation with RAPs (refer to Section 1.5.1). This will only be a requirement if avoidance cannot be achieved. | <ul style="list-style-type: none"> <li>• AHIMS site 45-5-2721 (PAD-OS-7)</li> </ul>       |

### 6.1.1. CHRP

The OCCHMP identified various mitigation measures for CHRP including:

- Active avoidance
- Active protection
- Salvage collection
- Salvage excavation.

A portion of CHRP is located outside the construction footprint and will remain in situ. This portion of CHRP will be protected through fencing and signage along the edge of the construction footprint closest to the site.

A portion of CHRP is located within the construction footprint. Salvage collection is required at sites in the construction footprint where stone artefacts have been recorded on the surface and salvage excavation is required at Aboriginal cultural heritage sites assessed as having high scientific and overall significance. CHRP has been subject to salvage undertaken as low impact work approved by the Planning Secretary by a suitably qualified archaeologist as detailed in the Aboriginal Cultural Salvage Strategy. Completion of the salvage activities is summarised in the M12 Motorway Project: Critical State Significant Infrastructure (SSI-9364) Completion of Archaeological Fieldwork (Kelleher Nightingale Consulting, July 2022).

As required by REMM AH02, the Aboriginal Cultural Salvage Strategy has been prepared in consultation with the Project RAPs and Environment and Heritage Group (EHG). The results of the salvage collection will be documented in an Aboriginal Cultural Heritage Report prepared by an experienced and qualified heritage specialist, which will be issued to the RAPs for information, and Planning Secretary no later than 12 months after the completion of the salvage work.

### 6.1.2. Aboriginal Heritage Interpretation Plan

Two Heritage Interpretation Plans (HIP) for Aboriginal and non-Aboriginal heritage have been prepared for the Project on behalf of TfNSW to fulfill the requirements of NSW CoA E27. The non-Aboriginal HIP is detailed in Section 6.2.2.

The Aboriginal HIP was prepared by Balarinji Indigenous Design and Strategy on behalf of TfNSW. Consultation was conducted with the following organisations and agencies:

- Aboriginal Cultural Heritage Advisory Committee
- Local Aboriginal Land Council/s
- Fairfield City Council

- Penrith City Council
- Liverpool City Council.

The Aboriginal HIP includes interpretation measures that will improve community awareness of Aboriginal cultural heritage values. This is an Aboriginal artwork interpretation strategy and plan for Aboriginal cultural heritage sites surrounding the Project. The Aboriginal HIPs will be provided to WSIA and Sydney Metro Western Sydney Airport to assist in guiding opportunities for integration of heritage values into their project design.

## 6.2. Non-Aboriginal heritage

### 6.2.1. Archival photographic recording

A suitably qualified heritage specialist has been engaged by TfNSW to prepare an archival photographic recording of heritage sites in accordance with the *Heritage Information Series: How to prepare archival records of heritage items* (NSW Heritage Office, 1998) and *Photographic Recording of Heritage Items Using Film or Digital Capture* (Heritage Branch, 2006).

Archival recording was carried out for heritage items in accordance with the Revised Environmental Management Measures prior to commencement of work that may impact on the items. The recording included both buildings and landscape features such as dams, and earthworks. The recording includes a detailed map showing the location of the features in an Archival Recordings Heritage Report.

No items within the M12 East package footprint have been identified as requiring archival recording within the documents listed in NSW CoA A1.

In accordance with NSW CoA E81 and REMM NAH06, the relevant policies of the Upper Canal Pheasants Nest to Prospect Reservoir Conservation Management Plan, including Policy 40 (archival recording) have been considered as part of the project through the following:

- The EIS Non-Aboriginal Heritage Assessment report concluded that the M12 Motorway project (including the M12 East package) would not cause any impacts to the views of the Upper Canal System (as it is underground) or to Shaft 4 (as it is already located in the M7 Motorway central median)
- The M12 Project, Upper Canal System Shaft 3: Stage 2 Investigation Results did not recommend archival recording for Air Shaft 3.

The OCCHMP identified that Item 4a: Upper Canal System, Air Shaft 3 would be subject to archival photographic recording if required by outcomes of additional investigation. As above, the M12 Project, Upper Canal System Shaft 3: Stage 2 Investigation Results did not recommend archival recording for Air Shaft 3. As a result, no additional archival recording under NSW CoA E28 is expected to be required as part of the M12 East package.

### 6.2.2. Non-Aboriginal Heritage Interpretation Plan

A Heritage Interpretation Framework and Plan has been prepared for the Project by Extent Heritage on behalf of TfNSW to fulfil the requirements of NSW CoA E27 as they relate to non-Aboriginal heritage.

The HIF includes consideration of elements to enable the continued interpretation and understanding of heritage values within the M12 corridor. The HIF considers five sites along the M12 corridor, including the Upper Canal System (Pheasants Nest Weir to Prospect Reservoir). The Upper Canal System was built in the 1880s to bring water from Sydney's south-west to the city to ensure a stable water supply for the growing city.

The five sites addressed in the HIF have been categorised into three themes. The Upper Canal System is associated with the theme of 'water harvesting'. The HIF proposes interpretive device types for the Project including interpretive signs along, and inlays set into the shared pathway associated with the Upper Canal System.

### 6.2.3. Archaeological test excavations

Archaeological test excavations have been carried out for the Cecil Park School, Post Office and Church Site (Item 8) in accordance with the research design and methodology outlined in the *M12 Motorway: Former Cecil Park Historical Complex Historical Archaeological Salvage Research Design and Methodology* (Jacobs, 2020). Heritage NSW formed the opinion that no further archaeological excavation was required at Cecil Park Complex Archaeological Site where 'relics' were unlikely to be disturbed.

A suitably qualified archaeologist will be present during excavation of the area occupied by the Cecil Park Archaeological site to confirm that the significance of artefacts and remains are in line with the findings of the test excavations already completed. Where an unexpected find of a 'relic' (as defined in the *Heritage Act 1977*) is encountered, works would stop and the unexpected finds protocol for the project would be implemented. Heritage NSW would be notified of the unexpected find of a 'relic', if required.

### 6.2.4. Thematic heritage study

A thematic non-Aboriginal heritage study was prepared on behalf of TfNSW to satisfy REMM NAH04. The Non-Aboriginal Heritage Thematic Study was broadened to include all sites within the M12 Motorway Project alignment. The Cecil Park School, Post Office and School Church site and the Upper Canal System are relevant to the M12 East package and are included in the heritage items that are the focus of the Thematic Study.

Cecil Park School, Post Office and School Church is associated with the following key themes and messages identified in the Thematic Study:

- Shaping and developing: manipulation, establishment and growth, securing a future
- The cycle and milestones of life: people, places, names.

Upper Canal System is associated with the following key themes and messages identified in the Thematic Study:

- The natural environment: life, earth, water, sky
- Shaping and developing: manipulation, establishment and growth, securing a future
- Extending and advancing: movement and motion, knowledge and research, communication
- External influences: influences and responses, a global community, government policy, war and conflict
- The cycle and milestones of life: people, places, names.

### 6.2.5. Upper Canal System

CoA E81 requires that the Upper Canal Pheasants Nest to Prospect Reservoir Conservation Management Plan 2016 and Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines (2020) are consulted when constructing the CSSI.

CoA E82 explains that the CSSI must not destroy, modify or otherwise cause direct or indirect damage to the Upper Canal System, including the Cecil Hills Tunnel and Tunnel Shafts 3 and 4.

Heritage assessments in the EIS identified that the Upper Canal System had the potential to be impacted by vibration from the M12 East package. Potential vibration impacts are further described in the Construction Noise and Vibration Management Plan (CNVMP), which notes that heritage structures (e.g. Upper Canal System) may be susceptible to vibration impacts associated with construction equipment if they are operating within the safe working distance for heritage sensitive receivers.

The following Conservation Management Plan policies would be reviewed and adhered to such that the Upper Canal Sydney is managed and protected during the works:

- POLICY 1: The following aspects of the Upper Canal are integral to the significance of the place. Manage them to ensure they are conserved and their heritage values retained.
  - Key original components of the Canal including open canal sections, tunnels, aqueducts, weirs and offtakes and the support structures that allow it to function such as flumes, access roads, depots, cottage, telegraph lines and bridges. These elements are ranked as having Exceptional or High heritage significance.
- POLICY 3: Elements of Exceptional Significance. Retain all elements of Exceptional Significance as a priority.
- POLICY 35: Make decisions requiring change to the Upper Canal with a clear understanding of the implications for the identified heritage values of the Canal and seek to minimise negative heritage impacts.
- POLICY 45: Retain and conserve in situ elements of Exceptional heritage significance, which are presently redundant or may be identified as redundant during the life of this Conservation Management Plan.

### 6.3. Unexpected Heritage Finds and Human Remains Procedure

The TfNSW Unexpected Heritage Finds and Human Remains Procedure (Appendix B) will be implemented for the duration of all M12 East package works. This procedure has been prepared by a suitably qualified and experienced heritage specialist in accordance with relevant guidelines and standards through consultation with NSW Heritage and the Heritage Council of NSW. The procedure has been submitted to the Planning Secretary for information no later than one month before the commencement of construction.

