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CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

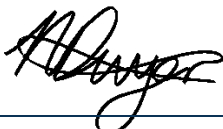
Sydney Metro SWM4

**Design and Construction of
Errant and Hostile Vehicle
Mitigation Treatments for
the Southwest Metro Project**

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GLOSSARY

Specific terms, abbreviations and acronyms used throughout this plan are listed and described below:

TERM	DESCRIPTION
AARD	Archaeological Assessment and Research Design report
AS	Australian Standard
ASS	Acid Sulfate Soils
BC Act	Biodiversity Conservation Act 2016 (NSW)
CCS	Community Communication Strategy
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CNVIS	Construction Noise and Vibration Impact Statement
CoA	Conditions of Approval
CSR	Combined Services Route
CSSI	Critical State Significant Infrastructure
CTMP	Construction Traffic Management Plan
CTR	Compliance Tracking Review
Cwth	Commonwealth
dB	Decibels
DECC	NSW Department of Environment and Climate Change
DPI	NSW Department of Primary Industries
DPHI	Department of Planning, Industry and Environment
EAP	Environmental Audit Program
ECM	Environmental Control Map
EESG	NSW Environment, Energy and Science Group (formerly OEH)
EIN	Environmental Improvement Notice
EIS	Environmental Impact Statement
EMS	Environmental Management System
EP&A Act	Environment Planning and Assessment Act 1979 (NSW)
EPA	NSW Environment Protection Authority
EPBC Act	Environment Protection and Conservation Act 1999 (Cwth)

TERM	DESCRIPTION
EPL	Environment Protection Licence under the POEO Act
EPO	Environmental Performance Outcome
ER	Environmental Representative
ERP	Emergency Response Plan
ESCP	Erosion and sediment control plan
EWMS	Environmental Works Method Statement
E&SMS	Environment and Sustainability Management System
HMP	Heritage Management Plan
ICNG	Interim Construction Noise Guideline
IMS	Sydney Metro Integrated Management System
ISO	International Standardization Organisation
IWC	Inner West Council
KPI	Key Performance Indicator
LV	Low Voltage
Minister, the	The Minister of New South Wales (NSW) Planning
MMS	Martinus Management System
NSW	New South Wales
NVMP	Noise and Vibration Management Plan
OCCS	Overarching Community Communication Strategy
OEH	NSW Office of Environment and Heritage (formerly DECC)
OOHW	Out-of-Hour Works
PASS	Potential Acid Sulfate Soils
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
Project	Means the Sydenham to Bankstown Planning approval (SSI 8256)
Proponent	The person or organisation identified as the proponent in Schedule 1 of the planning approval. In this case Sydney Metro Authority
REMM	Revised Environmental Mitigation Measure
RMS	NSW Roads and Maritime Services

TERM	DESCRIPTION
ROL	Road Occupancy Licence
SCO	Sydney Coordination Office
Planning Secretary	The Secretary of the Department of Planning, Industry and Environment
SM	Sydney Metro
SMP	Sustainability Management Plan
SPIR	Submissions and Preferred Infrastructure Report
SSI	State Significant Infrastructure
SWM	Southwest Metro
SWMP	Soil and Water Management Plan
SWMS	Safe Works Method Statement
TfNSW	Transport for New South Wales
UCM	Utilities Coordination Manager
VAMP	Visual Amenity Management Plan
WFDIP	Workforce Development and Industry Participation Plan
WP	Work Packs

1 INTRODUCTION

Sydney Metro is Australia's biggest public transport project. The network will deliver 31 metro stations and more than 65km of new metro rail. The Sydney Metro Network will provide opportunities to lead the transformation of Sydney's urban environment and support transit orientated development connecting Sydney's Central Business District to vibrant and attractive places across the Greater Sydney Region. The Sydney Metro Network will link Sydney's three Metropolitan centres and introduce the necessary step change in rail infrastructure to ensure, the NSW Government's aim of 30-minute cities as defined in Future Transport Strategy 2056.

The Sydney Metro Network has currently two core corridors, the Northwest Corridor and City and Southwest Corridor, with a further six corridors proposed as shown in Figure 1.

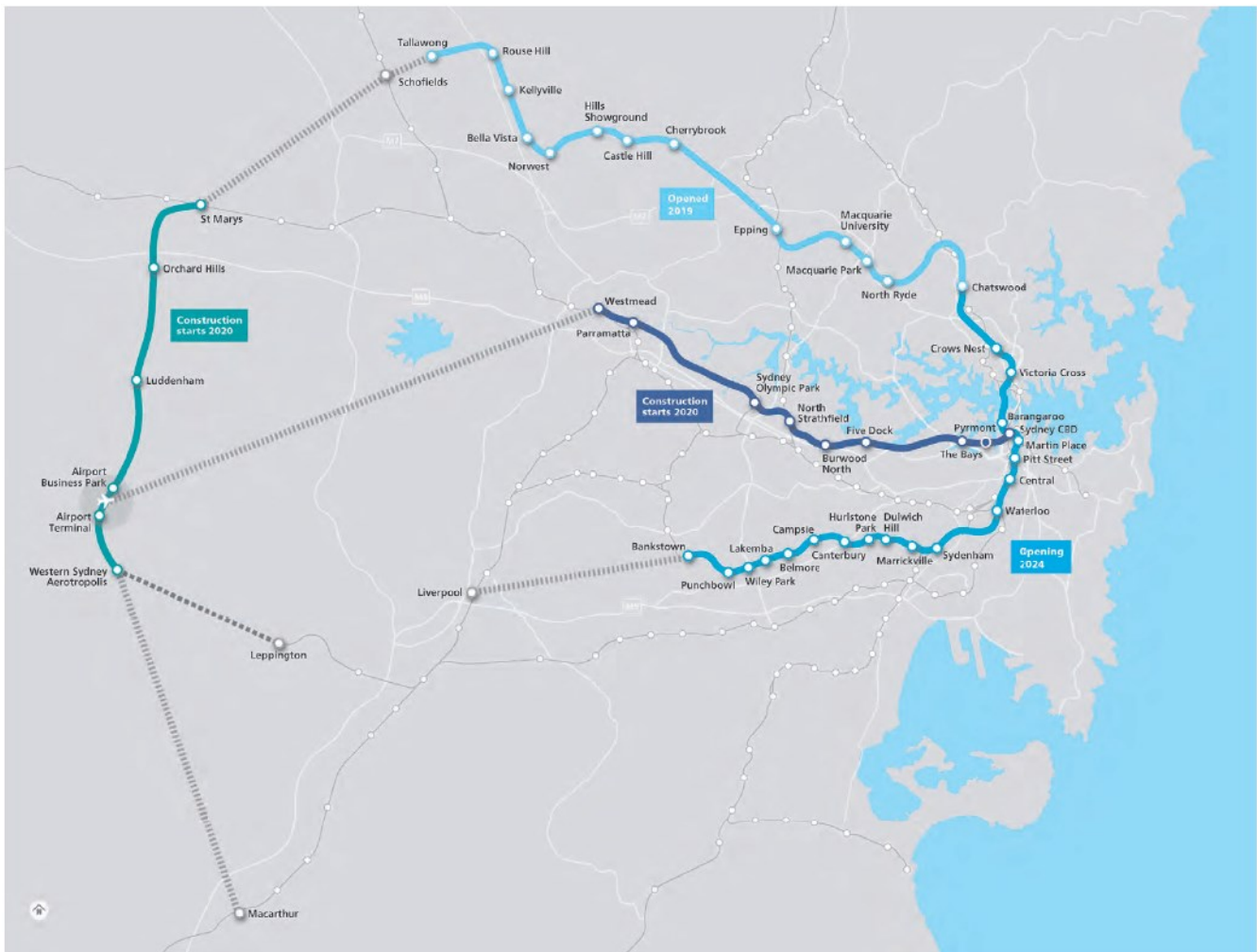


Figure 1: Sydney Metro route map

The Sydney Metro City & Southwest project includes a new 30km metro line extending metro rail from the end of the Metro North West Line at Chatswood, under Sydney Harbour, through new Central Business District stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.

Sydney Metro City & Southwest comprises two core components – the Chatswood to Sydenham project, and the Sydenham to Bankstown upgrade. This document refers to the Sydenham to Bankstown upgrade (herein referred to as the Southwest Metro (SWM) Project).

The SWM Project was declared to be State Significant Infrastructure (SSI) and Critical State Significant Infrastructure (CSSI) by a Ministerial order on 10 December 2015 under Section 5.12 (4) and 5.13 of the Environmental Planning and Assessment Act 1979 (EP&A Act) (previously referred to as sections 115U(4)

and 115V prior to amendment of the EP&A Act). An Environmental Impact Statement (EIS) (GHD/AECOM September 2017) was prepared and placed on public exhibition from 13 September 2017 to 8 November 2017. A Submissions and Preferred Infrastructure Report (SPIR) (GHD/AECOM June 2018) was prepared in response to the submissions received during the EIS exhibition period. The SPIR was placed on public exhibition from 20 June 2018 to 18 July 2018. A Submissions Report was then prepared by Sydney Metro (September 2018) in response to submissions received during the SPIR exhibition period. The project was approved by the Minister for Planning on 12 December 2018 (Planning Approval number SSI-8256).

A modification report for the SWM Project was prepared by Sydney Metro (May 2020) and placed on public exhibition from 21 May 2020 to 4 June 2020. A Submissions Report was prepared by Sydney Metro (September 2020) in response to the submissions received during the modification report exhibition period. The SWM Project Modification was determined by the Minister for Planning on 22 October 2020.

1.1 Scope of Works

The Southwest Metro works will convert and upgrade the existing T3 Bankstown Line between Sydenham station to Bankstown station to metro standards. To meet the test level safety standards for metro operations, the Southwest Metro project requires the delivery of safety critical works to secure critical points from errant and hostile vehicles at station overbridges, non-station overbridges and non-bridge locations along the Southwest Metro rail corridor.

The scope for the Construction of Errant and Hostile Vehicle Mitigation Treatments (hereafter known as the Project), generally includes:

- Errant vehicle treatments consisting of:
 - Eight (8) station overbridge barriers
 - Seven (7) non-station road-over-rail overbridge barriers; and
 - Barriers at 66 non-bridge locations
- Hostile vehicle mitigation (HVM) treatments to the eight (8) station precincts
- Road upgrades (kerbside ramps) at Wiley Park
- Fencing, finishing works and other streetscaping elements across various locations
- Remediation works.

Temporary Construction facilities to facilitate Construction of the Project would be located at the locations outlined in Table 1 (refer to the Appendix B.2 of the Construction Noise and Vibration Impact Statement within the Noise and Vibration Management Plan for aerial imagery).

Table 1: Temporary Minor Ancillary Facilities

Overbridge location	Intended Location of Minor Ancillary Facility
Illawarra Road overbridge	At the end of Wooley Lane – AF1
Livingstone Road overbridge	At the end of Marrickville Avenue – AF2 And/or At the end of Randall Street – AF3
Albermarle Street overbridge	On the verge of Albermarle Street adjacent to the overbridge And/or At the end of Kays Avenue – AF05
Wardell Road overbridge	Ewart Lane carpark – AF06 Satellite office – Ewart Lane carpark
Garnet Street overbridge	Corner Garnett St & The Parade – AF07
Duntroon Street overbridge	42 Floss Street – carpark area – AF08 and/or AF09

Overbridge location	Intended Location of Minor Ancillary Facility
Melford Street overbridge	Melford Street – adjacent verge to the overbridge – AF10 Hutton Street – western verge – AF11
Canterbury Road overbridge	Charles Street, occupying existing SMW facility – AF12
Loch Street overbridge	Lilian Lane, adjacent to the Tobruk commuter carpark – AF13
Burwood Road overbridge	At the end of Tobruk Ave commuter carpark, with access to Cleary Avenue AF14 and/or AF15 and AF16 Existing Belmore site compound – AF17
Moreton Street overbridge	Corner of Railway Parade and The Boulevarde – AF 18 And/or Corner of Peel St and The Boulevarde – AF19
Haldon Road overbridge	Corner of The Boulevarde and Dennis Street – AF20 And/or Corner of Haldon St and The Boulevarde – AF22 and AF24 And/or Corner of Haldon St and Railway Parade – AF21 and AF23
King Georges Road overbridge	Corner of The Boulevarde and Kathleen Street – AF26 and/or AF25
Punchbowl Road overbridge	Corner of Urunga Parade and Dudley Street – AF27 And/or Corner of The Boulevarde and Dudley Street – AF28 And/or Loder Lane, Punchbowl Satellite office – Corner Urunga Parade and Dudley Street And/or Corner The Boulevarde and Dudley Street – AF29
Stacey Street overbridge	South Terrace carpark area – AF32 And/or North Terrace vegetated area kerbside – AF30 And/or Satellite office – South Terrace carpark area – AF31

When establishing a construction facility, Martinus will consider the requirements of the CEMF, CoA and REMM in developing the layout of the site. Including, but not limited to:

- The location of noise intensive works and 24-hour activities in relation to noise sensitive receivers;
- The location of site access and egress points in relation to noise and light sensitive receivers, especially for sites proposed to be utilised 24 hours per day;
- The use of site buildings to shield noisy activities from receivers;
- The use of noise barriers and / or acoustic sheds where feasible and reasonable for sites proposed to be regularly used outside of daytime hours; and

- Aim to minimise the requirement for reversing, especially of heavy vehicles.

1.2 Purpose of this CEMP

This Construction Environmental Management Plan (CEMP) covers strategies, systems and procedures to ensure the Project meets the environmental obligations and targets for the construction activities as set out in the Contract. This will be achieved through the development and application of Martinus' contract-specific Environmental Management System (EMS) and this Plan.

The purpose of this CEMP and incorporated documents is to:

- Achieve the Project's stated environmental objectives and targets;
- Ensure legal and contractual compliance; and
- Outline procedures for how we will prevent, mitigate and/or remedy environmental aspects to ensure appropriate environmental protection during the construction activities.

In addition, it provides a framework for managing the environmental controls and processes implemented by Martinus, subcontractors, and consultants in carrying out their respective responsibilities in relation to the Project.

In accordance with the Sydney Metro City & Southwest - Sydenham to Bankstown Staging Report, Martinus will implement the environmental management requirements of the CEMF in line with Table 5 of the Staging Report.

Figure 2 outlines the applicability of the CEMF to the Project (and is extracted from Table 5 of the Staging Report).