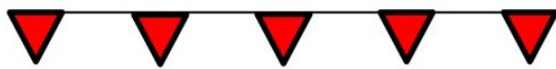
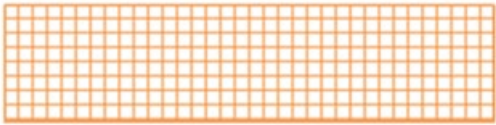
The Procedure includes the requirement that consultation with Registered Aboriginal Parties will be undertaken in the event that previously unidentified Aboriginal heritage is discovered. This consultation supports a partnership with the local Aboriginal community to appropriately manage the Aboriginal cultural heritage values associated with the M12 East package.

*Note: Human remains that are found unexpectedly during the carrying out of Work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.*

### 6.4. Exclusion zones

John Holland will establish exclusion zones through fencing or other means (e.g. flagging, signage, etc.) to demarcate heritage items to be retained (including those located outside of the M12 East package boundary). These exclusion zones will restrict access by personnel and vehicles into sensitive areas. Exclusion zones will be mapped out by a qualified surveyor in accordance with the flagging protocol in Table 6–2 and TfNSW Specification D&C G40.

Table 6–2: Flagging protocol

| Flagging type                                                                       | Description                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Red Flagging – Project Boundary                                                                                                                                                             |
|  | Orange Flagging – Clearing Limits/Exclusion Fencing. No clearing outside this flagging at any time during project.                                                                          |
|  | Orange Parawebbing with “NO ENTRY Environmental Protected Area” signs – Heritage/Threatened Flora/Fauna exclusion zones. No entry permitted without written permit from WSO Co / TfNSW ESM. |

Environmental protection area signage will be installed on exclusion zone fencing at regular intervals agreed to by the WSO Co/TfNSW ESM (or delegate). This fencing will be regularly inspected to ensure the fencing has not been damaged, as detailed in Section 7.3. If damaged, the exclusion zone will be rectified immediately. The fencing will only be removed following agreement by the WSO Co/TfNSW ESM (or delegate).

Exclusion zones will be established along the project construction boundary near key Aboriginal heritage items/areas as detailed in Table 6–1, and for non-Aboriginal heritage sites including:

- CHRP (areas of the site located outside of the construction footprint and remaining in situ)
- PAD-OS-7
- Unnamed Aboriginal heritage sensitive area
- Item 4: Upper Canal System (Pheasants Nest Weir to Prospect Reservoir (SHR 01373)) Shaft 3 and Shaft 4

Exclusion zones are mapped on the Sensitive Area Plans within the CEMP (Appendix A6).

Exclusion zones may only be entered in agreement with WSO Co / TfNSW ESM (or delegate) to enhance biodiversity values such a landscape and/or weed management or to undertake vibration monitoring or other pedestrian surveys (e.g. biodiversity survey, etc).

## 6.5. Safe working distances

Safe working distances, vibration monitoring and reporting will be undertaken in accordance with the Construction Noise and Vibration Management Plan. A summary of the relevant information is included here.

Vibration testing is required to be conducted during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent cosmetic damage. In 2019, TfNSW commissioned a condition survey of the Cecil Hills Tunnel component of the Upper Canal System (ref SMEC report dated 23 July 2019, 14.2166.0522-0032 re: M12 Motorway – Dilapidation Survey of WaterNSW Cecil Hills Tunnel). The dilapidation survey undertaken by SMEC, established a vibration criteria of peak particle velocity (PPV) of 25 mm/s.

The M12 Motorway Package 3 - East Elizabeth Drive Connection Building Condition And Public Utilities Assessment Report (WSP September 2022) identified the safe working distances based on a desktop survey for non-Aboriginal heritage structures within or near the M12 East package. These are identified in Table 6–3.

Table 6–3: Safe working distances for non-Aboriginal heritage structures

| Item                                           | Distance from construction works (m) | Key plant / equipment               | Safe working distance (m) |
|------------------------------------------------|--------------------------------------|-------------------------------------|---------------------------|
| Item 4: Upper Canal Shaft 4                    | 30                                   | Vibratory roller (>18t)             | 68                        |
|                                                |                                      | Vibratory roller (typically 13-18t) | 54                        |
|                                                |                                      | Vibratory roller (typically 7-13t)  | 41                        |
|                                                |                                      | Vibratory roller (typically 4-6t)   | 33                        |
|                                                |                                      | Vibratory roller (typically 2-4t)   | 16                        |
|                                                |                                      | Vibratory roller (typically 1-2t)   | 14                        |
|                                                |                                      | Bored piles                         | 5                         |
| Item 4: Upper Canal underground infrastructure | Within footprint                     | Vibratory roller (>18t)             | 68                        |
|                                                |                                      | Vibratory roller (typically 13-18t) | 54                        |
|                                                |                                      | Vibratory roller (typically 7-13t)  | 41                        |
|                                                |                                      | Vibratory roller (typically 4-6t)   | 33                        |
|                                                |                                      | Vibratory roller (typically 2-4t)   | 16                        |
|                                                |                                      | Vibratory roller (typically 1-2t)   | 14                        |
|                                                |                                      | Bored piles                         | 5                         |
| Item 4a: Upper Canal Shaft 3                   | Adjacent to footprint                | Vibratory roller (>18t)             | 68                        |
|                                                |                                      | Vibratory roller (typically 13-18t) | 54                        |
|                                                |                                      | Vibratory roller (typically 7-13t)  | 41                        |
|                                                |                                      | Vibratory roller (typically 4-6t)   | 33                        |
|                                                |                                      | Vibratory roller (typically 2-4t)   | 16                        |
|                                                |                                      | Vibratory roller (typically 1-2t)   | 14                        |
|                                                |                                      | Bored piles                         | 5                         |

Assessment and monitoring will be undertaken in line with the M12 East Construction Noise and Vibration Management Plan. Sensitive items that require survey were identified in the EAD and include:

- Item 4: Upper Canal System, including air shaft 4
- Item 4a: Upper Canal System, including air shaft 3.

Vibration monitoring will be carried out when vibration intensive tasks are occurring within the minimum working distances to heritage structures, including for the Upper Canal system (in consultation with WaterNSW). If vibration, monitoring equipment is required to be installed at heritage-listed structures, advice from a heritage specialist will be sought on methods and locations for installing the equipment.

Where the monitoring identifies exceedances in the relevant criteria, or where impacts are identified, additional mitigation measures will be identified and implemented to appropriately manage impacts. These

include modifying plant specifications and/or work methodology, and delineating additional exclusion areas around structures to restrict high-vibration activities occurring too close to sensitive structures.

All required vibration monitoring and reporting will be undertaken in accordance with Section 5.6 and Section 9.6 of the M12 East Noise and Vibration Management Plan.

## 6.6. Heritage specialist advice

Advice from a heritage specialist will be obtained prior to physically affecting any heritage-listed structures (e.g. Item 4 (Upper Canal System)), including:

- Prior to installing equipment used for vibration, movement and/or noise monitoring at any heritage-listed structure, advice will be sought on methods and locations for the installation of such equipment
- Advice from a built heritage specialist will be obtained prior to conducting any at-property treatment at any heritage-listed item identified in the EAD to ensure such work does not have an adverse impact on the heritage significance of the item
- Before occupying or utilising heritage buildings for potential use, a dilapidation survey will be carried out and a heritage architect will be engaged to advise on proposed modifications and management measures to avoid and minimise impact on the buildings.

A suitably qualified archaeologist will be present during excavation of the area occupied by the Cecil Park Archaeological site in accordance with REMM NAH09, to confirm that the significance of artefacts and remains are in line with the findings of the test excavations already completed. If remains with the potential to be considered 'relics' (as defined in the Heritage Act 1977) are found, then works will stop and the unexpected finds procedure (RMS, 2015) will be followed.

## 6.7. Management measures

Management actions prescribed by this CCHMP aim to avoid and minimise impacts on Aboriginal and non-Aboriginal heritage values during construction of the M12 East package. The measures are sourced primarily from the Infrastructure Approval, REMMs and relevant TfNSW specifications and are summarised in Table 6–4.