Figure 2: CEMF Applicability to the Project

CEMF Environmental Management Category	SMEW	LW	SMC & Additional works	MCL	DCP	HBW	TSOM	EHVMT	SWM3
Waste / Spoil / Recycling *	CEMP / SMP	CEMP-P	SMP sub-plan	CEMP-P	CEMP-P	CEMP-P	N/A	CEMP-P	SMP sub-plan
Groundwater	CEMP	CEMP-P	CEMP	CEMP	CEMP	CEMP	N/A	CEMP-P	CEMP
Traffic	CoA E47 CTMP	CoA E47 CTMP	CoA E47 CTMP	CoA E47 CTMP	CoA E47 CTMP	CoA E47 CTMP	N/A	CoA E47 CTMP	CoA E47 CTMP
Noise & Vibration	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	N/A	CEMP sub-plan	CEMP sub-plan
Heritage	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	N/A	CEMP sub-plan	CEMP sub-plan
Flora & Fauna / Biodiversity	CEMP-P	CEMP-P	CEMP-P	CEMP-P	CEMP-P	CEMP-P	N/A	CEMP-P	CEMP-P
Visual Amenity	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	N/A	CEMP sub-plan	CEMP sub-plan
Carbon & Energy	SMP sub-plan	SMP sub-plan	SMP sub-plan	SMP	SMP	SMP	SMP sub-plan	SMP	SMP sub-plan
Materials	SMP sub-plan	SMP sub-plan	SMP sub-plan	SMP sub-plan	SMP sub-plan	SMP sub-plan	SMP sub-plan	SMP	SMP sub-plan
Soil & Water	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	CEMP sub-plan	N/A	CEMP-P	CEMP sub-plan

CEMF Environmental Management Category	SMEW	LW	SMC & Additional works	MCL	DCP	HBW	TSOM	EHVMT	SWM3
Air Quality	CEMP-P	CEMP-P	CEMP-P	CEMP-P	CEMP-P	CEMP-P	N/A	CEMP-P	CEMP-P
Workforce Development	WFDIP Plan	WFDIP Plan	WFDIP Plan	WFDIP Plan	WFDIP Plan	WFDIP Plan	N/A	WFDIP Plan	WFDIP Plan

Note: The Staging Report will be updated by Sydney Metro for the Project prior to commencement of construction in accordance with CoA A12. This figure will be updated accordingly.

The following CEMP sub plans, which will be prepared separately to this document, will form part of the CEMP but is not required to be submitted to DPHI:

- *Visual Amenity Management Plan (as referred to under Section 3.4 of the CEMF).*

The following stand-alone plan will also be prepared and submitted to DPHI for information and to TfNSW for information following engagement with the Sydney Coordination Office (SCO) (as per CoA E47):

- *Construction Traffic Management Plan (as referred to in CoA E47 and Section 3.4 of the CEMF).*

A Sustainability Management Plan is currently being developed separately. The following plans are Sub-plans to the Sustainability Management Plan.

- *Carbon, Energy & Materials Management Plan*

Management of the following aspects during Construction have been incorporated into the CEMP as procedures (refer to Appendix E for CEMP procedures):

- *Biodiversity;*
- *Groundwater;*
- *Air Quality; and*
- *Waste and Spoil.*

The CEMP has been developed in accordance with the:

- *Framework of AS/NZS ISO 14001:2015 EMS;*
- *New South Wales Environmental Management Systems Guidelines; and*
- *Sydney Metro's Construction Environmental Management Framework v3.2.*

Implementation of the CEMP will:

- *Identify the environmental obligations and the hazards and risks associated with the works (indicative risks are included in Appendix C);*
- *Help prevent unauthorised environmental harm;*
- *Ensure Martinus complies with the Minister for Planning's Project Planning Approval SSI-8256;*
- *Ensure Martinus obtains and complies with relevant licences and approvals;*
- *Comply with all relevant environmental legislation;*
- *Minimise negative impacts on the community that relate to the environmental impacts of the works; and*

- *Identify and implement feasible opportunities to reduce the environmental impact of the works that are beyond contractual and compliance requirements.*

In accordance with CoA C2 and C6, this CEMP and associated subplots will be endorsed by the Environmental Representative (ER) and will be submitted to DPHI for approval no later than one (1) month before commencement of Construction.

In accordance with CoA C7, Construction will not commence until the CEMP and relevant Sub-plans listed in CoA C3 of the Project Planning Approval have been approved by the Planning Secretary of DPHI.

The CEMP and CEMP Sub-plans as approved by the Planning Secretary, including any minor amendments approved by the ER, must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and CEMP Sub-plans for that stage have been approved by the Planning Secretary.

1.3 Environment and Sustainability Policy Statement

Martinus' Environmental Policy (MMS #MR-ES-001) and Sustainability Policy (MMS #MR-SS-001) are included in Appendix D.

The Environmental Policy reflects a commitment in the delivery of the project to achieve the following:

- Visible and demonstrated environmental leadership.
- Promoting innovative thinking and practices to achieve positive environmental outcomes.
- Compliance with applicable environmental obligations.
- Monitoring environmental performance and seeking continual improvement.
- Prevention of pollution and minimising environmental impacts.

To achieve our sustainability vision, Martinus shall:

- Embed environmental, economic, and social outcomes by establishing robust sustainability objectives and targets that encourage restorative actions and are aligned with Martinus Culture, the United Nations Sustainability Development Goals, and the Australian Sustainable Development Goals.
- Demonstrate corporate social responsibility excellence by operating in a fair, ethical, and philanthropic manner.
- Manage resources efficiently through incorporating energy, water and material saving initiatives into our activities and products.
- Support and enhance social, cultural and community wellbeing by sourcing people, equipment, and products from local suppliers where practicable, and engaging with local indigenous and community groups.
- Report on sustainability performance and be accountable for meeting environmental and social responsibilities.
- Implement sustainable procurement process and work with suppliers who promote sound sustainability practices.
- Encourage the pioneering of innovation in sustainable design, process or advocacy that seeks continuous improvement to promote new ideas and thinking.
- Engage with clients to understand their expectations and to deliver projects in a sustainable manner.
- These policies align with and support the *Sydney Metro Environment & Sustainability Policy* to:
- Optimise sustainability outcomes, transport service quality, and cost effectiveness;

- Develop effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and community expectation, and heritage and biodiversity conservation;
- Be environmentally responsible, by avoiding pollution, enhancing the natural environment, and reducing the project ecological footprint, while complying with all applicable environmental laws, regulations and statutory obligations; and
- Be socially responsible by delivering a workforce legacy which benefits individuals, communities, the project and industry, and is achieved through collaboration and partnerships.

1.4 Objectives and Targets

The key objective of this Plan is to provide a framework for the Project which addresses all relevant environmental and planning requirements. With regards to the environment, this will be achieved by undertaking the work in compliance with Sydney Metro's Environmental Policy documents, Statutory Legislation (see Section 2) as well as utilising Martinus' accredited internal Quality, WHS and Environment Management Systems.

Key environmental performance outcomes, commitments and mitigation measures for the Project have been sourced from the project's EIS and the CEMF and are summarised in Table 2. These will be reviewed on a regular basis and updated where appropriate to reflect any changes that may occur to the project scope of works.

Additional environmental targets for the works are:

- Compliance with the Minister for Planning's Project Planning Approval SSI-8256 as it relates to the scope of works;
- Compliance with all permits and licences; and
- Continual improvement through collaboration with Sydney Metro, regulatory agencies, and other key stakeholders.

Table 2: Objectives and targets

Objective	Target	Management measure
Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project Construction and operation.	The project is designed to minimise impacts on biodiversity. Where practicable, the design minimises the need to clear vegetation. Potential impacts on biodiversity are managed in accordance with relevant legislation, including the EP&A Act, <i>Biodiversity Conservation Act 2016</i> (BC Act) and <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). The biodiversity outcome is consistent with the Framework for Biodiversity Assessment (OEH, 2014a).	Management will be undertaken in accordance with CEMF, REMMs and CoA's.
Flooding and hydrology The project minimises adverse impacts on existing flooding characteristics. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.	Construction is undertaken in a manner that minimises the potential for adverse flooding impacts, through staging of works and the implementation of mitigation measures. Construction compounds and work sites are laid out such that flows are not significantly impeded.	Management of soil and surface water will be undertaken throughout the delivery of the Project in accordance with this plan.

Objective	Target	Management measure
Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.	The project maintains or reduces flood levels within and adjacent to the rail corridor. The project avoids long term impacts to surface water. Opportunities to reuse water resources are considered during the design process. The use of water during Construction is minimised.	
Heritage The design, Construction and operation of the project facilitates, to the greatest extent possible, the long-term protection, conservation, and management of the heritage significance of items of environmental heritage and Aboriginal objects and places. The design, Construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage significance of environmental heritage and Aboriginal objects and places.	The design is sympathetic to the historic significance of existing stations and the heritage significance of surrounding listed heritage items, and where practicable, avoids and minimises impacts to heritage. The design and mitigation strategies are reviewed by the Sydney Metro City & Southwest Design Review Panel. Impacts on heritage are managed in accordance with relevant legislation, including the EP&A Act, the Heritage Act 1977, and relevant guidelines. The potential impacts identified are mitigated by the mitigation measures provided.	Management of heritage will be undertaken throughout delivery of the project in accordance with the HMP.
Noise and vibration – amenity Construction noise and vibration (including airborne noise, ground borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.	The project will minimise impacts to the local community by: - controlling noise and vibration at the source - controlling noise and vibration on the source to receiver transmission path - controlling noise and vibration at the receiver - implementing practicable and reasonable measures to minimise the noise and vibration impacts of Construction activities on local sensitive receivers.	Management of noise and vibration impacts will be undertaken throughout delivery of the project in accordance with the NVMP.
Noise and vibration – structural Construction noise and vibration (including airborne noise, groundborne noise and blasting) are effectively managed to minimise adverse impacts on the structural integrity of buildings, items including Aboriginal places and environmental heritage, and nearby road infrastructure.	The project minimises impacts to structures by: - controlling vibration at the source - controlling vibration on the source to receiver transmission path - implementing practicable and reasonable measures to	Management of noise and vibration impacts will be undertaken throughout delivery of the project in accordance with the NVMP.

Objective	Target	Management measure
Increases in noise emissions and vibration affecting environmental heritage as defined in the Heritage Act 1977 during operation of the project are effectively managed.	minimise vibration impacts of Construction activities on structures.	
Socioeconomic, land use and property The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities. The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	The project minimises impacts to the local community, community infrastructure, and businesses. Impacts to existing land use and properties are minimised. The project is appropriately integrated with adjoining land uses, and access to private properties is maintained.	Management will be undertaken in accordance with the REMMs and CoA's.
Soils The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	Site-specific soil characteristics are taken into consideration during detailed design and Construction. Any contamination is managed in accordance with relevant regulatory requirements. Any soil waste is assessed, classified, managed, and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	Management of soil and surface water will be undertaken throughout the delivery of the Project in accordance with this plan.
Sustainability The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised.	Sustainability considerations are integrated throughout design, Construction, and operation. The project will be carried out in accordance with the Sydney Metro City & Southwest Sustainability Policy.	Refer to Sydney Metro Sustainability Management Plan and Martinus' Sustainability Management Plan.
Traffic, transport, and access Network connectivity, safety, and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained. Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	Impacts to traffic and transport are minimised. Motorist, pedestrian, and cyclist safety will be maintained or improved. Safe access to properties is maintained.	Management will be undertaken in accordance with the TRAFFIC MANAGEMENT PLAN, REMMs and CoA's.
Place making and urban design The project capitalises on opportunities to improve place, character and quality of the surrounding build and natural environment (including adjoining public spaces).	The project is designed to have regard to the surrounding landscape and visual environment and to minimise the potential for visual impacts.	Management will be undertaken in accordance with the REMMs and CoA's.

Objective	Target	Management measure
The project contributes to the accessibility and connectivity of communities.	The project is visually integrated with its surroundings. The stations provide a sense of place and contribute positively to the surrounding urban environment. The design takes into account future planning for the Sydenham to Bankstown Corridor Urban Renewal Strategy. Vegetation providing screening to the rail corridor is retained where practicable.	
Water – quality The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and marine waters (if applicable).	Impacts to water quality during Construction and operation are minimised. Erosion and sediment controls during Construction are implemented in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) and Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008a).	Management of soil and surface water will be undertaken throughout the delivery of the Project in accordance with this plan.
Utilities The project is designed, constructed, and operated to minimise impacts to utilities and provision of such to the public.	Impacts to utilities during Construction are minimised. The design takes into account the input of utility providers and owners.	Management will be undertaken in accordance with the REMMs and CoA's as well as the Utilities Management Strategy.

1.5 Consultation

The Conditions of Approval require that the sub-plans associated with this CEMP be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan. As such, the following stakeholders have been consulted with. Further details regarding the outcomes of these consultations can be found in each applicable sub-plan.

Table 3: Consultation carried out in the development of CEMP Sub-plans

CoA	Agency Consultation	Requirements and Date Submitted
C6	Department of Planning, Housing and Infrastructure (DPHI)	Requirement: Review and comment on the HMP, NVMP Date submitted: 30/08/2024
C3	Department of Premier and Cabinet Heritage NSW (formerly Heritage Council)	Requirement: Review and comment on the HMP Date submitted: 24/07/2024

CoA	Agency Consultation	Requirements and Date Submitted
C3 C8	Inner West Council	Requirement: Review and comment on the WMRP, HMP, NVMP Date submitted: 12/07/2024
C3 C8	City of Canterbury Bankstown	Requirement: Review and comment on the WMRP, HMP, NVMP Date submitted: 12/07/2024

2 LEGAL AND APPROVAL REQUIREMENTS

2.1 Environmental Planning Approval Process Background

As discussed in Section 1, in September 2017 an EIS for the SWM Project was placed on public exhibition for a period of 56 days (eight weeks). A SPIR for the SWM Project was prepared and placed on public exhibition in June 2018 for a period of 28 days (four weeks). A Submissions Report for the SWM project was prepared and publicly released in September 2018. The SWM Project was approved on 12 December 2018 (SSI 8256). A Project Modification was prepared in May 2020, with Project Modifications MOD-1 and MOD-2 being approved on 22 October 2020 and 02/06/2025 respectively.

Under Section 5.23 of the EP&A Act the following authorisations are not required for approved State Significant Infrastructure (SSI) (and accordingly the provisions of any Act that prohibit an activity without such an authority do not apply):

- A permit under section 201, 205 or 219 of the Fisheries Management Act 1994;
- An approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977;
- An Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974;
- A bush fire safety authority under section 100B of the Rural Fires Act 1997; and
- A water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the Water Management Act 2000.

In addition, Division 8 of Part 6 of the *Heritage Act 1977* does not apply to prevent or interfere with the carrying out of approved SSI and the following directions, orders or notices cannot be made or given so as to prevent or interfere with the carrying out of approved critical SSI:

- An interim protection order (within the meaning of the *National Parks and Wildlife Act 1974*);
- An order under Division 1 (Stop work orders) of Part 6A of the *National Parks and Wildlife Act 1974*, or Division 7 (Stop work orders) of Part 7A of the *Fisheries Management Act 1994*;
- A remediation direction under Division 3 (Remediation directions) of Part 6A of the *National Parks and Wildlife Act 1974*;
- An order or direction under Part 11 (Regulatory compliance mechanisms) of the *Biodiversity Conservation Act 2016*;
- An environment protection notice under Chapter 4 of the *Protection of the Environment Operations Act 1997*; and
- An order under section 124 of the *Local Government Act 1993*.

The abovementioned potential aspects and impacts are deemed to be addressed under the Project Planning Approval.

2.2 Approval and Licensing Requirements

The key legislative and approval requirements for the works are outlined in Table 4. Further detail is provided in Appendix B.