Table 6-4: M12 East package management and mitigation measures of relevance to heritage

| ID     | Management measure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | When to implement     | Responsibility for implementation       | Reference or source | Evidence of implementation                                    |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------|---------------------|---------------------------------------------------------------|
| CH01   | <p>All personnel (including sub-contractors) are required to attend a compulsory site induction that includes an environmental component before commencement on-site.</p> <p>The induction will include relevant information regarding management of Aboriginal and non-Aboriginal heritage associated with the M12 East package.</p>                                                                                                                                                                                                                                                                                                                         | Prior to work on site | Environmental Site Representative (ESR) | G36                 | Induction package                                             |
| CH02   | <p>At least 10 working days prior to commencing Physical Work on Site in or near an environmentally sensitive area (including heritage sites), prepare an EWMS which includes the details of the environmental protection measures to be implemented at that location.</p> <p>An EWMS is required for works in the vicinity of:</p> <ul style="list-style-type: none"> <li>• Upper Canal System including Air Shaft 3 and Air Shaft 4</li> <li>• CHRP</li> <li>• PAD-OS-5</li> <li>• PAD-OS-7</li> <li>• Unnamed Aboriginal Sensitive area.</li> </ul> <p>Clearly delineate the environmentally sensitive area and signpost the locations and boundaries.</p> | During construction   | ESR Superintendent                      | G36 – Clause 4.13   | EWMS and release of Hold Point<br>Site inspection/photographs |
| CH02.1 | <p>For all works in proximity to the WaterNSW assets and other assets that have vibration and water runoff limits (refer to TfNSW D&amp;C G7):</p> <p>At least 20 working days prior to the proposed commencement of each applicable work activity, submit the EWMS documents, addressing the issues listed in Clause 3.2.4 for the nominated work activity.</p>                                                                                                                                                                                                                                                                                              | During construction   | ESR Superintendent                      | G36 – Clause 3.2.4  | EWMS and release of Hold Point                                |

| ID   | Management measure                                                                                                                                                                                                                                                                                                                                                                                                                                      | When to implement                                              | Responsibility for implementation        | Reference or source       | Evidence of implementation                                         |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------|---------------------------|--------------------------------------------------------------------|
| CH03 | A detailed Aboriginal Cultural Salvage Strategy must be prepared in consultation with the RAPs and EESG before any archaeological or cultural salvage is undertaken within the CSSI boundary. All salvage collections and excavations will be carried out by a suitability qualified and experienced Archaeologist using methods determined in consultation with the Environmental, Energy and Science Group (part of DPE) (EESG) and Project RAPs.     | Prior to construction                                          | TfNSW                                    | REMM AH02                 | Aboriginal Cultural Salvage Strategy                               |
| CH04 | Following completion of all salvage works associated with heritage items, an Aboriginal Cultural Heritage Report must be prepared in accordance with relevant guidelines and in consultation with Project RAPs and EESG. The Report will document all results of the salvage activities including analysis of artefacts from collections and excavations and management of all artefact finds.                                                          | Prior to construction                                          | TfNSW                                    | REMM AH02                 | Aboriginal Cultural Heritage Report                                |
| CH05 | Impacts on identified Aboriginal cultural heritage sites will be minimised where feasible in consultation with a suitably qualified and experienced archaeologist. Measures considered will include (but not be limited to): <ul style="list-style-type: none"> <li>• Remaining within the approved construction footprint and haulage routes,</li> <li>• Design haulage routes and access roads to minimise potential disturbance of soils.</li> </ul> | Detailed design, prior to construction and during construction | ESR<br>Archaeologist                     | REMM AH03                 | EWMS<br>Aboriginal Cultural Heritage Report                        |
| CH06 | An Unexpected Heritage Finds and Human Remains Procedure (refer to Section 6.3) must be prepared in consultation with Heritage NSW. The Procedure must be submitted to the Planning Secretary and be implemented for the duration of Work.                                                                                                                                                                                                              | Prior to and during construction and operations                | ESR<br>Project Manager<br>Superintendent | CoA E31<br>CoA E32<br>G36 | Unexpected Heritage Finds and Human Remains Procedure (Appendix B) |

| ID   | Management measure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | When to implement                               | Responsibility for implementation                 | Reference or source            | Evidence of implementation                                            |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------|--------------------------------|-----------------------------------------------------------------------|
| CH07 | <p>Where previously unidentified historic (non-Aboriginal) heritage items or Aboriginal cultural heritage objects are discovered, all work must immediately stop in the vicinity of the affected area and the Unexpected Heritage Finds and Human Remains Procedure (Appendix B) must be implemented. Works potentially affecting the previously unidentified objects must not recommence until Heritage NSW has been informed.</p> <p>If required, the previously unidentified site will be registered in the Aboriginal Heritage Information Management System (AHIMS).</p> | Prior to and during construction and operations | ESR<br>Project Manager<br>Superintendent<br>TfNSW | CoA E33<br>REMM AH01(a)<br>G36 | Unexpected Finds report / Unexpected Heritage Item Recording Form 418 |
| CH08 | If human remains are found unexpectedly during the carrying out of Work, NSW Police should be notified immediately and the Unexpected Heritage Finds and Human Remains Procedure shall be implemented.                                                                                                                                                                                                                                                                                                                                                                        | Prior to and during construction and operations | Project Manager<br>Supervisor<br>ESR              | CoA E31<br>Co A E32<br>G36     | Written correspondence                                                |
| CH09 | <p>An investigation will be carried out during detailed design to minimise impacts on the CHRP site where feasible.</p> <p>This is applicable to the portion of the CHRP site located adjacent to the construction boundary, and not previously salvaged by TfNSW.</p>                                                                                                                                                                                                                                                                                                        | Detailed design and prior to construction       | ESR                                               | REMM AH04                      | Design Report                                                         |
| CH10 | Salvage collection of surface artefacts / salvage excavation will be carried out for CHRP as detailed in the Aboriginal Cultural Salvage Strategy.                                                                                                                                                                                                                                                                                                                                                                                                                            | Prior to construction                           | TfNSW                                             | REMM AH06<br>REMM AH07         | Aboriginal Cultural Heritage Report                                   |
| CH12 | <p>Exclusion fencing (Section 6.4) shall be implemented for heritage sites:</p> <ul style="list-style-type: none"> <li>• Portion of CHRP that remains in situ</li> <li>• PAD-OS-5</li> <li>• PAD-OS-7 (AHIMS site 45-5-2721)</li> <li>• Unnamed Aboriginal heritage sensitive area</li> </ul>                                                                                                                                                                                                                                                                                 | Prior to and during construction                | Supervisor<br>ESR                                 | AH08<br>AH10 (amended)<br>G36  | Sensitive Area Plans<br>Site inspection/photographs                   |

| ID     | Management measure                                                                                                                                                                                                                                                                                                                              | When to implement                             | Responsibility for implementation                            | Reference or source   | Evidence of implementation                          |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------|-----------------------|-----------------------------------------------------|
|        | <ul style="list-style-type: none"> <li>Upper Canal System (Pheasants Nest Weir to Prospect Reservoir), Air Shaft 3 and Air Shaft 4.</li> </ul>                                                                                                                                                                                                  |                                               |                                                              |                       |                                                     |
| CH14   | Before occupying or utilising heritage buildings for potential use, a dilapidation survey will be carried out and a heritage architect will be engaged to advise on proposed modifications and management measures to avoid and minimise impact on the buildings                                                                                | Prior to construction                         | Site Engineer<br>ESR<br>Archaeologist                        | NAH07                 | Written report                                      |
| CH15   | Impacts on non-Aboriginal heritage items will be avoided or minimised where reasonable and feasible. Where impacts are unavoidable, works will be carried out in accordance with the measures for individual non-Aboriginal heritage items outlined in CH15.1, CH16 and CH18.                                                                   | Prior to construction and during construction | Area Manager<br>Supervisor<br>ESR                            | NAH03                 | Sensitive Area Plans<br>Site inspection/photographs |
| CH15.1 | The detailed design and construction of the M12 East package will consider the relevant conservation policies outlined in the Upper Canal CMP (NSW Public Works Government Architect's Office, 2016) and the relevant measures outlined in the Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines (WaterNSW 2020). | Prior to construction and during construction | Design Manager                                               | CoA E81<br>REMM NAH06 | Design reports                                      |
| CH16   | A suitably qualified archaeologist will be present during the excavation of the area occupied by the Cecil Park Archaeological site to confirm that the significance of artefacts and remains are in line with the findings of the test excavations already completed (Item 8).                                                                 | Prior to construction                         | ESR<br>Area Manager<br>Archaeologist                         | NAH09                 | Report prepared by Archaeologist                    |
| CH17   | <p>The following structures have the potential to be within the safe working distances for sensitive structures (Group 3 from DIN 4150):</p> <ul style="list-style-type: none"> <li>Item 4: Upper Canal System</li> </ul>                                                                                                                       | Prior to construction and during construction | ESR<br>Heritage Consultant<br>Noise and Vibration Consultant | CoA E42<br>NV11       | Monitoring report                                   |

| ID   | Management measure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | When to implement     | Responsibility for implementation                           | Reference or source                                                    | Evidence of implementation                   |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------|------------------------------------------------------------------------|----------------------------------------------|
|      | <ul style="list-style-type: none"> <li>Item 4a: Upper Canal System, air shaft 3.</li> </ul> <p>Construction work is to be carried out in to comply with the safe working distances for sensitive heritage items set out in Section 6.5. Where safe distances cannot be achieved, plant specifications and/or work methodology is to be modified to not cause damage to sensitive structures.</p> <p>Vibration monitoring will be carried out when vibration intensive tasks are occurring within the minimum working distances to heritage structures. Vibration monitoring of the Upper Canal will also be carried out during construction in consultation with WaterNSW.</p> <p>Where the monitoring identifies exceedances in the relevant criteria, or where impacts are identified, additional mitigation measures will be identified and implemented to appropriately manage impacts.</p> |                       |                                                             |                                                                        |                                              |
| CH20 | The location of Upper Canal Air Shaft 3 will be included on Sensitive Area Plans prepared for the project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | During construction   | ESR                                                         | Upper Canal System Air Shaft 3 (Item 4a) Stage 2 Investigation Results | CEMP – Appendix A6 Sensitive Area Plans      |
| CH21 | Consultation will be undertaken with neighbouring land owners and with personnel who will be undertaking work on other projects within the vicinity of the M12 East package construction footprint to ensure they are aware of any exclusion zones or sensitive areas identified for the M12 East package.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Prior to construction | ESR<br>Stakeholder and Community Manager<br>Project Manager | CoA C5(d)                                                              | Written report / memo / consultation records |

## 7. Compliance management

### 7.1. Roles and responsibilities

The M12 East package organisational structure and overall roles and environmental responsibilities are outlined in Section 6.1 of the CEMP. Specific responsibilities for the implementation of heritage management are detailed in Section 6 of this Plan.