Table 4: Approval / licence requirements

Regulatory Authority	Approval / licence required for this Project
Department of Planning, Housing and Infrastructure (DPHI)	Project Planning Approval granted under Division 5.2 of the <i>EP&A Act</i> (no. SSI-8256) Approval of reports, studies and plans as required by the Project Planning Approval.
Commonwealth Department of Environment	The <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) prescribes the Commonwealth's role in environmental assessment, biodiversity conservation and the management of protected areas. Under the EPBC Act, matters of national environmental significance include world and national heritage properties and listed biodiversity impacts. The EIS concludes that the Project would not have a significant impact in relation to these matters. As such the Project is not a Controlled Action and does not require assessment and approval under the EPBC Act.
TfNSW and other road authorities	In accordance with the <i>Roads Act 1993</i> , Martinus will obtain the consent of the appropriate roads authority to erect a structure, carry out work in, on or over a public road, or dig up or disturb the surface of a public road. If the applicant is a public authority, the roads authority must consult with the applicant before deciding whether or not to grant consent or concurrence. As required, road occupancy permits will be sought in accordance with the Construction Traffic Management Plans.
EPA	The Protection of the Environment Operations Act 1997 (POEO Act) is the key piece of environment protection legislation administered by the EPA to protect the environment from pollution and its effects. The Act provides the regulatory framework to help reduce and eliminate the discharge of pollutants into the air, land, and water. The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the Protection of the Environment Operations Act 1997. The POEO Act requires an Environmental Protection Licence (EPL) for certain activities that are likely to impact on the environment or cause pollution. The Project would not have a significant impact in relation to these matters. As such the Project does not qualify as a scheduled activity and does not require an EPL under the POEO Act.

2.3 Relevant Legislation

Martinus ensures compliance with all relevant legislation and aims to employ best practice environmental management procedures for the construction of the Project.

Key environmental legislation and other requirements relevant to the Project are outlined in Appendix B.

2.4 Additional Environmental Assessment

Changes to the project may require an assessment to determine consistency with the Project Approval and Environmental Documents. This assessment would be carried out in accordance with the Sydney Metro Planning Approval Consistency Assessment Procedure (SM ES-PW314).

The assessment will include:

- A description of the existing surrounding environment;
- Details of the ancillary works and Construction activities required to be carried out including the hours of works;
- An assessment of the environmental impacts of the works, including, but not necessarily limited to traffic, noise and vibration, air quality, soil and water, ecology and heritage;
- Details of mitigation measures and monitoring specific to the works that will be implemented to minimise environmental impacts; and
- Identification of the timing for completion of the Construction works, and how the sites will be reinstated (including any necessary rehabilitation).

Consistency Assessments would require approval from the Sydney Metro Director of Environment, Sustainability and Planning. Consistency Assessments will be made available on Martinus' website and provided to the ER for information.

2.5 Standards and Codes

The project will be constructed in accordance with relevant standards and codes. The environmental publications, standards, codes of practice and guidelines included in Table 5 are relevant to the Project and are referenced throughout this Plan. Other aspect specific guidelines are discussed in the relevant CEMP Sub-plans and other project management plans.

Table 5: Applicable standards and codes

Standard / Guideline	Relevant authority
ISO 14001 Environmental Management Systems – Requirements with Guidelines for use	International Organisation for Standardization
AS/ NZS 1940: 2017 – The Storage and Handling of Flammable and Combustible Liquids	Standards Australia
AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting	Standards Australia
Australian Dangerous Goods Code	National Transport Commission
Environment Protection Manual for Authorised Officers: Bunding and Spill Management technical bulletin (EPA, 1997)	NSW EPA
Interim Construction Noise Guidelines (Department of Environment and Climate Change, 2009)	NSW EPA
ISO 14001 Environmental Management Systems – Requirements with Guidelines for use	International Organisation for Standardization
Managing Urban Stormwater: Soil and Construction (Landcom, 2008)	Landcom
Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2008)	NSW EPA
IECA 2008 Best Practice Erosion and Sediment Control	International Erosion Control Association (IECA)

ANZECC 1992 Australian Water Quality Guidelines for Fresh and Marine Waters

Australian and New Zealand Environment and Conservation Council (ANZECC)

2.6 Environment Protection License

Based on the scope for the Project, an Environmental Protection Licence is not required under the *Protection of the Environmental Operations Act 1997*.

2.7 Project Environment and Sustainability Management System

The Martinus Management System (MMS) provides the framework to implement specified standards and practices in a consistent manner. It outlines the application of work processes, and systems for engineering/design, acquisition of materials, equipment and services, construction, and other services related to tendering and project execution.

Martinus' Environmental Management System is applied across all operations and is accredited by SAI Global to ISO 14001:2015 Environmental Management Systems.

All works carried out for the Project (including works carried out by sub-contractors and others) will be in accordance with:

- *Client requirements as detailed in the Contract*
- *Martinus' environmental requirements, as detailed in the EMS*
- *ISO 14001:2015 Environmental Management System*
- *Martinus' compliance obligations including mandatory and voluntary requirements.*

This Plan references relevant parts of the Company's environmental management system and incorporates the additional elements necessary to satisfy the Sydney Metro's environmental system requirements.

3 ENVIRONMENTAL MANAGEMENT PLAN

This CEMP provides a system and set of procedures to ensure that sound and effective controls are established and maintained to manage potential environmental impacts throughout the Project operations and, wherever practicable, to deliver positive environmental outcomes. As part of our commitment to environmental management we will take a proactive approach to environmental management for the Project. This document is therefore based upon a risk management process where the environmental risk associated with each element of the Project is identified and assessed, and appropriate mitigation strategies implemented to eliminate or minimise the subsequent risk.

3.1 Preparation and availability of the CEMP

3.1.1 Preparation

Consistent with the requirements of CoA C1, this CEMP has been prepared in accordance with the approval documents and the Sydney Metro Construction Environmental Management Framework (CEMF).

The CEMP incorporates all relevant requirements of the EIS documentation, CoA, SPIR, Submissions Report, Modification Report as well as all relevant licences, permits and approvals for the Project including Sydney Metro's Environment and Sustainability Policy (Appendix D).

For further detail regarding CEMP preparation refer to Section 1.2 of this CEMP. The CEMP will be submitted to the Planning Secretary prior to commencement of Construction as outlined in CoA C2.

3.1.2 Availability

This CEMP will be available to all personnel and subcontractors via the Martinus' Project document control management system. Martinus will ensure all personnel and subcontractors have access to the Project's CEMP. An electronic version of the CEMP will be made available on the project website, in accordance with CoA B14. The project website is: [Sydney Metro Southwest Metro Conversion and Station Works | Martinus Rail](#).

This Plan will be reviewed and updated as required in an event if it:

- *Does not adequately address the matters it is intended to address;*
- *Is not consistent with new, additional or modified project scope;*
- *Is causing non-conformity or is otherwise necessary to comply with the conditions of the contract, planning approval or any other statutory requirements;*
- *Has to be changed because of an Internal or External audit outcome;*
- *No longer represents current or appropriate practice; or*
- *Is otherwise required by the Contract to be updated.*

Sydney Metro will be notified immediately of any changes and the amended documentation will be submitted to Sydney Metro and Environmental Representative for endorsement, and to the Planning Secretary if required. An updated revision of this plan will then be published on the project website.

Subject to confidentiality, all documents subject to CoA B14, including this CEMP will be made publicly available. In accordance with CoA B14, copies of the following documents will be published prior to works commencing and maintained on the Project website:

- a) Information on the current implementation status of the CSSI.
- b) The telephone number, postal address and email address required under Condition B6.
- c) A copy of the documents listed in Conditions A1 and A2 of the approval and any documentation relating to any modifications made to the CSSI or the terms of this approval.

- d) A copy of the approval in its original form, a current consolidated copy of the approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval.
- e) A copy of an EPL required and obtained in relation to the CSSI.
- f) A current copy of each document required under the terms of the approval, which must be published before the commencement of any relevant activity to which they relate or before their implementation, as the case may be.
- g) A copy of the compliance reports required under Conditions A29 and A32 of the approval.

Where a CoA requires a document to be prepared prior to commencement of any work or Construction, a current copy of the relevant document will also be published on the Project website (<https://www.sydneymetro.info>) before the activity is undertaken.

Confidential information, which may include the location of threatened species, Aboriginal objects or places and personnel contact details, will be removed from all documents provided or made available to the public. The Project's Environment Policy will be displayed on the Project website, at the site office/s, and communicated to staff and other interested parties via inductions and ongoing awareness programs.

This document is uncontrolled when printed. One controlled hard copy of the CEMP and supporting documentation will be maintained by Martinus' Quality Manager at the Project office. Copies of this CEMP will be distributed via the Project document management system to:

- *Martinus Project Director;*
- *Martinus Construction Director;*
- *Martinus Environmental Manager;*
- *Martinus Public Liaison Manager;*
- *Sydney Metro; and*
- *The Environmental Representative.*
-

3.2 Planning

3.2.1 Compliance tracking

In accordance with CoA A29, a Compliance Monitoring and Reporting Program must be prepared in order to monitor compliance with the terms of the project approval. Compliance reporting on the project will be undertaken in accordance with the requirements of the *City and Southwest – Sydenham to Bankstown Compliance Monitoring and Reporting Program Report* (Sydney Metro, 2022).

It is the responsibility of Sydney Metro to undertake the Compliance Tracking Program in accordance with the *City and Southwest – Sydenham to Bankstown Compliance Monitoring and Reporting Program Report* with input from Martinus as required. A compliance matrix has been established for the project, incorporating CoA, REMM, licence conditions, permits and other approvals relevant to the Project to track issues and ensure compliance issues are addressed and closed out. Refer to Section 3.9.4 for further detail regarding the implementation of compliance tracking and reporting during Construction, in accordance with the *City and Southwest – Sydenham to Bankstown Compliance Monitoring and Reporting Program Report*.

3.2.2 Environmental objectives and targets

Refer to Section 1.4.

3.2.3 Environmental Work Method Statement and Environmental Control Maps

Environmental Works Method Statements (EWMS) will be developed in consultation with relevant site management personnel to detail mitigation methods and controls for high-risk environmental activities undertaken during construction. Mitigation measures and controls will include those from relevant management Sub-plans and key procedures to be used concurrently with the EWMS. EWMS will be specifically prepared to communicate requirements, actions, processes, and controls to Construction personnel using plans, diagrams, and simple written instructions.

EWMS will be prepared progressively prior to and throughout Construction, in consultation with the relevant site management personnel. This will ensure that all issues are addressed, methods and activities are practical, and all personnel are aware of their commitments and responsibilities.

All construction personnel and subcontractors involved in the activities must sign on to the EWMS prior to work commencing to show they are aware of their environmental commitments and responsibilities. The EWMS includes all the risks associated and the management controls associated with the activities using Martinus' Project Risk Register (MMS #MR-IR-012) to evaluate the probability and the consequence of the risk.

The EWMS will include at least the following elements:

- *Description of the work activity, including any plant and equipment to be used;*
- *Outline of the sequence of tasks for the activity, including interfaces with other Construction activities;*
- *Identification of any environmental and/or socially sensitive areas, sites or places;*
- *Identification of potential environmental risks/impacts due to the work activity;*
- *Mitigation measures to reduce the identified environmental risk, including assigned responsibilities to site management personnel; and*
- *Process for assessing the performance of the implemented mitigation measures.*

High risk activities related to the project include, but not limited to:

- *Clearing and Grubbing*
- *Heritage Management*
- *Soil Management (Topsoil, Contaminated Land, Acid Sulfate Soils)*
- *Working near waterways*
- *High noise intensive works near sensitive receivers*

Construction personnel and subcontractors undertaking a task governed by an EWMS must participate in training on the EWMS and acknowledge that they have read and understood their obligations by signing an attendance record prior to commencing work.

Regular monitoring, inspections and auditing of compliance with the EWMS will be undertaken by project management and environmental personnel to ensure its effectiveness and that all controls are being followed and that any non-conformances are recorded and corrective actions implemented (refer to Section 3.11). Any improvements or changes identified in such reviews will be incorporated into subsequent revisions of the EWMS.

Environmental control maps (ECMs) are to be used in project inductions, work site set-up, as information in tender documents to subcontractors (where applicable) and in support of ancillary environmental approvals. ECMs will be prepared prior to Construction commencing.

The ECMs will be 'live' documents and updated to reflect the relevant works stage as works progress. The ECMs will be endorsed by the Environment Manager (or delegate). The ECMs will be endorsed before being utilised.

The project ECMs shall include but not be limited to:

- *Environmental procedures, environmental approvals, or licences that are applicable;*
- *The worksite layout and boundary, significant structures, entry/exit points and internal roads;*
- *Consideration of minimising light spillage to surrounding properties, in accordance with CoA E54;*
- *Location of environmentally sensitive areas and sensitive receivers;*
- *Environmental control measures;*
- *Endangered and Threatened Ecological Communities;*
- *Known cultural heritage sites;*
- *Known fauna habitat to be protected;*
- *Watercourses, wetlands and natural springs;*
- *Acid sulphate soils;*
- *Project boundaries and work locations;*
- *Environmental protection boundaries; and*
- *Designated "No-Go Zones".*

The ECMs will be in addition to any erosion and sediment control plans.

A demonstration of an ECM intended to be used during Construction has been included in Appendix K. All ECMs will be endorsed by the ER no later than one month prior to Construction.

Updated ECMs will be included in any further amendments to the CEMP requiring ER endorsement, or Planning Secretary approval.

3.3 Environmental Life Cycle

Martinus is committed to considering the environmental life cycle of activities, products and services in the delivery of the Project. Stages in the life cycle of products and services that are relevant to this project include acquisition of raw materials, design, production, transportation/delivery, use, end of life treatment, and final disposal. Considering the environmental life cycle perspective prevents environmental impacts from being unintentionally transferred to somewhere else in the life cycle. Environmental aspects relevant to each stage of the environmental life cycle will also be considered in the Project Risk Register (MMS # MR-IR-012). Control measures and mitigation techniques that will be implemented to minimise Martinus' impact on the environmental life cycle for the Project are listed in the table below.

Stage of Environmental Life Cycle	Martinus Life Cycle Considerations and Mitigation Measures
Acquisition of Raw Materials	• Consider what raw materials are used in products and the environmental impact during acquisition of materials (energy required to extract, carbon emissions during extraction, impacts on local environment) during the procurement phase.

	Investigate alternatives for materials with energy intensive processes or high carbon emissions.
Design	During design process to consider: - Availability of local materials - Lifespan and maintenance requirements of products to be used - The potential to reuse existing material or recyclable material - Assess the existing environmental aspects as part of the Safety in Design (SiD) assessment to minimise environmental impacts during construction and operation.
Production	Consider the materials used, processing methods to manufacture, quality of the product and packaging during procurement. Cost should be considered in context of the lifespan of the product or service, rather than just upfront cost to minimise single use products.
Transportation / Delivery	- Consider freight distance for transportation of products. Where practicable, use local suppliers to reduce transportation distance. - Forecast quantity of materials required prior to procurement to optimise deliveries. - Where practicable, have products delivered at point of use or assembly to prevent additional haulage on site.
Use	- Implement management and mitigation controls for all environmental aspects. Controls should be inspected and maintained as required. - Use Martinus approved suppliers that have environmental and sustainability management measures or agree to work as per Martinus Management Systems. - Maintain equipment and plant as per manufacturer's instructions to promote longevity. - Consider how recyclable, responsible or "green" products can be used during the procurement phase. - Forecast quantities of products required prior to purchasing to avoid wastage. - Choose products with a long lifespan to optimise reuse potential.
End of Life Treatment	- Save excess products for reuse on future projects. Ensure there is a central system for tracking these products to encourage reuse. - Appropriately segregate / recycle waste to divert resources from landfill. Segregation should include dedicated bins for recycling, cardboard, steel, regulated waste (solid and liquid), tyres, timber.
Final Disposal	Engage licenced waste contractors for waste tracking and treatment/disposal and ensure final disposal site is licenced to receive type and quantity of waste. Tracking should include waste type, quantities removed and final location.