### 7.2. Training

#### 7.2.1. Induction

To ensure that this Plan is effectively implemented, all site personnel (including sub-contractors) will undergo site induction training relating to heritage management issues before construction commencing. The induction training will address elements related to heritage items and values, including:

- Existence and requirements of this overarching CCHMP, this CCHMP and all plans and procedures prepared under the CCHMPs
- Relevant legislation, regulations
- Incident response, management and reporting
- Environmentally sensitive locations and exclusion zones
- Site flagging protocol
- Boundaries for land disturbance
- General heritage management measures
- Procedures to follow in the event of an unexpected heritage find or discovery of human remains (Appendix B).

Targeted training in the form of toolbox talks or specific training will also be provided to personnel with a key role in environmental management or those undertaking an activity with a high risk of environmental impact. Site personnel will undergo refresher training at not less than six monthly intervals.

The ER will review and approve the induction and training program prior to the commencement of construction and monitor implementation.

#### 7.2.2. Aboriginal cultural education

Aboriginal cultural education training will be presented to site personnel periodically during construction of the M12 East package. The training will be delivered by a representative of the local Aboriginal Community, a registered Aboriginal stakeholder or a Traditional Owner. TfNSW training guidance includes:

- Cultural values and significance of the M12 East package area
- Practical strategies to effectively engage and work with Aboriginal people
- How to improve communication with Aboriginal colleagues and customers
- Diversity within Aboriginal Australia, protocols, family and kinship systems
- Busting myths and stereotypes
- Encouragement to provide feedback and ask questions regarding Aboriginal issues.

#### 7.2.3. Daily pre-start meetings

Daily pre-start meetings conducted by the Area Manager, Site Supervisor (or other delegate) will inform the site workforce of any environmental issues relevant to heritage that may be impacted by, or impact on, the day's activities.

Further details regarding staff induction and training are provided in Section 6.3 of the CEMP.

### 7.3. Inspections and monitoring

The ESR will conduct regular inspections of sensitive areas, exclusion zones and activities with the potential to impact Aboriginal and non-Aboriginal heritage for the duration of the M12 East package. WSO Co/TfNSW and the ER will also conduct independent inspections to confirm compliance with heritage management requirements.

Requirements and responsibilities in relation to monitoring and inspections are documented in Section 8 of the CEMP.

### 7.4. TfNSW Specification Hold Points

TfNSW specifications set out environmental protection requirements and include hold point processes. Key Hold Points relevant to this CCHMP are identified in Table 7–1.

Table 7–1: Heritage TfNSW Specification Hold Points

| TfNSW specification | Clause | Type       | Description                                                                                                                                                                                                                                                                                                                                                                           | Document Reference         |
|---------------------|--------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| G36                 | 3.2.4  | Hold point | All works in proximity to the Water NSW assets and other assets that have vibration and water runoff limits.<br><br>At least 20 working days prior to the proposed commencement of each applicable work activity, submit the EWMS documents, addressing the issues listed in Clause 3.2.4 for the nominated work activity.                                                            | Section 1.4<br>Section 6.7 |
| G36                 | 4.13   | Hold point | At least 10 working days prior to commencing Physical Work on Site in or near an environmentally sensitive area, prepare an EWMS which includes the details of the environmental protection measures to be implemented at that location in accordance with G40/E (Flagging Protocol). Clearly delineate the environmentally sensitive area and signpost the locations and boundaries. | Section 1.4<br>Section 6.7 |

### 7.5. Salvage due diligence

John Holland will undertake the following due diligence check to ensure that required salvage activities have been completed by others prior to the commencement of M12 East package works that may impact the relevant area. This check includes:

- Requesting confirmation from WSO Co/TfNSW that salvage for the following sites/areas has occurred:
  - CHRP.
- Requesting evidence (e.g. clearance letter, Aboriginal Cultural Heritage Report, etc.) from WSO Co/TfNSW.

In the event that exclusion zone fencing is present in the relevant areas, no work will be undertaken in that area until confirmation is received from TfNSW that salvage has been completed.

### 7.6. Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this CCHMP, CoA and other relevant approvals, licenses and guidelines.

Audit requirements are detailed in Section 8.4 of the CEMP.

## 7.7. Reporting and identified records

General reporting requirements and responsibilities for the M12 East package are documented in Section 8.3 and Section 8.5 of the CEMP. Specific reporting requirements associated with heritage management are outlined in Table 7–2.

Table 7–2: Reporting requirements relevant to heritage management

| Report                                                                  | When to implement                                                                   | Timing of submission to Planning Secretary                                                                    | Responsibility                                                                                                                              |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Aboriginal Cultural Heritage Report (NSW CoA E29)                       | Following completion of all salvage works associated with Aboriginal heritage sites | Within 12 months of completing the heritage related work described in the environmental assessment documents. | TfNSW Project Director<br>WSO Co / TfNSW ESM (or delegate)<br>Project Archaeologist through consultation with Project RAPs and Heritage NSW |
| Archival Recording Heritage Report (NSW CoA E29)                        | Prior to construction                                                               | Within 12 months of completing the heritage related work described in the environmental assessment documents. | TfNSW Project Director<br>WSO Co / TfNSW ESM (or delegate)<br>Suitable qualified heritage specialist                                        |
| Salvage excavation report (NSW CoA E29)                                 | Following completion of all archaeological excavations                              | Within 12 months of completing the heritage related work described in the environmental assessment documents. | TfNSW Project Director<br>WSO Co / TfNSW ESM (or delegate)<br>Suitable qualified heritage specialist                                        |
| Aboriginal Heritage Interpretation Plan (NSW CoA E27)                   | Prior to the finalisation of the Place, Design and Landscape Plan                   | Prior to the finalisation of the Place, Design and Landscape Plan                                             | TfNSW Project Director<br>WSO Co / TfNSW ESM (or delegate)<br>Suitable qualified heritage specialist<br>Detailed designers                  |
| Non-Aboriginal Heritage Interpretation Plan (NSW CoA E27)               | Prior to the finalisation of the Place, Design and Landscape Plan                   | Prior to the finalisation of the Place, Design and Landscape Plan                                             | TfNSW Project Director<br>WSO Co / TfNSW ESM (or delegate)<br>Suitable qualified heritage specialist<br>Detailed designers                  |
| Unexpected Heritage Item Recording Form 418 (if required) (NSW CoA E31) | Following encounter with an unexpected heritage item                                | Within 24 hours of encounter with an unexpected heritage item                                                 | ESR<br>WSO Co / TfNSW ESM (or delegate)                                                                                                     |
| Notification to Heritage NSW (if required) (NSW CoA E31)                | Following encounter with an unexpected heritage item                                | Following confirmation that Notification to Heritage NSW is required                                          | ESR<br>WSO Co / TfNSW ESM (or delegate)                                                                                                     |

| Report                                                                                        | When to implement                                               | Timing of submission to Planning Secretary                                       | Responsibility                                                                    |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Registration of unexpected Aboriginal heritage finds in the AHIMS (if required) (NSW CoA E33) | Following encounter with an unexpected aboriginal heritage item | Within a reasonable period of encounter with unexpected aboriginal heritage item | ESR<br>WSO Co / TfNSW ESM (or delegate)<br>Suitable qualified heritage specialist |
| Notification to NSW Police (if required) (NSW CoA E32)                                        | Following encounter with human remains                          | Immediately after encounter with human remains                                   | ESR<br>WSO Co / TfNSW ESM (or delegate)                                           |

Monthly environmental reports (refer to Section 8.5 of the CEMP) submitted to WSO Co/TfNSW will include:

- Any archaeological salvage or excavation activities
- Any unexpected heritage finds.