3.4 Resources, Responsibilities, and Authority

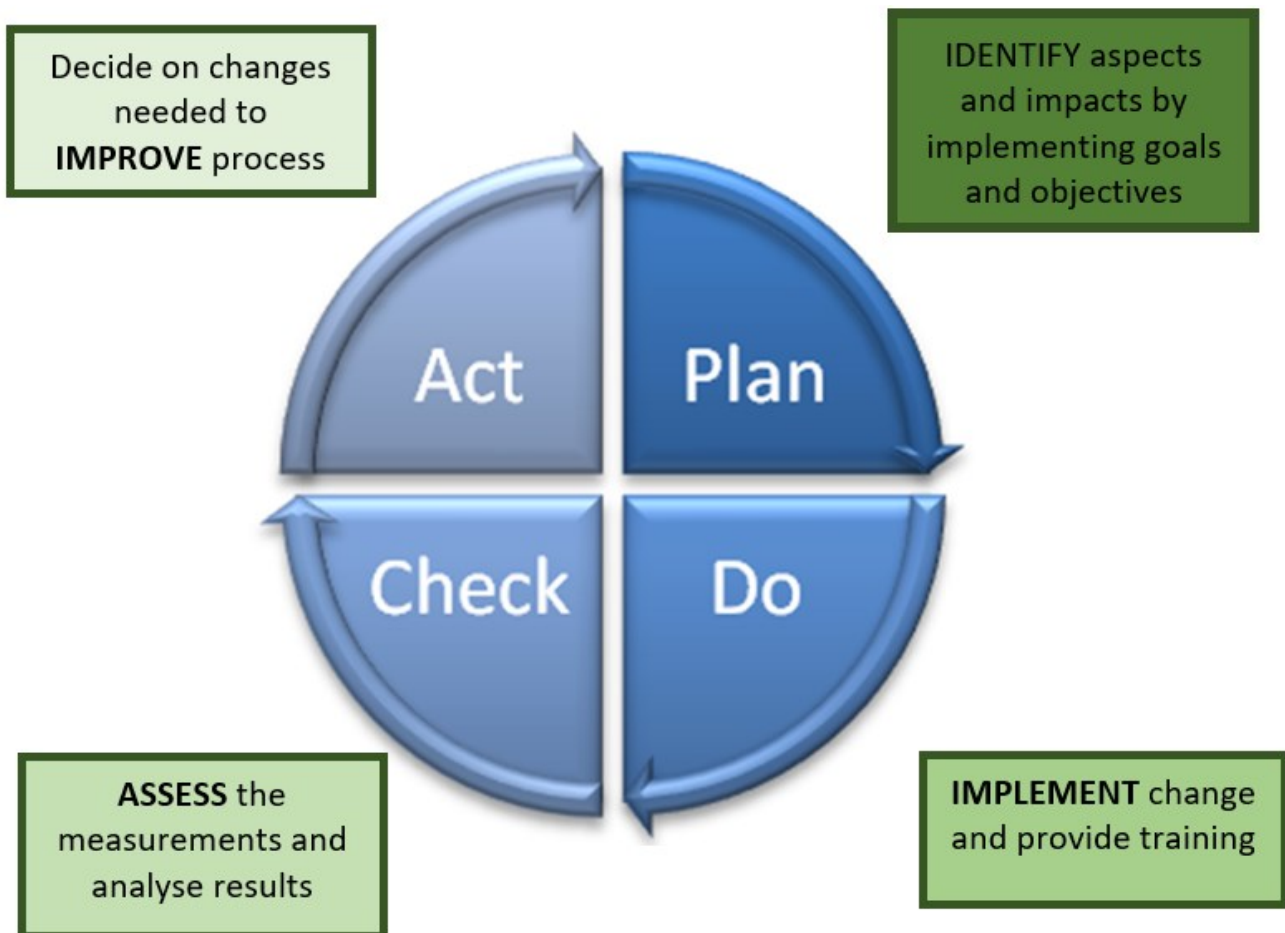
In accordance with the contract for the Project, Martinus will perform certain roles and meet certain requirements under the Planning Approval. This includes consultation with key regulatory stakeholders such as; Heritage NSW (formerly OEH), Canterbury-Bankstown Council and Inner West Council where required. DPHI is the approval authority for several items required under the Planning Approval, including the CEMP and CEMP Sub-plans.

Sustainability and environmental protection are the responsibility of all individuals and organisations involved with the Project. All personnel will be made aware of environmental issues associated with the Project and their responsibilities through training and competency methods detailed in Section 3.5.

From Project Director down, all staff will lead by example, setting the highest standards for environmental management and performance. They are to act immediately to correct any non-conforming conditions or behaviours and promote environmental awareness, good environmental behaviours, and continuous improvement at every opportunity. Martinus undertakes a reflective, resourceful, inclusive and flexible approach to environmental management and leads by example in ensuring that statutory and contractual requirements are met, and positive environmental performance is maximised.

Our approach to environmental leadership is underpinned by our strong safety culture and commitment to zero harm and continual improvement. The process for continual improvement is built into Martinus' Management Systems and the ideology of Continuous Improvement is based on the Plan Do Check Act model as outlined in Figure 3 below.

Figure 3: Plan Do Check Act Model



Sydney Metro have engaged, and received DPHI approval, for an Independent ER for the Project. The Independent ER will perform the duties described within Table 6, as per the requirements of CoA A26. Sydney Metro have also engaged an Independent Certifier to assess and certify project compliance. The role includes certification against environmental compliance.

Key responsibilities are indicated in Table 6. Note that this is not an exhaustive list of all site personnel and responsibilities. References to other roles and activities may be referred to throughout the CEMP and Sub-plans. Reporting lines are shown in the Organisation Chart below.

Table 6: Roles and Responsibilities

Role	Key Responsibilities and Authorities
Project Director (Project Leader)	• <i>Reports to senior management within the organisation</i> • <i>Ensure that internal audits of the system are conducted</i> • <i>Review audit corrective actions and take action as necessary to ensure timely close out of issues</i> • <i>Authorise expenditure on environmental issues within limits of authority</i> • <i>Resolve major issues which cannot be resolved by the Project Manager</i> • <i>Must complete corporate and project induction covering environmental responsibilities and Martinus' environmental management system.</i> • <i>Ensure that project responsibilities and authorities are defined and communicated</i> • <i>Provide adequate resources to meet environmental objectives</i> • <i>Ensure that the CEMP is effectively implemented and maintained</i> • <i>Appoint/nominate and provide support for the Environmental Manager</i> • <i>Ensure suppliers and subcontractors comply with requirements</i> • <i>Report environmental incidents to the client / local authorities as required</i> • <i>Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals.</i>
Project Manager (Construction Manager)	• <i>Ensure all works achieve legislative compliance</i> • <i>Provide leadership in the development and implementation of the EMP</i> • <i>Ensure that all project personnel and subcontractors are familiar with and implement all relevant environmental control measures</i> • <i>Reports to the Project Director</i> • <i>Support the Project Director in environmental matters as required</i> • <i>Oversight of environmental requirements for design and construction</i> • <i>Must complete corporate and project induction covering environmental responsibilities and Martinus' environmental management system.</i> • <i>Supervise all site Construction activities and personnel by ensuring that they meet environmental and other requirements</i> • <i>Organise and manage site plant, labour and temporary materials</i> • <i>Ensure that site environmental controls are properly maintained and provide support for the Environmental Manager</i> • <i>Report all environmental incidents</i> • <i>Take action to resolve non-conformances, non-compliances and incidents</i> • <i>Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.</i>

	• <i>Encourage all employees to maintain acceptable standards of health, safety and environmental work practices and foster awareness of health, safety, and environmental matters</i>
Procurement Personnel	• <i>Reports to the Project Director</i> • <i>Carefully select suppliers and subcontractors based upon their ability to meet stated requirements</i> • <i>Ensure that purchase orders and agreements include environmental requirements as necessary</i> • <i>Where practical, select materials which are “environmentally friendly”</i> • <i>Must complete corporate and project induction covering environmental responsibilities and Martinus’ environmental management system.</i> • <i>Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.</i>
Project Environmental Manager	• <i>Ensure that the CEMP is effectively established, implemented and maintained at the project level</i> • <i>Ensure relevant licences, approvals and permits are obtained</i> • <i>Ensure compliance with all relevant statutes, regulations, rules, procedures, standards and policies</i> • <i>Carry out six monthly reviews of the CEMP and Sub-plans</i> • <i>Liaise with the ER and/or Superintendent on environmental issues, including the written notification of non-conformances (incidents, emergencies or deviations from the CEMP) and non-compliances</i> • <i>Ensure that all personnel on site receive appropriate environmental induction and training and are aware of their environmental responsibilities under the CEMP, relevant legislation and the contract</i> • <i>Report to the Project Director on the performance of the system and improvement opportunities</i> • <i>Provide support to the project team to enable them to meet their environmental commitments</i> • <i>Ensure that environmental records and files are collected and maintained</i> • <i>Ensure that environmental controls, materials and equipment are maintained</i> • <i>Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals. The Project Environmental Manager will be the primary contractor contact for the Independent Environmental Representative</i> • <i>Must complete corporate and project induction covering environmental responsibilities and Martinus’ environmental management system.</i> •
Project Environmental Coordinator	• <i>Support the Environmental Manager in matters relating to environmental management</i>

	• <i>Must complete corporate and project induction covering environmental responsibilities and Martinus' environmental management system.</i> • <i>Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals.</i>
Communication and Stakeholder Relations Manager	• <i>Leadership and management of the Communications, Stakeholder and Community Relations Team</i> • <i>Build and maintain effective working relationship with Sydney Metro's representative and Stakeholder and Community Liaison team</i> • <i>Develops and oversees the implementation of the CCS and subplans</i> • <i>Responsible for a stakeholder and community relations induction and training program for all personnel involved in the performance of the project</i> • <i>Approves the Communications, Stakeholder and Community Relations team roles, role descriptions and responsibilities</i> • <i>Liaising with the Community Complaints Mediator, where required</i> • <i>Ensures the Community Communications Strategy and key activities are integrated into the project schedule</i> • <i>Attends the Sydney Metro led Communications Management Control Group and reports on activities, strategies and issues</i> • <i>Attends the monthly Project Management Review Group meeting to discuss project status and issues</i> • <i>Manages media issues and acts as media spokesperson (subject to media protocols)</i> • <i>Responsible for the Communications and Stakeholder Management KPI as well as the Communications and Stakeholder management component of the Quality of Information and Relationship with the Principal's representative KPI</i> • <i>Required to be on call 24 hours based on the team rotation</i> • <i>Liaise directly with the Independent Environment Representative as required and where appropriate to facilitate any environmental management requirements, including those identified within the Planning Approvals.</i>
Community Place Manager	• <i>Build and maintain effective working relationship with community, businesses, and stakeholders</i> • <i>Support the successful delivery of the project's Community Communication's Strategy and requirements</i> • <i>Implementation of the Community Communications Strategy and any relevant Sub-plans</i> • <i>Liaising with the Community Complaints Mediator, where required</i> • <i>Establish effective working relationships with local stakeholder to support the effective delivery of the project</i>

	• <i>Required to be on call 24 hours based on the team rotation to respond to enquiries and complaints.</i> • <i>Review, approve and oversee the development and distribution of all notification, newsletter, social media, photography, and other communication material.</i> • <i>Maintain the Consultation Manager database and generate reports as required.</i> • <i>Drives Communications and Stakeholder Management KPIs as well as the Communications and Stakeholder management component of the Quality of Information and Relationship with the Principal's representative KPI.</i>
Project Training Coordinator	• <i>Develop a Training Needs Analysis to identify relevant environmental training for all contractor (and subcontractor, where appropriate) personnel</i> • <i>Develop environmental training materials in consultation with the Project Environmental Manager</i> • <i>Organise external environmental training courses/material, where required</i> • <i>Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.</i>
Site Foreman (Site Superintendents)	• <i>Construction delivery in relation to environmental management and compliance in conjunction with the Project Environmental Manager</i> • <i>Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts</i> • <i>Promote environmental awareness by all on the project site;</i> • <i>Ensure activities are performed in compliance with the EMP;</i> • <i>Ensure environmentally acceptable work methods and practices are implemented and that plant and equipment is properly operated and maintained to enable operations to be carried out without environmental harm;</i> • <i>Ensure construction activities are undertaken in accordance with the requirements of the EMP including ensuring timely planning and communication of activities;</i> • <i>Ensure hazards are identified, risks assessed, and control measures are planned and implemented in consultation with all relevant personnel; and</i> • <i>Participate in incident and non-conformance report investigations and ensure that corrective and preventative action proposed is implemented effectively.</i>
Subcontractors	• <i>Comply with all legal, contractual requirements and this CEMP</i> • <i>Comply with site environmental requirements</i> • <i>Comply with management / supervisory directions</i> • <i>Participate in induction and training as directed</i> • <i>Report all incidents</i> • <i>Environmental qualifications as required by contract</i>

	• <i>Must complete project induction covering environmental responsibilities and the Martinus' environmental management system.</i> • <i>Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.</i> • <i>Regardless of the approach to managing a subcontractor's environmental impacts, all subcontractors will be subject to the following:</i> • <i>Regular on-site auditing to assess their performance against the requirements of this EMP.</i> • <i>Implementation, protection and maintenance of environmental management controls as set out in the Project's environmental management documentation.</i>
All Personnel	• <i>Provide effective environmental leadership;</i> • <i>Ensure construction is undertaken in accordance with the requirements of the Project Scope and Technical Requirements, EMP and relevant standards;</i> • <i>Ensure works have minimal environmental impact and environmental risk is appropriately mitigated; and</i> • <i>Participate in incident and non-conformance report investigations and ensure that corrective and preventative action proposed is implemented effectively.</i> • <i>Comply with the relevant Acts, Regulations and Standards</i> • <i>Comply with the Company's environmental policy and procedures</i> • <i>Promptly report to management on any non-conformances, non-compliances environmental incidents and/or breaches of the system</i> • <i>Undergo induction and training in environmental awareness as directed by management</i> • <i>Report all incidents</i> • <i>Act in an environmentally responsible manner</i> • <i>Must complete corporate and project induction covering environmental responsibilities and Martinus' environmental management system.</i> • <i>Provide information to the Independent Environment Representative as requested and where appropriate, via the Project Environmental Manager.</i>
Independent Environment Representative	• <i>Receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI;</i> • <i>Consider and inform the Planning Secretary on matters specified in the terms of this approval;</i> • <i>Consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;</i> • <i>Review documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so:</i>

	• <i>make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or</i> • <i>make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Planning Secretary);</i> • <i>Regularly monitor the implementation of the documents listed in Conditions C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval</i> • <i>As may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A34 of this approval</i> • <i>As may be requested by the Planning Secretary, assist the Department in the resolution of community complaints</i> • <i>Assess the impacts of minor ancillary facilities as required by Condition A19 of this approval</i> • <i>Consider any minor amendments to be made to the documents listed in Conditions C1, C3 and C8 and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval</i> • <i>Prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI.</i> • <i>Must complete project induction covering Martinus' environmental management system.</i>
Independent Certifier	• <i>Assess and certify the Project for compliance, including environmental requirements.</i>
Utilities Coordination Manager	• <i>The management and coordination of all utility work associated with the delivery of the Project, to ensure respite is provided to the community, in accordance with CoA E22</i> • <i>Establishing a Utilities Project Team with nominated representatives from utility service providers that may be impacted by the CSSI</i> • <i>Coordination of meetings with utility service providers as requested by Sydney Metro's Contractors</i> • <i>Involvement with reviews of CSSI designs and Construction methodologies to assist with identifying potentially impacted utility assets</i>

- Assist with coordination of design and Construction methodology reviews by utility service providers to identify necessary utility works
- Communicate with the Utilities Project Team, Sydney Metro, and Sydney Metro's Contractors' delivery teams to understand the proposed program of works to coordinate intercepting, interconnecting and interrelated works and manage priorities as they may arise
- Observation of utility works
- Manage escalation of utility work-related issues within Sydney Metro and the utility service providers as required.
- In conjunction with the Contractors, co-ordinate utility providers and relevant council(s) to identify opportunities for maintenance, replacement or augmentation of utilities that cross the rail corridor and facilitate and co-ordinate requests by the utility providers and relevant council(s) to undertake the Work during rail shutdowns
- Collaborate with the communications team and as required, the Community Complaints Mediator, to ensure utility works are appropriately notified and any complaints are resolved.