In the event of any unexpected find or discovery of human remains, all reporting will be undertaken as required in accordance with the Unexpected Heritage Finds and Human Remains Procedure (Appendix B).

John Holland will maintain accurate records substantiating all construction activities associated with the M12 East package or relevant to the CoAs, including measures taken to implement this CCHMP. Records will be made available to DPE and Commonwealth Department of Climate Change, Energy, Environment and Water (DCCEEW) upon request, within the timeframe nominated in the request.

In addition, key identified records relevant to the CCHMP as specified by TfNSW Specification D&C G36 are identified in Table 7–3.

*Table 7–3: Identified records*

| Identified records | Description                                                                                 | Document reference |
|--------------------|---------------------------------------------------------------------------------------------|--------------------|
| G36 – Clause 3     | Contractor's Environmental Management Plan (CEMP), Plans & Sub-Plans, procedures and EWMS's | Table 6–4          |

## 8. Review and improvement

### 8.1. Continuous improvement

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement. The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance
- Identify environmental risks not already included in the risk register
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets.

The ESR will be responsible for ensuring Project environmental risks are identified and included in the risk register and appropriate mitigation measures implemented throughout the construction of the Project as part of the continuous improvement process. The process for ongoing risk identification and management during construction is outlined in Section 4.1 of the CEMP.

### 8.2. CCHMP update and amendment

The processes described in Section 8.7 of the CEMP may result in the need to update or revise this Plan. This will occur as needed. Any revisions to the CCHMP and other Sub-plans will be in accordance with the process outlined in Section 1.3.3 of the CEMP.

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

## Appendix A. Secondary CoA, REMMs and Specifications

### NSW Conditions of Approval

| CoA No. | Condition requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Document reference                      |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| A7      | References in the terms of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this approval.                                                                                                                                                                                                                                                                                                                                    | Section 3.1.2                           |
| C9      | Any of the CEMP Sub-plans may be submitted to the Planning Secretary for approval along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before the commencement of construction.                                                                                                                                                                                                                                                                                                                       | OCCHMP – Section 1.4.1                  |
| C10     | Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary, unless otherwise agreed 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 sub-plans for that stage have been endorsed by the ER and approved by the Planning Secretary. | OCCHMP – Section 1.4.1<br>Section 1.4.1 |
| E26     | An experienced and qualified heritage specialist(s) must prepare and/or endorse the:                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | OCCHMP – Section 6.1, 6.2               |
|         | a. Heritage Interpretation Plan required by Condition E27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 6.1.2                           |
|         | b. Archival photographic digital recording required by Condition E28; and                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 6.2.1                           |
|         | c. Heritage Report required by Condition E29.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Section 6.2.2<br>Section 7.7            |
| E27     | A Heritage Interpretation Plan must be prepared that identifies and interprets the key heritage values and stories of the heritage items impacted by the CSSI. The Heritage Interpretation Plan must include but not be limited to:                                                                                                                                                                                                                                                                                                                     | Section 6.1.2<br>Section 6.2.2          |
|         | d. Integration of heritage themes and values in the design of the CSSI; design elements (form and fabric) and themes for the CSSI;                                                                                                                                                                                                                                                                                                                                                                                                                      | Section 7.7                             |
|         | e. Design elements (form and fabric) and themes for the CSSI;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |
|         | f. Consideration of the design concepts for Western Sydney International Airport and Sydney Metro Western Sydney Airport                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
|         | g. Opportunities for design responses for Aboriginal and non-Aboriginal heritage.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |
|         | The Heritage Interpretation Plan must be provided to Western Sydney International Airport and Sydney Metro Western Sydney Airport to assist in guiding opportunities for integration of heritage themes and values into their design.                                                                                                                                                                                                                                                                                                                   |                                         |

| CoA No. | Condition requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Document reference                                                                                                  |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|         | <p>The Heritage Interpretation Plan must be prepared in accordance with the <i>Interpreting Heritage Places and Items: Guidelines</i> (NSW Heritage Office, 2005), and in consultation with Heritage NSW, Aboriginal Cultural Heritage Advisory Committee, LALC and relevant council(s).</p> <p>The Plan must be implemented and inform the Place, Design and Landscape Plan required by Condition E69.</p> <p>The Heritage Interpretation Plan must be submitted to the Planning Secretary and Heritage NSW for information prior to finalising the Place, Design and Landscape Plan required by Condition E69.</p> <p>Note: Nothing in this condition prevents the Proponent from preparing separate Heritage Interpretation Plans for Aboriginal and Non-Aboriginal Heritage.</p> |                                                                                                                     |
| E28     | <p>Archival photographic digital recording must be undertaken as outlined in the documents listed in Condition A1 for all listed heritage items and for all sites assessed to have heritage significance which will be affected by the CSSI. The recordings must be undertaken prior to the commencement of Work which may impact the items. The recordings must include buildings, structures and landscape features and detailed maps showing the location of features. The archival recording must be prepared in accordance with <i>How to Prepare Archival Records of Heritage Items</i> (NSW Heritage Office, 1998) and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (NSW Heritage Office, 2006).</p>                                         | <p>Section 6.2.1</p> <p>Section 7.7</p>                                                                             |
| E29     | <p>Following completion of all Work described in the documents listed in Condition A1 in relation to heritage items, a Heritage Report including the details of archival recordings, further historical research either undertaken or to be carried out and archaeological excavation (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> <p><i>Note: Nothing in this condition prevents the Proponent from preparing separate Heritage Reports for Aboriginal and Non-Aboriginal Heritage.</i></p>                                                                                                                          | <p>Section 6.1</p> <p>Section 6.2</p> <p>Aboriginal Cultural Heritage Strategy</p> <p>Salvage excavation report</p> |
| E30     | <p>The Heritage Report must be submitted to the Planning Secretary and Heritage NSW for information within 12 months of completing all Work described in the documents listed in Condition A1 in relation to heritage items. Copies of the Heritage Report must also be provided to relevant local libraries and relevant local historical societies.</p>                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>Section 6.1</p> <p>Section 6.2</p> <p>Aboriginal Cultural Salvage Strategy</p> <p>Salvage excavation report</p>  |
| E31     | <p>An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds in accordance with any guidelines and standards prepared by the Heritage Council of NSW or Heritage NSW. The Procedure must be prepared in consultation with heritage NSW and form part of the Heritage CEMP Sub-plan required by Condition C4.</p>                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>Section 6.3</p> <p>Section 6.6</p> <p>Appendix B</p>                                                             |

| CoA No. | Condition requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Document reference                                      |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| E32     | <p>The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Work.</p> <p><i>Note: Human remains that are found unexpectedly during the carrying out of Work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.</i></p>                                                                                                                                                                                                                                                                                                                                                                         | <p>Section 6.3</p> <p>Section 6.6</p> <p>Appendix B</p> |
| E33     | <p>Where previously unidentified Aboriginal objects are discovered, all work must immediately stop in the vicinity of the affected area. Works potentially affecting the previously unidentified objects must not recommence until Heritage NSW has been informed. The measures to consider and manage this process must be specified in the Unexpected Heritage Finds and Human Remains Procedure required by Condition E31 and include registration in the Aboriginal Heritage Information Management System (AHIMS).</p>                                                                                                                                                                                                              | <p>Section 6.3</p> <p>Appendix B</p>                    |
| E42     | <p>The Proponent must conduct vibration testing during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent cosmetic damage. In addition, vibration monitoring must be undertaken during construction for relevant remaining Fleurs Radio Telescope structures, the Upper Canal (in consultation with WaterNSW) and McMaster Farm and McGarvie-Smith Farm group of remaining buildings. In the event that the vibration testing and attended monitoring shows that the preferred values for vibration are likely to be exceeded, the Proponent must review the construction methodology and, if necessary, implement additional mitigation measures.</p> | <p>Section 6.5</p> <p>Section 6.6</p> <p>CNVMP</p>      |
| E43     | <p>Advice from a heritage specialist must be sought on methods and locations for installing equipment used for vibration, movement and noise monitoring at heritage-listed structures.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p>Section 6.5</p> <p>Section 6.6</p> <p>CNVMP</p>      |
| E44     | <p>Before conducting at-property treatment at any heritage item identified in the documents listed in Condition A1, the advice of a suitably qualified and experienced built heritage specialist must be obtained and implemented to ensure such work does not have an adverse impact on the heritage significance of the item.</p>                                                                                                                                                                                                                                                                                                                                                                                                      | <p>Section 6.6</p>                                      |
| E45     | <p>All Work undertaken for the delivery of the CSSI, including that undertaken by third parties (such as utility relocations), must be coordinated to ensure respite periods are provided. The Proponent must:</p> <p>h. Reschedule any work to provide respite to impacted noise sensitive land user(s) so that the respite is achieved in accordance with Condition E47; or</p> <p>i. Where respite outlined in Condition E47 cannot be achieved, consider the provision of alternative respite or mitigation to impacted noise sensitive land user(s); and</p> <p>j. Provide documentary evidence to the ER in support of any decision made by the Proponent in relation to respite or mitigation.</p>                                | <p>CNVMP</p>                                            |

| CoA No. | Condition requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Document reference                                                             |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|         | The consideration of respite must also include all other CSSI, SSI and SSD projects which may cause cumulative and/or consecutive impacts at receivers affected by the delivery of the CSSI.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                |
| E76     | The Proponent must offer pre-construction surveys to the owners of surface and sub-surface structures and other relevant assets identified at risk from vibration, including all listed heritage items and buildings/structures of heritage significance as identified in the documents listed in Condition A1. Where the offer is accepted, the survey must be undertaken by a suitably qualified and experienced engineer and/or building surveyor prior to the commencement of vibration- generating works that could impact on the structure/asset. The results of each survey must be documented in a Pre-construction Condition Survey Report and the report must be provided to the owner of the item(s) surveyed no later than one (1) month before the commencement of all other potentially impacting works | CNVMP<br>OCS<br>M7-M12 Integration project<br>Communication Management<br>Plan |