It is noted that;

- ***“Subcontractors” and “All personnel” are categorised as “Operational Personnel”. All other roles as listed above are categorised as “Management”. Refer to Section 3.5 for training requirements for each category.***
- ***Work must not commence until an ER has been approved by the Planning Secretary and engaged by the Proponent.***
- ***The Planning Secretary's approval of an ER must be sought no later than one (1) month before the commencement of Work.***
- ***The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the EIS, SPIR or Submissions Report and is independent from the design and Construction personnel for the CSSI and those involved in the delivery of it.***

It is the responsibility of Sydney Metro to engage an appropriate ER and seek approval from DPHI.

CIRA Organisational Chart

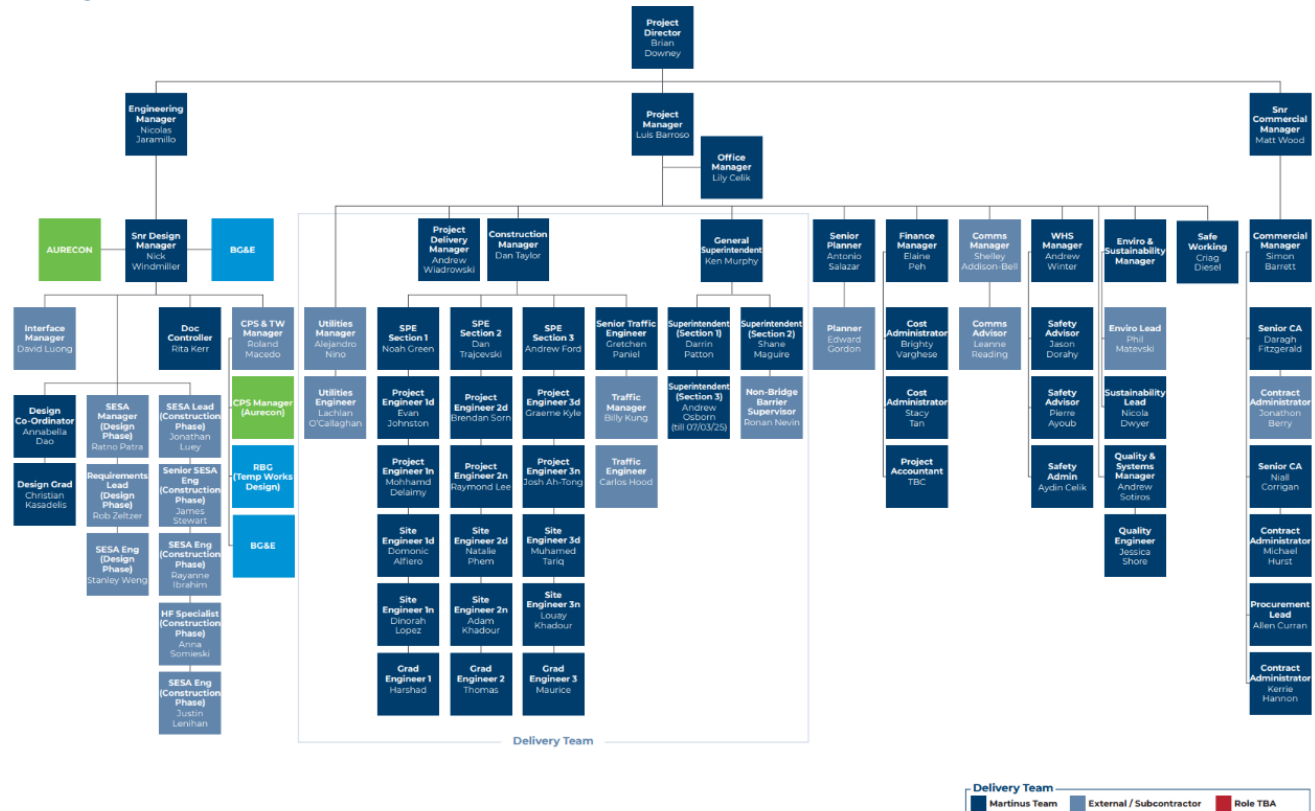


Figure 4: Organisational Structure

3.5 Selection and Management of Subcontractors

Environmental requirements and responsibilities are to be specified to subcontractors in the contract documentation. All subcontractors engaged by Martinus will be required to work under Martinus' E&SMS.

The supply of goods and/or services by suppliers and subcontractors will be managed in accordance with the following:

- During the tender phase, supply chain partners will be evaluated by Martinus for their ability to meet the project's environmental obligations. Environmental issues will be taken into account when selecting subcontractors and suppliers and as provided in the project's Procurement Management Plan;
- Supply, subcontract and consultancy agreements must address the relevant environmental compliance obligations;
- Agreements will outline the contractual requirements to be delivered by the supply chain through their scope of works;
- Suppliers of chemicals and hazardous substances will be required to submit SDS's with delivery or prior to chemicals arriving at site;
- Supply chain partners are to be required to nominate relevant environmental risks and proposed mitigation measures associated with their scope of work within their project specific documentation. As a minimum subcontractors Safe Work Method Statements must address the environmental risks associated with their site activities;

- *The environmental performance of subcontractors will be monitored by Martinus during site inspections, subcontractor meetings, and in accordance with the obligations in their agreements and contracts; and*
- *Delivery drivers will be required to undertake Martinus' delivery driver induction process.*

3.6 Competence, Training, and Awareness

3.6.1 Environmental Induction

All personnel (including subcontractors) will be required to satisfactorily complete the Martinus Induction Training before commencing work on site. This is to ensure all personnel involved in the Project are aware of the requirements of the CEMP, and to ensure the implementation of the REMMs. This will aid in the prevention of any breaches of the CoA resulting from the actions of all persons invited onto any site, including contractors, subcontractors, and visitors.

Short-term visitors undertaking inspections or entering site (such as regulators) will be required to undertake a visitor's induction and be accompanied by inducted personnel at all times. Temporary visitors to site for purposes such as deliveries will be required to be accompanied by inducted personnel at all times.

Other mechanisms of communicating environmental controls are through Toolbox Talks and Pre-Start Meetings described below.

The Project Induction will include a presentation of the requirements of this CEMP and in particular the requirements of the specific environmental risks, incident response and emergency procedures.

The purpose of the induction is to ensure that, at a minimum, the employee or sub-contractor:

- *Understands the importance of conforming with the environmental policy and procedures and to the requirements of this CEMP.*
- *Is aware of the significant environmental values and risks associated with the Project works and the potential impact of the construction activities on the environment.*
- *Is aware of all conditions of environmental licenses, permits and approvals.*
- *Is aware of any environmentally sensitive areas and No-Go Zones (if applicable).*
- *Understands the potential consequences of a departure from the established procedures.*
- *Is aware of the roles and responsibilities relating to environmental management for the Project.*
- *Is aware of the emergency response and incident procedures.*

Attendance records of all training and briefing sessions will be maintained by Martinus and held on the Project MMS.

A record of all environment inductions will be maintained and kept on site. Martinus' Environmental Manager may authorise amendments to the induction at any time. Possible reasons for changes to the induction may be Project modifications, legislative changes or amendments to this CEMP or related documentation.

Legible environmental records of all environmental inductions will be kept in an Induction Register.

3.6.2 Toolbox Talks, Training, and Awareness

Toolbox Talks are conducted monthly for site personnel as a method of raising awareness and educating personnel on issues related to all aspects of Construction including project or site wide updates, any key or recurring environmental issues. The toolbox talks will be used to ensure environmental awareness continues throughout Construction and include details of EWMS for relevant personnel. Toolbox talks will

also be tailored to specific environmental issues relevant to upcoming works, including any environmental matters that Sydney Metro would like to communicate to Martinus' workforce. Toolbox talk attendance is mandatory and attendees of toolbox talks are required to sign an attendance form and the records maintained.

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact. All employees (including subcontractors) may receive induction/training in the following (but not limited to):

- *Environmental Policy;*
- *Site environmental objectives and targets;*
- *Understanding individual authorities and responsibilities;*
- *Basic understanding of their legal obligations;*
- *Site environmental rules;*
- *Emergency procedure and response (e.g. Spill clean-up);*
- *Relevant project specific and standard noise and vibration mitigation measures;*
- *Permissible hours of work;*
- *Any limitations on high noise generating activities;*
- *Location of nearest sensitive receivers; and*
- *Relevant licence and approval conditions.*

To promote environmental awareness amongst the Construction team, environmental alerts will be issued as required and distributed amongst Martinus' Project / Site Engineers and Supervisors which will be discussed during the daily pre-start meeting or during toolbox talks. In addition, the ECMs will be displayed in crib sheds and site offices to promote awareness of the environmental constraints. Erosion and Sediment Control Plans (ESCPs) will be distributed to Martinus' Site Foreman to provide detail on erosion and sediment controls on the Project.

Environmental awareness may also be promoted to Construction personnel through the development and distribution of awareness notes. These will typically take the form of a poster, booklet, or similar and will be distributed to Martinus' Engineers, Leading Hands, Site Foreman and others with a responsibility for managing specific work locations or activities. This documentation may be used to inform the broader workforce through either daily pre-start meetings (see Section 3.5.3) or provision in worker crib sheds / break facilities.

In accordance with the CEMF, Martinus will conduct a Training Needs Analysis which identifies the competency requirements of staff that hold environmental roles and responsibilities as outlined in Table 6. This CEMP will be revised to include a summary of Martinus' Training Needs Analysis.

A Training Register is to be maintained on Martinus' information management system.

3.6.3 Daily Pre-start Meetings

Pre-start meetings are used by the supervisors to inform the site workforce before the commencement of work each day (or shift), or where changes occur during a shift, of the day's activities, safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, coordination issues with other trades, hazards and other information that may be relevant to the day's work. All operational aspects of the task are discussed including safety and environmental issues and controls, particularly if there are new hazards or if there has been a recent incident.

Daily pre-start meetings will be succinct in nature and generally take approximately 10-15 minutes.

The environmental component of pre-starts will be determined by relevant personnel and will include any environmental issues that could potentially be impacted by, or impact on, the day's activities as required. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

3.7 Working hours

Working hours for the Project are set by the CoA E19 to E26. Standard Construction hours as approved in the CoA E19 are as follows:

- *Monday to Friday: 7:00 am to 6:00 pm;*
- *Saturday: 8:00 am to 6:00 pm; and*
- *At no times on Sundays or Public Holidays.*

CoA E20 permits work outside of the hours specified in CoA E19, in the following circumstances:

- a) For the delivery of materials required by the NSW Police Force or other authority for safety reasons;
- b) Where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm;
- c) Where different Construction hours are permitted or required under an EPL in force in respect of the CSSI;
- d) Work approved under an Out-of-Hours Work Protocol for Work not subject to an EPL as required by Condition E25;
- e) Construction that causes LAeq (15 minute) noise levels:
 - i. no more than 5 dB(A) above the rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009), and
 - ii. no more than the 'Noise affected' noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC, 2009) at other sensitive land uses, and
 - iii. continuous or impulsive vibration values, measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), and
 - iv. intermittent vibration values measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006).
- f) Where a negotiated agreement has been reached with a substantial majority of sensitive receivers who are within the vicinity of and may be potential affected by the particular Construction, and the noise management levels and/or limit for ground-borne noise and vibration (human comfort) cannot be achieved. All agreements must be in writing and a copy forwarded to the Planning Secretary at least one (1) week before the commencement of activities.

In accordance with CoA E24, except as permitted by an EPL, highly noise intensive works that result in an exceedance of the applicable NML at the same receiver will only be undertaken:

- *Between the hours of 8:00 am and 6:00 pm Monday to Friday;*
- *Between the hours of 8:00 am and 1:00 pm Saturday; and*
- *In continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block. 'Continuous' includes any period during*

which there is less than one hour respite between recommencing any of the work that are the subject of the CoA.

There is no definition in the CoA SSI 8256 for “Highly Noise Intensive Works” as mentioned in CoA E24. Sydney Metro has adopted the following definition for “Highly Noise Intensive Works”, based upon definitions within CoA issued by DPHI for other SSI projects. For the purpose of this Project, Highly Noise Intensive Works are Construction activities which are defined as annoying under the ICNG, these include:

- *Use of power saws, such as used for cutting timber, rail lines, masonry, road pavement or steel work;*
- *Grinding metal, concrete or masonry;*
- *Rock drilling*
- *Line drilling;*
- *Vibratory rolling;*
- *Rail tamping and regulating;*
- *Bitumen milling or profiling;*
- *Jackhammering, rock hammering or rock breaking; and*
- *Impact piling.*

Any other works outside of standard Construction hours would be permitted provided they are undertaken in accordance the City and Southwest Out-of-Hours Work Protocol/Strategy (OOHW) as per CoA E25, or provided they meet:

- *the requirements of CoA E20;*
- *additional requirements as specified under CoA E25;*
- *utility coordination OOHW respite as per CoA E26;*
- *any emergency OOHW under CoA E21;*
- *EPL requirements (if applicable); and*
- *requirements of OOHW scheduling and respites under CoA E22 and E23.*

3.8 Communication

3.8.1 Internal Communication

Communication regarding environmental issues and controls is important to ensure that management techniques are being adhered to and that employees have the opportunity to address concerns.

Environmental communication will primarily be through Pre-Start Meetings, weekly team meetings and Toolbox Talks; however, it can also occur during site inspections or through communication between members of the site or management teams. This forum will provide an opportunity for the environment team members to advise on any upcoming sensitive environmental matters for future work areas and to receive feedback from on-site personnel.