## Revised Environmental Management Measures

| ID   | Measure/requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Timing                                                         | Document reference                                                                                                                                                                                    |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AH03 | <p>Impacts on identified Aboriginal sites will be minimised where feasible in consultation with a suitably qualified and experienced archaeologist. Measures considered will include (but not be limited to):</p> <ul style="list-style-type: none"> <li>• Designing and locating bridges (including bridge pylons), haulage routes and other access roads to minimise potential disturbance of soils where feasible</li> <li>• Focusing protection measures on the zone within 100 metres of creeks including consideration of opportunities to cover the original cultural deposits in temporary protective barriers such as geotextile fabric and a layer of clean fill.</li> </ul> | Detailed design, prior to construction and during construction | Section 6.7                                                                                                                                                                                           |
| AH06 | <p>Salvage collection of surface artefacts will be carried out at the following sites:</p> <ul style="list-style-type: none"> <li>• BCE</li> <li>• SCW T2</li> <li>• KCW</li> <li>• PCP8</li> <li>• CHRP</li> <li>• RR</li> <li>• M12A1</li> <li>• Isolated artefact 4</li> <li>• TNR-AFT-14.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                               | Prior to construction                                          | <p>Note that only CHRP is applicable to the M12 East package.</p> <p>OCCHMP<br/>Section 6.1<br/>Table 6-1<br/>Aboriginal Cultural Heritage Strategy</p>                                               |
| AH07 | <p>Salvage excavation will be carried out at the following sites:</p> <ul style="list-style-type: none"> <li>• CCW</li> <li>• BWB</li> <li>• BCW</li> <li>• SCW T1</li> <li>• SCW T2</li> <li>• SCE</li> <li>• KCW</li> <li>• CHRP.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                         | Prior to construction                                          | <p>Note that only CHRP is applicable to the M12 East package and salvage of the portion of the site within the M12 East package construction footprint has already been undertaken.</p> <p>OCCHMP</p> |

| ID                | Measure/requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timing                                                         | Document reference                                                                                         |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|                   | The methodology and extent of excavations required for the above sites will be in accordance with site specific requirements outlined in the ACHAR prepared for the project.                                                                                                                                                                                                                                                                                                                                                              |                                                                | Section 6.1<br>Table 6-1<br>Aboriginal Cultural Heritage Strategy                                          |
| AH08              | Exclusion zones will be set up in the form of an appropriate barrier/fencing along the portion of AHIMS site 45-5-2721 (PAD-OS-7) that extends into the construction footprint, with visible signage notifying construction personnel to avoid ground impacts                                                                                                                                                                                                                                                                             | Prior to construction and during construction                  | Section 6.1<br>Section 6.4<br>Section 6.7                                                                  |
| AH09              | Archaeological test excavation will be carried out at PAD-OS-7 in the instance that construction restrictions result in impacts to that site. Test excavations will be conducted in accordance with Requirement 16a of the Code of Practice (DECCW 2010) Stage 2 PACHCI (Roads and Maritime 2011) and in consultation with RAPs.                                                                                                                                                                                                          | Prior to construction                                          | Section 6.1<br>Table 6-1<br>Aboriginal Cultural Salvage Strategy                                           |
| AH10<br>(amended) | No ground disturbance (penetration and/or cutting of the surface) is permitted within Mamre Road Kemps Creek AFT 1, KC/ED2 and CP AS1/P-CP9. Protection will be provided with visible signage and temporary fencing where necessary notifying construction personnel to avoid ground impacts within Mamre Road Kemps Creek AFT 1 (AHMIS 45-5-5478), KC/ED2 and CP AS1/P-CP9.                                                                                                                                                              | Prior to construction                                          | OCCHMP<br>Not applicable to M12 East package                                                               |
| NAH03             | Impacts on Non-Aboriginal heritage items will be avoided or minimised where reasonable and feasible. Where impacts are unavoidable, works will be carried out in accordance with the measures for individual Non-Aboriginal heritage items outlined in measures NAH04 to NAH12.                                                                                                                                                                                                                                                           | Detailed design, prior to construction and during construction | Section 6.2<br>Section 6.7<br>Note that not all REMMs NAH04 to NAH12 are relevant to the M12 East package. |
| NAH06             | Relevant conservation policies outlined in the Upper Canal CMP (NSW Public Works Government Architect's Office, 2016) will be considered during detailed design and incorporated into CCHMP to ensure heritage fabric is not impacted by the project.<br><br>The CCHMP will be consistent with and require implementation of relevant measures outlined in the Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines (WaterNSW 2020) which sets out guidelines for designing, planning or assessing development | Prior to construction                                          | Section 5.3<br>Section 6.2.5<br>Section 6.4<br>Section 6.5<br>CNVMP                                        |

| ID    | Measure/requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Timing                                        | Document reference                                                                                            |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|       | <p>on land adjacent to the canal at this location. Additional structures identified in the construction footprint will be investigated and measures implemented to avoid or minimise impacts.</p> <p>Guidelines and associated safe working distances to be adhered to for heritage structures as outlined in Appendix K of the EIS</p> <p>A safe working distance exclusion zone will be established around the exposed tunnel air shaft in the M7 Motorway median in accordance with the process outlined in noise and vibration management measures NV-9 - NV10.</p> <p>Transport for NSW will provide an updated report to WaterNSW on project design changes as they relate to the WaterNSW Upper Canal corridor during detailed design.</p>                                                                                                                                                                                                                      |                                               |                                                                                                               |
| NAH09 | <ul style="list-style-type: none"> <li>A suitably qualified Archaeologist will be present during the excavation of the area occupied by the Cecil Park Archaeological site to confirm that the significance of artefacts and remains are in line with the findings of the test excavations already completed. If remains with the potential to be considered 'relics' (as defined in the Heritage Act 1977) are found, the works will stop, and the unexpected find procedure (RMS, 2015) will be followed.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Prior to construction                         | Section 6.2.3                                                                                                 |
| NV11  | <p>The following structures have the potential to be within the safe working distances for sensitive structures (Group 3 from DIN 4150):</p> <ul style="list-style-type: none"> <li>Item 1: McGarvie Smith Farm</li> <li>Item 2: Fleurs Radio Telescope Site</li> <li>Item 4: Upper Canal System</li> <li>Item 6: McMaster Field Station</li> <li>Item 7: Fleurs Aerodrome</li> <li>Item 4a: Upper Canal System, including air shaft 3.</li> </ul> <p>A detailed survey will be completed to determine the potential for vibration impacts and to define appropriate criteria for each heritage item. Vibration monitoring will be carried out when vibration intensive tasks are occurring within the minimum working distances to heritage structures. Where the monitoring identifies exceedances in the relevant criteria, or where impacts are identified, additional mitigation measures will be identified and implemented to appropriately manage impacts.</p> | Prior to construction and during construction | Section 6.4<br>Section 6.5<br>Section 6.7<br>CNVMP<br>Only Item 4 and 4a are relevant to the M12 East package |

## TfNSW Specifications

| Section | Measure/requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timing                           | Document reference                        |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------|
| D&C G36 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                           |
| 4.13    | The Principal has identified the following environmentally sensitive areas:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                  |                                           |
|         | (c) Aboriginal heritage sites; and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Pre-construction                 | Section 4.1<br>Section 5.2<br>Figure 4-1  |
|         | (d) Non-Aboriginal heritage sites.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Pre-construction                 | Section 4.2<br>Section 5.3<br>Figure 4-2  |
|         | Clearly show all identified environmentally sensitive areas and sensitive places on Sensitive Area Maps, submitted as part of the CEMP. Prepare environmentally Sensitive Area Maps using a high-resolution aerial imagery and include all WUC, station markers at minimum of 500 metre intervals, a north point, a scale bar and be prepared at a scale of 1:5000, unless otherwise agreed by the Principal. The Sensitive Area Maps must clearly show vegetation clearing limits (refer to Specification TfNSW G40), exclusion/no-go zones, all locations of known threatened flora and fauna species, and ecological communities, Aboriginal heritage sites, non-Aboriginal heritage sites, weed infestations, and trees which have been marked or otherwise identified through your own Site investigations as well as extracted from details included in the Environment Assessment documents listed in Annexure G36/A3, for preservation. Review and update regularly the Sensitive Area Maps to include environmentally sensitive areas identified during the Work Under the Contract. Make the Sensitive Area Maps available to all personnel working on the Site. | Pre-construction<br>Construction | Section 6.4<br>Appendix A6 of the CEMP    |
|         | Prepare and include in the CEMP an EWMS for working in or near the environmentally sensitive areas. Include in the EWMS environmental protection measures that are effective for minimising the risk of impacting the environmentally sensitive areas. Review these measures regularly to ensure that they are effective.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Pre-construction<br>Construction | Section 1.4<br>Section 6.7<br>Section 7.4 |
|         | At least 10 working days prior to commencing Physical Work on Site in or near an environmentally sensitive area, prepare an EWMS which includes the details of the environmental protection measures to be implemented at that location. Clearly delineate the environmentally sensitive area and signpost the locations and boundaries in accordance with Specification TfNSW G40, Appendix G40/E Flagging Protocol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Construction                     | Section 6.7<br>Section 7.4                |

| Section    | Measure/requirement                                                                                                                                                                                                                                                                                     | Timing       | Document reference         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------|
|            | As part of the environmental induction (refer Clause 3.5) to your staff and sub-contractors working on the Site, provide an understanding of the risks associated with working in or near environmentally sensitive areas, and training on implementing the relevant environmental protection measures. | Construction | Section 7.2                |
|            | Clearly delineate and signpost the locations and boundaries of all environmentally sensitive areas on Site.                                                                                                                                                                                             | Construction | Section 6.4<br>Section 6.7 |
| D&C G40    |                                                                                                                                                                                                                                                                                                         |              |                            |
| Annexure E | Flagging Protocol                                                                                                                                                                                                                                                                                       | Construction | Section 6.4                |

## Appendix B. Unexpected Heritage Finds and Human Remains Procedure

An Unexpected Heritage Items Procedure Road and Maritime, 2015) was developed to provide a consistent method for managing unexpected heritage items (both Aboriginal and non-Aboriginal) that are discovered during TfNSW activities. The Procedure includes TfNSW's heritage notification obligations under the *Heritage Act 1977* (NSW), *National Parks and Wildlife Act 1974* (NSW), *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) and the *Coroner's Act 2009* (NSW).

The discovery of an 'unexpected heritage item' may include:

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

The following guidelines and policies were referenced during the drafting of the Procedure:

- *Assessing heritage significance* (NSW Heritage Office, 2001)
- *Photographic recording of heritage items using film or digital capture* (NSW Heritage Office, 2006)
- *Skeletal remains: Guidelines for management of human skeletal remains* (NSW Heritage Office, 1988)
- *Due diligence code of practice for the protection of Aboriginal objects in NSW* (OEH, 2010)
- *Aboriginal cultural heritage consultation requirement for proponents* (OEH, 2010)
- *Code of practice for the archaeological investigation of Aboriginal objects in NSW* (OEH, 2010)
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011).

The Procedure was prepared by two suitably qualified and experienced heritage specialists:

- Greta Logue, former Environment Officer (Heritage) with Roads and Maritime Services. Greta has a B.Sc. Hons (Archaeology), M.Sc. Hons (Forensic Anthropology, PG Diploma (Environment Law) and at the time of preparation of the procedure had 10 years professional heritage experience
- Daniel Percival, Environment Officer (Heritage) with Roads and Maritime Services. Daniel has a BA Hons (Archaeology) (First Class) with over 10 years professional heritage experience.

The Procedure was prepared in consultation with the Heritage Council of NSW and Heritage NSW as part of the CCHMP for consultation purposes, as required by NSW CoA E31, E32 and E33. During the consultation process, the Heritage Council of NSW and OEH indicated their support for the Procedure as being appropriate to manage the discovery of unexpected heritage items during Construction of the Project (refer Annexure A of the OCCHMP). The Procedure includes the requirement that consultation with Registered Aboriginal Parties will be undertaken in the event that previously unidentified Aboriginal heritage is discovered.

Attachment 1 to this Unexpected Heritage Items Procedure contains additional information that describes the process to be followed in the event that suspected human remains are discovered during construction.

Attachment 2 is the procedure for handling Aboriginal human remains in accordance with NSW-CoA outlines the procedure for handling Aboriginal human remains in accordance with NSW CoA E31, E32 and E33.

## **Attachment 1 Unexpected Aboriginal and non-Aboriginal heritage finds procedure.**

The following procedure has been prepared to accompany the CCHMP. This section outlines the tasks that will be carried out following the discovery of an unexpected heritage item. Figure D-1 outlines the procedure in summary.

This procedure has been prepared based on the content and processes outlined in the *Unexpected Heritage Items: Heritage Procedure 02* (RMS, 2015) and has been updated to be specific to construction. The RMS procedure was prepared by suitably qualified professionals in consultation with Heritage NSW.

In accordance with the *Unexpected Heritage Items Procedure* (RMS, 2015), different procedures will be put in place dependent on the items classification. The Unexpected Heritage finds procedure identifies three types of heritage items listed and classified as follows:

1. *Relic: 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*
2. *Aboriginal object: May include a shell midden, stone tools, bones, rock art or a scarred tree*
3. *Work: A building or standing structure. This may include tram tracks, kerbing, historic road pavement, fences, sheds or building foundations.*

### **Step 1. Stop work, protect item, and inform Environmental Site Representative**

If an unexpected heritage item is encountered during excavation/construction activities:

- Stop all work in the immediate area of the item and notify the Project Manager or Environmental Site Representative (or delegate)
- The Project Manager or site supervisor will be responsible for establishing a 'no-go zone' around the item, using high visibility fencing where practicable
- The item will be inspected, documented and photographed using 'Unexpected Heritage Item Recording Form 418'
- The Project Manager or Environmental Site Representative will engage a suitably qualified heritage specialist to identify whether the item is likely a 'relic', 'Aboriginal object' or 'work'. If the item is determined to be a 'work', and it is possible to continue works without causing further disturbance, works will continue, and the completed Form 418 will be submitted to the relevant TfNSW Staff within 24 hours
- TfNSW Environment and Sustainability Manager will advise Project Manager whether TfNSW has an approval or safeguard in place (apart from this procedure) to impact on the item. If yes, work will recommence in accordance with the approval, permit or appropriate safeguard and no further action will be required
- The Project Manager or Site Supervisor will liaise with Traffic Management Centre where the delay is likely to affect traffic flow.
- Item will be reported as a 'Reportable Event' in accordance with the TfNSW Environmental Incident Classification and Reporting Procedure.

### **Step 2. Contact and engage and archaeologist and, where required, an Aboriginal site officer**

- A suitably qualified and experienced archaeological consultant will be engaged to assess the find
- Where the item is likely to be an Aboriginal object, an Aboriginal Site Officer (ASO) will also be engaged to assess the find
- The archaeological consultant (and ASO, if relevant) will be provided with the photographs.

### **Step 3. Preliminary assessment and recording of the find**

- Should the archaeologist (and ASO, if relevant) determine from the photographs that no site inspection is required because no archaeological constraint exists, such advice will be provided in writing and confirmed by the Project Manager or Site Supervisor

- Site access will be arranged for the archaeologist (and ASO, if relevant) to inspect the item as soon as practicable
- Subject to the archaeologist assessment (and ASO's assessment, if relevant), work will recommence at a set distance from the item
- Should the archaeologist (and ASO, if relevant) provide advice after the site inspection and preliminary assessment that no archaeological constraint exists, such advice should be provided in writing and confirmed by the Project Manager or Site Supervisor
- Should it be required, additional specialist technical advice will be organised.

Should the item be identified as a relic, heritage item or an Aboriginal object the archaeologist will formally record them.

- Heritage NSW could be notified informally by telephone at this stage by the archaeologist or project manager. Any verbal conversations with Heritage NSW will be noted on project file for future reference
- If a relic, heritage item or Aboriginal object has been identified, the archaeologist will notify:
  - Heritage NSW (and formally register the site on the Aboriginal Heritage Information Management System (AHIMS) as required) and
  - Water NSW if a relic found is in proximity to Water NSW Upper Canal.

#### **Step 4. Prepare an archaeological or heritage management plan**

- An archaeological or heritage management will need to be prepared in the event of unexpected Aboriginal or non-Aboriginal heritage find
- Registered Aboriginal Parties will be consulted in the event of an unexpected Aboriginal heritage find
- The archaeological consultant will prepare an archaeological or heritage management plan (with input from the ASO and RAPs, where relevant) with consideration to the any heritage sub-plans, any conditions of heritage approvals, Minister's Conditions of Approval, and heritage assessment documentation
- The archaeologist will submit this plan as a letter, brief report or email to the Project Manager or Site Supervisor outlining all relevant archaeological or heritage issues
- The Project Manager or Site Supervisor will review the archaeological or heritage management plan.