Internal communication regarding the environmental means that employees will be involved in the communication and consultation of:

- *policies and management systems development;*
- *hazards and risk control processes including identification, assessment and control;*
- *changes to the workplace;*

- *outcomes of incident reviews; and*
- *other issues that may impact the environment.*

Martinus' team will meet regularly to discuss any issues with environmental management on site, any amendments to plans that might be required or any new / changes to Construction activities. Regular meetings may also be scheduled with the ER, Sydney Metro environmental personnel. The purpose of these meetings are to communicate ongoing environmental performance and to identify any issues to be addressed.

Further internal communications regarding environmental issues and aspects will be through awareness training as described in Section 3.6.

3.8.2 Liaison With Government Authorities or Other Relevant Stakeholders

Martinus' Environmental Manager will be the authorised contact person for communications with the relevant stakeholders i.e. Sydney Metro, the ER, DPHI and the EPA (if required) on environmental matters. Liaison will include reporting on the ongoing environmental performance, any key environmental matters on the Project to these stakeholders. Relevant government agencies will be consulted throughout Construction as required.

Where changes are made to the CEMP or Sub-plans following consultation, updates will be recorded in the relevant version control section(s).

Incident notification will be undertaken in accordance with the requirements of CoA A36 and A37 (refer to Section 3.10.3).

Liaison with government authorities and relevant stakeholder will be undertaken as per Section 8 of the OCCS.

3.8.3 Community Liaison and/or Notification

Direct communication with the media and general public is not permitted. Any requests from the media or general public are referred to the Project Manager who acts in accordance with the project's Stakeholder & Communication Management Plan.

All direct communication with statutory authorities is approved by the Project Manager or the Safety Manager.

Sydney Metro also has specific requirements relating to external communications.

Sydney Metro has prepared an Overarching Community Communication Strategy (OCCS) in accordance with CoA B2 to provide an approach to stakeholder and community communications. This plan identified opportunities and key communication tools needed to provide information and consult with the community and stakeholders during Construction of the Project. Section 8 of the OCCS outlines how community liaison and/or notification will be undertaken.

The OCCS also includes the process for notifying external stakeholders of new, changed, or upcoming Construction works, including works outside of normal working hours. The OCCS has been submitted to DPHI for approval prior to the commencement of works in accordance with CoA B3.

In accordance with Section 1 of the OCCS, the contract-specific communication team is responsible for developing a contract-specific Community Communication Strategy (CCS) for the Project.

3.8.4 Complaints Management

Sydney Metro's OCCS details the Complaints Management System, which includes a Complaints Register, which has been developed for the Project, in accordance with the requirements of AS 4269: Complaints Handling and CoA B5, B6, B7, B8 and B9. The Project Manager is responsible for the conduct and coordination of communications with all key external stakeholders.

As required by CoA B8(a)(b)(c) the Complaints Register must record the:

- a) Number of complaints received;
- b) Number of people affected in relation to a complaint; and
- c) Means by which the complaint was addressed and whether resolution was reached, with or without mediation.

The Complaints Register will be provided to the ER on a daily basis, in accordance with CoA A27(a). Please refer to the OCCS for more information about complaints management.

In accordance with CoA B6, the following information will be available to facilitate community enquiries and manage complaints one (1) month before the commencement of Work and for 12 months following completion of Construction:

- (a) a 24- hour telephone number for the registration of complaints and enquiries about the CSSI;
- (b) a postal address to which written complaints and enquires may be sent;
- (c) an email address to which electronic complaints and enquiries may be transmitted; and
- (d) a mediation system for complaints unable to be resolved.

Sydney Metro's OCCS also outlines how the Project will interface with the Community Complaints Mediator, as required, in accordance with CoA B10 to B13.

3.9 Emergency And Incident Response

3.9.1 General Emergency and Incident Response

Martinus' **Emergency Response Procedure (ERP) (MR-ERP-012)** will be followed in the event that an Emergency occurs. This procedure describes the organisational structure and process for managing emergencies related to health, safety, rail, and environmental emergencies and covers all foreseeable, abnormal and sudden occurrences, especially those events which could be dangerous to life, pose possible damage to property and/or the environment and where prompt action is required to control, correct or return the site to a safe condition.

The aim of the ERP is to apply the principles of prevention, preparedness, response and recovery to:

- *Ensure risks to Martinus' operational facilities and its workers from the effects of an emergency are identified, assessed and effectively mitigated; and*
- *Detail the immediate actions to be taken to support any response in the event of a major incident or emergency.*

The ERP will incorporate the following components:

- *Emergency contact list (for the above);*
- *Emergency Reporting Instructions;*
- *Emergency Muster Point Location;*
- *Emergency Response Coordinator Action Plan; and*
- *Emergency Personnel and Response Equipment.*

The ERP will be displayed in the Martinus project site office and employees will be trained in its requirements. All relevant Project personnel, subcontractors and relevant emergency agencies will be instructed in the requirements of this Plan.

The EPA must be notified immediately of all pollution incidents that cause or threaten material harm to the environment. Martinus will enact the MR-ERP-012 if an incident causes or has the potential to cause material harm.

As per the Planning Approval's definition, material harm *"is harm that:*

- involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or*
- results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)."*

If an incident presents an immediate threat to human health or property, 000 is to be called in accordance with the procedures outlined in the Construction Health and Safety Management Plan.

The EPA Environment Line is to be contacted on 131555.

The notification will need to include information on:

- The time, date, nature, duration and location of the incident;*
- The location of the place where pollution is occurring or is likely to occur;*
- The nature, the estimated quantity or volume and the concentration of any pollutants involved;*
- The circumstances in which the incident occurred (including the cause of the incident, if known);*
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution; and*
- Other information prescribed by the regulations.*

In addition to notifying the EPA of pollution incidents other authorities as outlined below must also be notified immediately, where relevant:

- Sydney Metro;*
- The ER;*
- DPHI;*
- The NSW Ministry of Health (via the local Public Health Unit – 02 9391 9000);*
- The SafeWork NSW (13 10 50);*
- Inner West, Bankstown-Canterbury Councils as relevant;*
- Fire and Rescue NSW on 000.*

Regardless of the actual or potential impact, these authorities must be notified under the amended legislation for all notifiable pollution incidents. Further information in relation to the incident must be provided immediately if it becomes available after the initial notification. Records of contact with and details of the information provided to external authorities must be maintained in the project records.

Incident notification will be undertaken in accordance with the requirements of CoA A36 and A37 and the Sydney Metro Incident and Non-compliance Reporting Procedure (refer to Section 3.10.3 and Appendix F).

3.10 Monitoring, Evaluation & Reporting

3.10.1 Environmental Inspections

Ongoing inspection of environmental mitigation measures will be undertaken by the Martinus' Site Foreman. Weekly site environmental inspections will be undertaken by Martinus' Environmental Manager to assess the ongoing effectiveness and suitability of the Project's environmental controls. The site environmental inspections will cover the following:

- *High risk activities and processes;*
- *Work in environmentally sensitive areas; and*
- *Site preparedness for adverse weather conditions, including adequacy of environmental controls and availability of emergency equipment.*

Copies of all environmental inspection reports prepared by Project environmental staff will be kept with the Project records and closed out within the agreed timeframes. These timeframes will be dependent on the nature of the required corrective action and the environmental risk associated with the outstanding action as determined by Martinus' Environmental Coordinator or Environmental Manager. The findings of the Inspection are to be recorded on the Site Environment and Sustainability Inspection Form (MMS # MR-EF-001).

In general, the corrective action will concentrate on the environmental management system and its associated processes rather than on the perceived deficiencies of individual workers. If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded in an environmental action list. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority. The environmental action list will then be issued to the relevant Martinus Site Foreman for actioning. Actions will be assigned an implementation priority by Martinus' Environmental Coordinator based on environmental risk. Actions are closed out by Martinus' Site Foreman and evidence of close out (usually a photograph) is to be supplied back to the Environmental Coordinator.

When an observation is raised of a significant nature, and where deemed necessary by Martinus' Environmental Manager, an Environmental Improvement Notice (EIN) may be issued to either the Engineering Supervisor or the subcontractor supervisor in charge of the work activity and/or an individual. The engineer or individual receiving the improvement notice will be required to respond to the agreed corrective action as outlined on the notice. The timeframe to respond will be determined by Martinus' Environmental Manager and documented in the EIN. Examples of observations deemed to be of a significant nature will include, but are not limited to, those that require immediate action due to potential environmental risk or recurring issues.

The completed EIN must be reviewed and followed-up to ensure they are promptly completed. Repetitive observations that have significant hazards should be reviewed to check that a system failure is not occurring. Martinus' Environmental Coordinator will confirm close out of the EIN and report this to the Environmental Manager.

Regular site inspections will be completed by the Environmental Representative (ER) and Sydney Metro representatives. These will be conducted at a frequency to be agreed by all parties. However, at minimum they will have a monthly frequency.

3.10.2 Environmental Monitoring

Environmental monitoring will be undertaken to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this CEMP, and to address approval requirements. The monitoring requirements for required aspects are included in the relevant environmental management sub-plans and summarised in Table 7.

Monitoring will be conducted on a routine basis in line with project approvals. Additional monitoring will occur as required in response to a complaint or incident.

Table 7: Summary of Construction phase environmental monitoring required by the Project approval

CoA / EMM	Description	Relevant Sub-plan or CEMP Chapter	Reporting Requirements
C8(a)	Noise and Vibration Monitoring Program	NVMP – Section 9	In accordance with C9(g), Martinus will submit noise and vibration monitoring reports to Sydney Metro and the Environment Representative for their review. After review, reports will be submitted to Inner West Council, City of Canterbury-Bankstown Council and the Planning Secretary for information at a frequency as specified in the monitoring program.
C8(b)	Water Quality Monitoring Program	Not required as there is no Soil and Water Management Sub-plan required.	N/A

3.10.3 Auditing

Sydney Metro's *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report* (Sydney Metro 2022) has been prepared to satisfy the obligations of CoA A33-A35. In accordance with the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report*, two levels of environmental auditing will be undertaken on the Project:

- *Internal auditing coordinated by Martinus; and*
- *Via the independent Environmental Audit Program (EAP).*

In addition to these, the Project may be audited by the Secretary upon the Secretary's request. In this event, the ER will facilitate the audit on behalf of the Secretary in accordance with CoA A26(f).

Audits will include works undertaken by subcontractors. Internal and external environmental audits will be undertaken and prepared in accordance with the terms of the project approval and AS/NZS ISO 19001:2014.

The ER will ensure that environmental auditing is undertaken in accordance with this CEMP and the Project's environmental management system, in accordance with CoA A26.

Internal audits undertaken in accordance with Section 4.4.3.1 of the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report* will be carried out on a six-monthly basis. Independent Environmental Auditing will be conducted at a frequency set out in the EAP.

3.10.4 Construction Phase Compliance Tracking

In accordance with CoA A29 to A32, Sydney Metro has developed the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report*. Compliance reporting on the Project will be undertaken by Martinus in accordance with the requirements of this document throughout the Construction phase of the Project.

In accordance with the *City and Southwest Compliance Monitoring/Tracking and Reporting Program Report*, Martinus will undertake quarterly reviews of the compliance requirements contractually allocated to them by Sydney Metro. These reviews are a collaborative exercise undertaken between Martinus, Sydney Metro and the ER.

The Compliance Tracking Review process is as follows:

- *Upon the award of each major contract, Sydney Metro will issue a Compliance Tracking Register (CTR) template containing a list of all the compliance requirements contractually allocated to the Principal Contractor. Martinus is required to complete this template and return to Sydney Metro no later than two weeks prior to the anticipated commencement of Construction activities.*

Martinus is to complete the template by demonstrating how compliance against each requirement has been addressed from the date of contract award to the date the CTR is due to be returned to Sydney Metro (including references to evidential documentation). This completed CTR will be used by Sydney Metro to prepare any documentation required to prepare/update the applicable Pre-Construction Compliance Report.

- *Following the commencement of Construction, Martinus is to complete a new CTR to cover all activities from the commencement of Construction until the end of the existing or subsequent calendar quarter (as determined by Sydney Metro). Martinus must issue the completed CTR to the ER within five working days following the end of the reporting period. The ER will review the CTR and where necessary, provide comments and/or requests for evidence to Martinus. The ER will provide the Planning Approvals Compliance Report only after all comments have been addressed, and all evidence requested during the CTR has been provided by Martinus. In accordance with CoA A31, the Compliance Report will provide details of any review of, and minor amendments made to, the CEMP, resulting from Construction carried out during the reporting period.*
- *Within five working days of receiving the final completed CTR (and any evidence requested) from Martinus, the ER is to issue a draft Planning Approvals Compliance Report (with the associated completed CTR) to Sydney Metro for comment. After reviewing any comments, the ER is to issue a final Compliance Summary Report to Sydney Metro.*
- *Following receipt of the final Compliance Summary Report from the ER, Sydney Metro will issue the next quarterly period CTR template to Martinus for completion. This process repeats every quarter until all compliance requirements have been 'completed' (refer to Section 4.3 of the City and Southwest Compliance Monitoring/Tracking and Reporting Program Report).*

In the event of a non-compliance against a requirement at any time during this process, a summary of the non-compliance needs to be entered into the relevant CTR template. This is in addition to the requirements of the Sydney Metro Environmental Incident and Non-Compliance Reporting Procedure SM-17-00000096 (refer to Appendix F).

3.11 Environmental Incidents Non-Conformances and Non-Compliances

All environmental incidents, non-conformances and non-compliances must be reported to the ER and Sydney Metro in accordance with Sydney Metro Environmental Incident and Non-compliance Reporting Procedure SM-17-00000096 (refer to Appendix F).

3.11.1 Environmental Incidents

The Environmental Incident and Non-compliance Reporting Procedure is summarised below. Sydney Metro has defined an Environmental Incident as:

- *An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.*

- *Adverse environmental impact includes contamination, harm to flora and fauna (either individual species or communities), damage to heritage items, or adverse community impacts.*

The Instrument of Approval defines an incident as:

- *An occurrence or set of circumstances that causes or threatens to cause material harm¹ and which may or may not be or cause a non-compliance.*

Environmental incidents are classified into three classes that are based upon the consequence descriptors for environmental risks in the Sydney Metro Risk Matrix (refer to Sydney Metro Risk Management Standard). These classifications trigger a variety of management actions and/or legislative requirements depending on the severity of the consequence described where Class 3 represents minor consequences and Class 1 represents major consequences.

This matrix is further sub-divided into consequence ratings ranging from C6 (low impact) to C1 (high impact). An incident transitions between a Class 3 to a Class 2 incident once material harm has been caused, and transitions into a Class 1 incident once it is determined that the Environmental Harm caused is large-scale and cannot be remediated (see Table 8).

Table 8: Classification System for Environmental Incidents

Class 3			Class 2	Class 1	
C6	C5	C4	C3	C2	C1
No appreciable changes to environment and/or highly localised event	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries	Short-term and/or well-contained environmental effects. Minor remedial actions probably required	Impacts external ecosystem and considerable remediation is required	Long-term environmental impairment in neighbouring or valued ecosystems Extensive remediation required	Irreversible large-scale environmental impact with loss of valued ecosystems

All incidents and complaints (including potential incidents) must be reported so that they can be investigated and prevented from recurring. Incidents, non-conformances, and non-compliances are to be recorded using the Environmental Incident and Non-compliance Report Form (SM ES-FT-403), by Martinus. Internal notification of the incident will occur between project and Martinus leadership in accordance with the Incident Notification Process in the **Incident Reporting and Investigation Procedure** (MMS # **MR-WP-002**).

The Project Manager is responsible for notifying Sydney Metro and parent companies of Reportable Incidents and the Environmental Manager is responsible for notifying relevant Regulators in consultation with Sydney Metro. The person responsible for completing the Environmental Incident and Non-compliance Report Form will make appropriate enquiries to determine the likely causal factors involved and assign effective corrective actions. Corrective actions are to be raised, addressed and closed-out in accordance with Martinus' own internal relevant management system procedure.

When an environmental incident occurs which causes environmental harm, in all cases both verbal and written communication of the incident must be carried out immediately and within 48 hours respectively. For Class 1 and 2 Incidents the notification process shown in Figure 5 must be followed. Incident

¹ Material harm is harm that: (a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or (b) results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

Notification Reports satisfy the requirement for written communication to Sydney Metro and are to be completed using the Environmental Incident and Non-compliance Notification Report (SM ES-FT-403) or a similar and consistent form approved by Sydney Metro.

All incidents will be subject to incident investigation, convened by the Project Manager to establish a sequence of events, determine the causal factors and root cause of the incident and to ensure that remedial / corrective actions are able to be implemented and closed out to ensure a repeat of the incident is avoided.

The outcomes of the incident investigation will be communicated to the Martinus leadership and key lessons learned communicated to the project team. An Incident Investigation Report will be submitted to the Sydney Metro and retained for Martinus records.

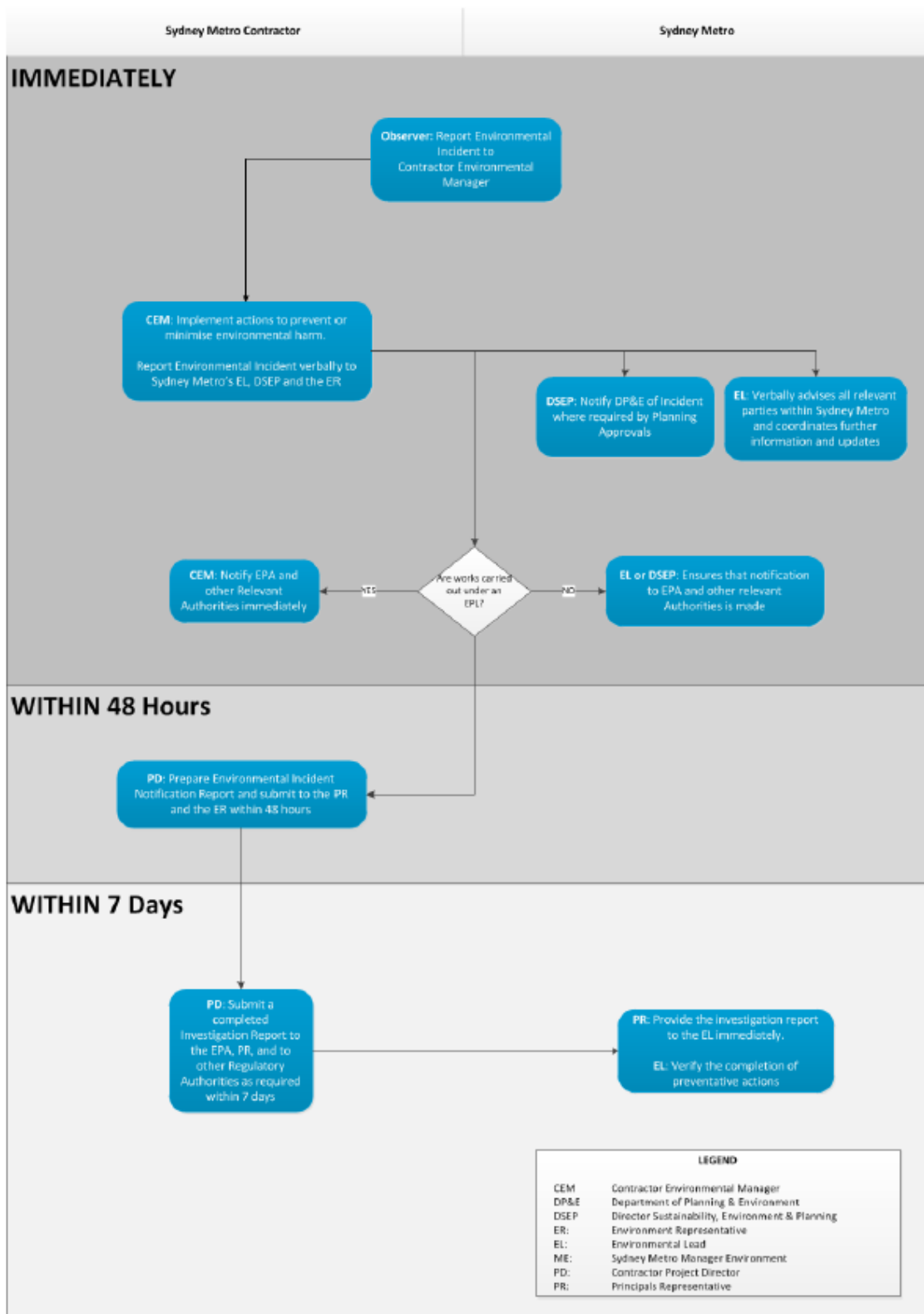


Figure 5: Environmental incident notification process for Class 1 and 2 Incidents

3.11.2 Review Of Compliance

An environmental non-compliance is a breach of an environmental requirement originating from Planning Approvals, EPLs, lease agreements, and other requirements documented in environmental management plans. Whether an event is classified as a Non-compliance, Non-conformance or an Incident the process behind managing the event remains the same, with the following exceptions:

- *Non-compliances are not notifiable to Regulatory Authorities under the POEO Act;*
- *Non-compliances are reported to have occurred on the day the breach was raised as opposed to the date when the requirement was breached;*
- *Non-compliances are not divided into severity classes;*
- *Non-compliances do not have the potential to trigger crisis or emergency management processes; and*
- *There is an informal notification process in the immediate timeframe following a Non-compliance being raised.*

When an Environmental Event (as defined by the Sydney Metro Environmental Incident and Non-compliance Reporting Procedure) occurs that causes Environmental Harm and also breaches one or more Environmental Requirements, then an Incident Notification Report will be created which records what requirements were breached.

If a Non-compliance is identified then it must be raised using the Environmental Incident and Non-compliance Report Form within 48 hours by the party responsible for the breach.

3.11.3 Department of Planning, Housing and Infrastructure Incident Notification

The Conditions of Approval define an incident as:

- *An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not cause a non-compliance with this approval.*

Environmental incident and notification requirements are outlined in CoA's A36 and A37 and Appendix A of the Instrument of approval. These requirements are outlined in Table 9. Any incidents will be notified to the Planning Secretary in accordance with these requirements.

Table 9: Incident notification to DPHI

CoA/Requirement	Details
CoA A36	The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident.
CoA A37	Subsequent notification must be given, and reports submitted in accordance with the requirements set out in Appendix A (of SSI-8256) .
Appendix A - 1	A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven (7) days after the Proponent becomes aware of an incident. Notification is required to be given under this condition even if the Proponent fails to give the notification required under Condition A37 or, having given such notification, subsequently forms the view that an incident has not occurred.
Appendix A - 2	Written notification of an incident must:

CoA/Requirement	Details
	(a) identify the CSSI and application number; (b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); (c) identify how the incident was detected; (d) identify when the Proponent became aware of the incident; (e) identify any actual or potential non-compliance with conditions of approval; (f) describe what immediate steps were taken in relation to the incident; (g) identify further action that will be taken in relation to the incident; and (h) identify a project contact for further communication regarding the incident.
Appendix A - 3	Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Proponent must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.
Appendix A - 4	The Incident Report must include: (a) a summary of the incident; (b) outcomes of an incident investigation, including identification of the cause of the incident; (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and (d) details of any communication with other stakeholders regarding the incident.

3.12 Work In Environmentally Sensitive Areas

Work within environmentally sensitive areas will follow EWMS and ECMs developed for each work site and high-risk activity across the southwest corridor. In summary from the information provided in Section 3.2.3 of this CEMP, Martinus will ensure that environmentally sensitive areas are protected through adherence to the following:

- Site specific ECMs
- High-risk activity EWMS
- Pre-start works brief for inducted personnel to ensure understanding of the requirements and procedures detailed within the respective and applicable ECM and EWMS associated with the type of activity being undertaken.

3.13 Ancillary Site Facilities

Ancillary site facilities used as part of the Project are discussed in Section 1.1.

3.13.1 Ancillary Facilities Approval Pathways

Ancillary facilities proposed to be used as part of the Project are discussed in Section 1.1. However, any ancillary facilities outlined in the Approval Documents may be used by the Project.

As per CoA A16 ancillary facilities not identified in the Approval Documents can be established and used if:

- a) they are located within the Construction boundary of the CSSI; and
- b) they are not located next to a sensitive receiver (including access roads) (unless landowners and occupiers have accepted in writing the carrying out of the relevant facility in the proposed location); and

- c) they have no impacts on heritage items (including areas of archaeological sensitivity), and threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and
- d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.

If proposed ancillary facilities are not identified in the Approval Documents and cannot satisfy the conditions of CoA A16 they can only be established and operated when a review of environmental impacts has been prepared as per CoA A17. When the proposed ancillary facility is located within the rail corridor the review of environmental impacts may be endorsed by the ER. When the proposed ancillary facility is located outside the rail corridor the review of environmental impacts would require approval of the Planning Secretary.

Minor ancillary facilities are defined in CoA A19 as:

- *Lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed Condition A1*

As per CoA A19, minor ancillary facilities can be established where they satisfy the following criteria:

- a) are located within the Construction boundary; and
- b) have been assessed by the ER to have –
 - i. minor amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (ICNG) (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and
 - ii. minor environmental impact with respect to waste management and flooding, and
 - iii. no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.

3.13.2 Boundary Screening Approach

Boundary screening will be erected around ancillary facilities that are adjacent to sensitive receivers as required under CoA A20 and A21. This will be for the duration of Construction unless otherwise agreed with relevant councils, and affected residents, business operators or landowners. All boundary screening will minimise visual, noise and air quality impacts as required by CoA A21. Boundary screening at sites will be consistent with the requirements identified in the Construction Noise and Vibration Impact Statement's (CNVIS) (refer to NVMP). All fencing and hoarding will be in accordance with the requirements of the OCCS.

3.14 Key Construction Activities Review

The activities outlined in Table 10 are not to proceed without objective review and approval by the nominated authority. These activities are considered hold points. The hold points should be incorporated into the working plans for the project (EWMS, work instructions, Construction methodologies, etc.).

Table 10: Activities requiring review

Item	Process Held	Acceptance Criteria	Approval Authority
Construction Environmental Management Plan and Sub-plans	Site activities	Site specific Construction Environmental Management Plan and Sub-plans have been developed, reviewed and approved.	Department of Planning, Housing and Infrastructure

Item	Process Held	Acceptance Criteria	Approval Authority
Monitoring Program Amendments (CoA C13)	Amendments to Monitoring Program(s) (during Construction, as per CoA C13)	Amendments have been reviewed and approved for implementation.	ER Endorsement and Approval
CNVIS	Site activities (Prior to Construction commencement)	CNVIS to be prepared by Specialist Consultant.	ER Endorsement
Specific Environmental Control Maps (ECMs)	Site activities	ECMs are developed with site specific environmental controls/mitigation measures with site supervisor/engineers for work activities and are to be implemented prior to works commencing (or a new work stage as appropriate).	Environmental Manager or Coordinator
Works that require a Project Approval Consistency Assessment	Specific site activities related to Consistency Assessment.	Consistency Assessment approval.	Sydney Metro (Approval)
Sediment and erosion control measures	Construction activities involving ground disturbance.	Sediment and Erosion Control Plan has been developed, reviewed, approved and implemented.	Environment Manager (or delegate)
Vegetation removal	Commencement of site clearing or vegetation removal.	Pre-clearing surveys and inspections for endangered and threatened flora and fauna species have been undertaken by qualified ecologists.	Environment Manager (or delegate)
Vegetation removal	Commencement of site clearing or vegetation removal.	Clearing limits have been verified against the project approval environmental assessment, limits have been set-out and vegetation to be retained has been delineated and or protected. Tree Report has been completed and submitted to the DPHI.	Environment Manager (or delegate)
Vegetation removal	Commencement of site clearing or vegetation removal.	Trained ecologist to be present during the clearing of native vegetation or removal of potential fauna habitat.	Environment Manager (or delegate)
Construction Methodologies – direct delivery and subcontract works.	Construction process representing potential medium or high impact to the environment.	Construction methodology / EWMS / Job Safety and Environmental Analysis (JSEA) have been reviewed by the Site Environmental Management Representative and addresses the relevant requirements of the CEMP procedures.	Project Engineer
OOHW Applications – individual works scenarios	Works to be performed outside of approved Construction hours (Pre-Construction and during Construction)	OOHW Protocol and Application Form and Community Notification	ER Endorsement and Approval Sydney Metro

Item	Process Held	Acceptance Criteria	Approval Authority
Use of local roads by heavy vehicles	Use of local roads by heavy vehicles	Preparation of Road Dilapidation Report in accordance with CoA E49. If damage to local roads occurs as a result of construction, rectification or compensation must occur in accordance with CoA E50.	Construction Manager (or delegate)
Dangerous Goods	Transport of dangerous goods	Verification that transport vehicles meet the requirements of CoA E41.	Construction Manager (or delegate)
Dangerous Goods	Storage of dangerous goods	Verification that bunded storage is provided and that segregation and separation distances are maintained for the storage area.	Construction Manager (or delegate)
Controlled/ Hazardous Waste	Transport of Controlled / Hazardous waste from the site	Verification that the waste has been classified in accordance with the EPA guidelines, transport licensing in place and landfill can lawfully receive the waste. Section 143 notice or equivalent from waste receiver has been received.	Construction Manager (or delegate)
Spoil Transport	Spoil import and removal	Verification that the spoil has been classified and the disposal location can lawfully receive the waste. Section 143 notice or equivalent from waste receiver has been received. Imported material has classification reports or appropriate testing to demonstrate that it meets any EPA exemptions or has been classified as VENM/ENM or subject to a RRO.	Construction Manager (or delegate) Environmental Manager (or delegate)
Encounter of Unexpected Heritage Item	Commencement of works in the affected area	The Unexpected Finds Process as outlined in the HMP and Sydney Metro Unexpected Finds Procedure must be applied in the event of encountering unexpected/potential heritage items.	Environmental Manager (or delegate)
Ancillary Facilities	Establishment of new ancillary facilities not identified in the planning approval documents	Demonstration that the ancillary facility meets the requirements of CoA A16. Where facilities don't meet the requirements of CoA A16, complying with the requirements of CoA A17. Endorsement by the ER for minor ancillary facilities in accordance with CoA A18.	DPHI (outside rail corridor) ER
Pre-Construction compliance report	Construction works	Pre-Construction compliance report to be completed in accordance with CoA's A30 and A31, and submitted to the DPHI at least one month prior	DPHI

Item	Process Held	Acceptance Criteria	Approval Authority
		to the commencement of Construction.	
Construction Monitoring Programs	Construction Works	Endorsement of the programs by the ER and submission to the DPHI for approval at least one month prior to the commencement Construction Relevant baseline data for the specific Construction activity has been collected.	ER DPHI

3.15 Restoration of Sites

On completion of the works, any areas disturbed by Construction activities (such as areas for site compounds, material storage, access and haul roads and the provision of the Principal's Project accommodation) will be reinstated and restored in accordance with consultation with Sydney Metro, the community, and stakeholders. As a minimum, reinstatement will include the following:

- *Martinus will clear and clean all working areas and accesses at project completion;*
- *At the completion of Construction all plant, temporary buildings or vehicles not required for the subsequent stage of Construction will be removed from the site;*
- *All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better;*
- *Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of Construction.*
- *If damage to local roads occurs as a result of construction, in accordance with CoA E50 Martinus must either:*
 - *(a) compensate the relevant road authority for the damage so caused. The amount of compensation may be agreed with the relevant road authority; or*
 - *(b) rectify the damage to restore the road to at least the condition it was in pre-Construction as identified in the Road Dilapidation Report(s).*

3.16 Records of Environmental Activities

3.16.1 Environmental Records

Martinus' Environmental Manager is responsible for maintaining all environmental management documents and records as current at the point of use. In accordance with the CEMF, records will be maintained onsite for the duration of works.