#### **Step 5. Notify Regulator (if required)**

- The archaeological or heritage management plan will be reviewed to confirm if Heritage NSW notification is required
- If yes, a notification letter will be prepared
- The draft notification letter, archaeological or heritage plan and the site recording form will then be sent to TfNSW Environment and Sustainability Manager for review and amended where appropriate
- The signed notification letter, archaeological or heritage management plan and site recording form will be submitted to Heritage NSW, DPE
- A copy of the final signed notification letter, archaeological or heritage management plan and the site recording form will be kept on file by the Project Manager or Site Supervisor and a copy sent to the TfNSW Environment and Sustainability Manager.

#### **Step 6. Implement archaeological or heritage management plan**

- The archaeological or heritage management plan will be modified to take into account any additional advice resulting from notification and discussions with Heritage NSW
- The archaeological or heritage management plan will be implemented. Where impact is expected, this will include such things as 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

- Where heritage approval is required, the Environmental Site Representative will be contacted for further advice and support material
- It will then be assessed whether heritage impact is consistent with the project approval
- Where statutory approval is not required and where recording is recommended by the archaeologist, sufficient will be allowed for this to occur.

**Step 7. Review CCHMP, OCEMP and CoA**

- The CCHMP will be updated as appropriate with any changes resulting from final heritage management (e.g. retention of heritage item, salvage of item). The updated CCHMP will incorporate additional conditions arising from any heritage approvals, and Aboriginal community consultation if relevant
- Any changes to the CCHMP will be included in site induction material site workers will be updated during toolbox talks
- Where statutory approval is not required and where recording is recommended by the archaeologist, sufficient time will be allowed for this to occur.

**Step 8. Resume work**

- The Construction Contractor will seek written clearance to resume project work from TfNSW Environment and Sustainability Manager and the archaeologist (and Heritage NSW)
- Archaeological excavation/heritage reporting, and other heritage approval conditions will be completed in the required timeframes. This includes artefact retention repositories, conservation and/or disposal strategies.

All heritage/archaeological assessments, heritage location data and its ownership status will be forwarded to the TfNSW Environment and Sustainability Manager. They will ensure all heritage items in TfNSW ownership and/or control are considered for the Roads and Maritime S170 Heritage and Conservation Register.

On discovering something that could be an unexpected heritage item ('the item'), the following procedure (Figure D-1) must be followed.

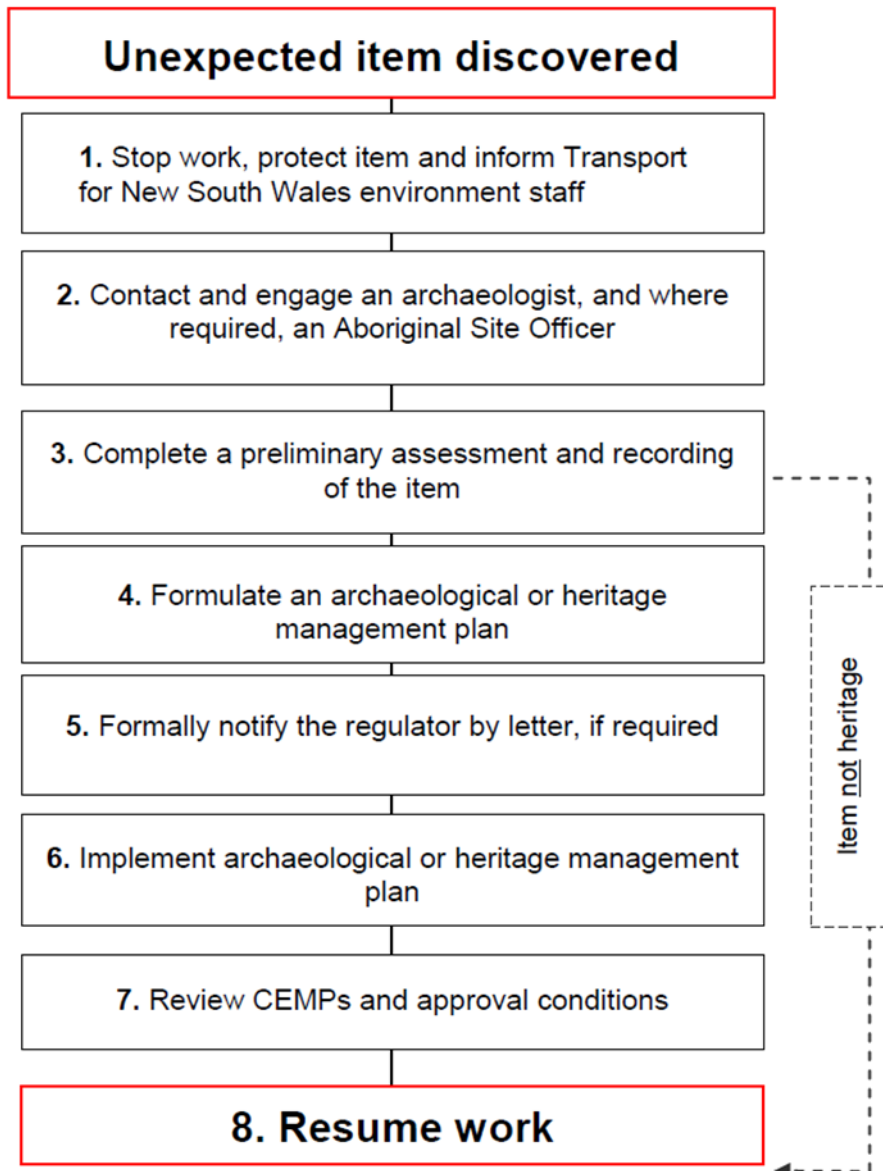


Figure D-1: Overview of steps to be undertaken on the discovery of an unexpected heritage item

**Attachment 2 Unexpected Human Remains Procedure**

This attachment outlines the procedure for handling Aboriginal human remains in accordance with NSW-CoA, the *Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977* (NSW Heritage Office 1998) and the *Aboriginal Cultural Heritage Standards and Guidelines Kit* (NPWS 1997).

If construction activity reveals possible Aboriginal human skeletal material (remains), the following procedure is to be followed:

1. Identify whether the remains are animal bones, ceramics or material before proceeding with this Procedure
2. As soon as remains are exposed, immediately halt all work at that location and immediately notify the TfNSW Environment and Sustainability Manager (or delegate) or Construction Contractor Project Manager on site to allow assessment and management
3. Secure the site
4. Contact police as the discovery of human remains triggers a process which assumes that they are associated with a crime. The NSW Police will retain carriage of the process until such time as the remains are confirmed to be Aboriginal or historic. If the remains are identified as being non-human, skip to Step 8
5. Notify DPE, as the approval authority, when human remains are found
6. Once the police process is complete and if remains are not associated with a contemporary crime contact DPE. DPE will determine the process, in consultation with Heritage NSW and/or the Heritage Office as appropriate
7. If the remains are identified as Aboriginal, secure the site and DPE and notify all RAPs or Aboriginal stakeholders in writing. DPE will act in consultation with Heritage NSW as appropriate. Notify Heritage NSW in writing according to DPE instructions. Work may not recommence until Heritage NSW have been notified
8. If the remains are identified as non-Aboriginal (historical) remains, secure the site and contact the DPE. DPE will act in consultation with the Heritage Division as appropriate. Notify the Heritage Division in writing according to DP&E instructions
9. Once the police process is complete and if the remains are identified as not being human and the appropriate clearances have been given, work can recommence.

## Appendix C. ISC Manual v1.2 compliance table

| Credit/level                                      | Requirement                                                                                                              | Document reference                                           |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| <b>Her-1 – Heritage assessment and management</b> |                                                                                                                          |                                                              |
| Level 1                                           | Measures to minimise adverse impacts to heritage during construction and operation have been identified and implemented. | Section 3.6                                                  |
| Level 2                                           | Community and key stakeholders have participated in the heritage studies                                                 | Section 3.6                                                  |
|                                                   | Heritage values beyond those listed in government registers have been identified, considered and addressed.              | Section 3.6                                                  |
|                                                   | Heritage has been interpreted to promote local heritage values.                                                          | Section 3.6<br>Section 6.1.2<br>Section 6.2.2                |
| Level 3                                           | Opportunities have been identified and implemented to enhance heritage values.                                           | Section 3.6                                                  |
| <b>Her-2 – Monitoring of heritage</b>             |                                                                                                                          |                                                              |
| Level 1                                           | Monitoring of heritage is undertaken at appropriate intervals during construction and operation.                         | Section 3.6<br>Section 6.5<br>Section 8 of the CEMP<br>CNVMP |
| Level 2                                           | Monitoring and modelling demonstrates maintenance of heritage values.                                                    | Section 3.6                                                  |
| Level 3                                           | Monitoring and modelling demonstrates enhancements to heritage values.                                                   | Section 3.6                                                  |