Types of documents and records include:

- *All environmental monitoring, inspection and compliance reports/records;*
- *Environmental monitoring data;*
- *Documentation as required by performance conditions, approvals, licences and legislation;*
- *Reports on environmental incidents, other environmental non-compliances or non-conformances and follow-up action;*
- *Results of internal and external audits;*
- *Minutes of CEMP and Construction environmental management system review meetings and evidence of any action taken;*

- *Modifications to site environmental documentation;*
- *Induction and training records;*
- *Procedures and protocols;*
- *Checklists, forms and templates;*
- *Correspondence with public authorities;*
- *Complaints and enquiries received, and follow-up action;*
- *Notifications received by regulators;*
- *Community engagement information;*
- *CEMP and Sub-plans;*
- *EWMS; and*
- *Additional documents and requirements as identified in the CEMF, CoA and REMMs.*

Records will be retained by Martinus for a period of no less than seven years and will be made available in a timely manner to Sydney Metro (or their representative) upon request.

3.16.2 Document Control

Martinus, the ER, and Sydney Metro where relevant, will coordinate the preparation, review and distribution, as appropriate, of the environmental documents and records listed above. During the Project, the environmental documents and records will be stored at each of the main site compounds.

There is no restriction on the distribution of this Plan within Martinus entities. The controlled copy of the current version of this Plan will be maintained on the project document control system database and SharePoint.

Martinus will implement a Project document control management system to control the flow of documents within and between Martinus, Sydney Metro, stakeholders and subcontractors.

The process will also ensure that documentation is:

- *Developed, reviewed and approved prior to issue;*
- *Issued for use;*
- *Controlled and stored for the legally required timeframe;*
- *Removed from use when superseded or obsolete; and*
- *Archived.*

A register and distribution list will identify the current revision of particular documents, records or data.

3.17 Management Review

Martinus will check the status and adequacy of the CEMP to ensure that it meets current requirements as well as relevant environmental standards.

The CEMP will be reviewed as and when required during the course of the contract when the following situations arise:

- *Sydney Metro and ER recommendations for changes;*
- *Changes to Martinus' standard system;*
- *Opportunities for improvement or deficiencies in the project system are identified; and*

- *Following an audit of the system or the occurrence of significant incidents, non-conformances or non-compliances.*

The routine management review will be undertaken at six monthly intervals.

In addition, Martinus will ensure the continual review and improvement of the E&SMS. This will generally occur in response to:

- *Issues raised during environmental surveillance and monitoring;*
- *Expanded scope of works;*
- *Environmental incidents; and/or*
- *Environmental non-conformances or non-compliances.*

A formal review of the E&SMS by Martinus Senior Management Team will also occur on an annual basis, as a minimum. This review will generate actions for the continual improvement of the E&SMS and supporting management plans.

3.18 CEMP/Sub-plan Revision and Changes to the Project

3.18.1 CEMP Revision

This CEMP has been developed using the best available methods, procedures, expertise, and experience available to Martinus and as such it represents best practice environmental management standards. However, consistent with the philosophy of continuous improvement, there will be opportunities during the Project to implement new or improved procedures.

Continual improvement is achieved through regular measurement, evaluation, audit, and review of the effectiveness of the CEMP, Project environmental outcomes and Martinus' EMS. A review process ensures that environmental documentation is updated as appropriate for the specific works that are occurring on site. Reviews undertaken as described in Section 3.16 will provide specific opportunities to identify improvements in the environmental management system and/or this CEMP.

This CEMP, CEMP Sub-plans and Monitoring Programs will be updated as required:

- *To take into account changes to the environment or generally accepted environmental management practices, new risks to the environment, any hazardous substances, contamination or changes in law;*
- *In response to internal or external audits or six-monthly management plan reviews;*
- *Following reportable environmental incidents;*
- *Upon identification of new risks, including risks identified during risk register updates;*
- *When non-conformances or non-compliances are identified;*
- *Following environmental audits that identify matters that require attention;*
- *In response to Project change (including modifications);*
- *As part of a continuous improvement process; and*
- *Where requested or required by DPHI or any other Authority.*

Should the document review process identify any issues or items within the documents that are either redundant or in need of updating, it is the responsibility of Martinus' Environmental Manager or Environmental Coordinators to prepare the revised documents.

This CEMP, and subsequent revisions, must be authorised by Martinus' Environmental Manager. The ER can approve minor changes to the CEMP, where the ER is satisfied that the amendment to the CEMP is necessary. Minor changes as described in the CoA A26(i) would typically include those that:

- *Are administrative in nature (e.g. staff and agency/authority name changes);*
- *Do not noticeably increase the magnitude of impacts on the environment when considered individually or cumulatively;*
- *Are in response to audit findings or periodic reviews; and*
- *Do not compromise the ability of the Project to meet legislative requirements and are consistent with terms of the approval and does not include any modifications to the terms of Project approval.*

Where the ER deems it necessary, the amended CEMP will be forwarded to relevant stakeholders for review and comment if required and forwarded to the Planning Secretary for approval. All updates to the CEMP are to be communicated to Sydney Metro prior to finalisation and/or update of document.

Revised versions of the CEMP or Sub-plans will be made available and distributed to relevant stakeholders through the processes described in Section 3.15.2. Changes will also be communicated through toolbox talks to existing onsite personnel and incorporated into environmental induction materials.

Where any changes and improvement to working practices are identified through the investigation of environmental incidents, these will be assessed and incorporated into the CEMP as part of the Incident Reporting and Investigation process.

3.18.2 Changes to the Project

Refinements to the Project may result from detailed design refinements or changed circumstances throughout Construction. In these instances, Martinus' Environmental Manager will undertake a review of the refinement to confirm that it is covered by the Approval Documents. It may be the case that a Consistency Assessment in consultation with Sydney Metro will need to be undertaken to determine if a Project modification may be required following design changes or changes in scope (refer to Section 2.4).

Should the Consistency Assessment determine that a Project modification may be required (i.e. the impacts are of a nature and scale that it is not considered consistent with the Project approval), a modification application under Section 5.25(2) of the EP&A Act 1979 as prepared and lodged by Sydney Metro to the Planning Secretary for determination.

If required, the CEMP and Sub-plans will be updated as required to incorporate any additional potential environmental impacts or mitigation or management measures that resulted from the proposed changes. Affected personnel will be made aware of changes before the relevant works commence through toolbox talks, daily pre-start meeting, HSE committees or forums arranged to specifically address changes.

4 ENVIRONMENTAL MANAGEMENT DOCUMENTATION

This section provides details on how each significant environmental aspect or issue associated with the construction phase of the Project will be managed and mitigated. All Project environmental aspects and issues will be managed in accordance with all legal, contract, approval, and other Project requirements.

CEMP Sub-plans, Monitoring Programs and Procedures support the Project's CEMP and environmental management. These documents have been prepared to address the requirements of the CoA, REMM, CEMF and other measures identified in Section 1.2 and environment assessment documentation. The CEMP structure overview is shown in Figure 6 and key environmental management documents are discussed below.

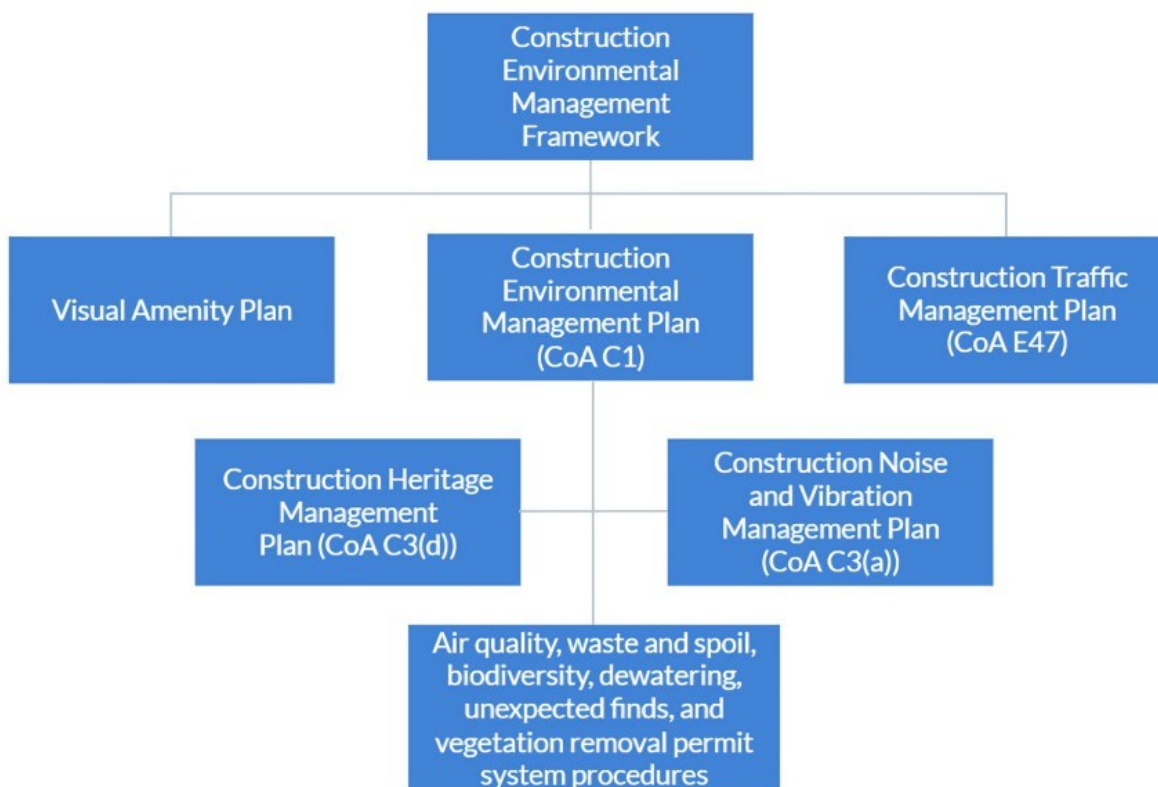


Figure 6: CEMP structure overview

4.1 Noise and Vibration

A Noise and Vibration Management Plan (NVMP) has been developed to manage the noise and vibration risks during Construction of the Project. The NVMP is located in Appendix G of the CEMP and has been developed in accordance with CoA C3, C4, C5, C6 and C7.

For further Sub-plan specific CoA, REMM and other relevant requirements used to prepare the NVMP refer to Section 2 of the NVMP.

Furthermore, in accordance with the CoA C8(a) a Noise and Vibration Monitoring Program has been prepared and is included in Section 8 of the NVMP

4.2 Heritage

A Heritage Management Plan (HMP) has been developed to manage the risks from Construction of the Project. The HMP is located in Appendix I of the CEMP and has been developed in accordance with CoA C3, C4, C5, C6 and C7.

For further Sub-plan specific CoA, REMM and other relevant requirements used to prepare the HMP refer to Section 2.2 and Appendix A of the HMP.

4.3 Waste and spoil

In accordance with the Sydney Metro City & Southwest - Sydenham to Bankstown Staging Report, a Waste and Spoil Procedure has been prepared. Refer to Section 4.6 and Appendix E for further detail.

4.4 Visual Amenity

A Visual Amenity Management Plan (VAMP) will be prepared by Martinus to manage the visual amenity risks during Construction of the Project. The VAMP is a standalone document and has been developed in accordance with Section 3.4 of the CEMP.

4.5 Traffic

Construction Traffic Management Plan/s (TRAFFIC MANAGEMENT PLAN/s) will be prepared as per CoA E47. These are standalone documents and do not form part of the CEMP. The TRAFFIC MANAGEMENT PLAN/s will be submitted to DPHIDPHI for information following engagement with RMS and SCO.

4.6 Other Aspects

Consistent with the Sydenham to Bankstown Staging Report and Sections 3.4 and 3.5 of the CEMP, procedures have been prepared for the following environmental aspects:

- *Biodiversity;*
- *Groundwater;*
- *Dewatering*
- *Air Quality; and*
- *Waste and Spoil.*

These procedures are included in Appendix E.

4.7 Sustainability

A Sustainability Strategy for the Sydenham to Bankstown project has been prepared in accordance with CoA E43. The Sustainability Strategy is available on the Sydney Metro website <https://www.sydneymetro.info/documents>.

APPENDICES

APPENDIX A – Conditions Of Approval Compliance Matrix

CoA	Condition requirements	Document reference
A1	The CSSI must be carried out in accordance with the terms of this approval and generally in accordance with the description of the CSSI in the: (a) Sydney Metro City & Southwest Sydenham to Bankstown Environmental Impact Statement – Volumes 1A-C and 2–6 (the EIS); (b) as modified by the Sydney Metro City & Southwest Sydenham to Bankstown Submissions and Preferred Infrastructure Report – Volumes 1, 2A-F and 3 G-J (the SPIR); and (c) the Sydney Metro City & Southwest Sydenham to Bankstown Submissions Report (the SR); (d) the Sydney Metro City & Southwest Sydenham to Bankstown, Bankstown Station Modification Report; and (e) the Sydney Metro City & Southwest Sydenham to Bankstown, Bankstown Station Response to Submissions.	Project Management Plans, this Plan and sub-plans
A2	The CSSI must be carried out in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the documents listed in Condition A1 unless otherwise specified in, or required under, this approval.	Project Management Plans, this Plan and sub-plans
A3	In the event of an inconsistency between the documents listed in Condition A1, or any other document required under this approval, and a term of this approval, the term of this approval prevails to the extent of the inconsistency. Note: For the purpose of this condition, there will be an inconsistency between a term of this approval and any document if it is not possible to comply with both the term and the document.	In case of a conflict between the documents specified in Condition A1 or any other document required under this approval and a term of this approval, the term of this approval takes precedence where there's an inconsistency.
A4	The Proponent must comply with all written requirements or directions of the Planning Secretary, in relation to: (a) the environmental performance of the CSSI; (b) any document or correspondence in relation to the CSSI; (c) any notification given to the Planning Secretary under the terms of this approval; (d) any audit of the Construction or Operation of the CSSI; (e) the terms of this approval and compliance with the terms of this approval (including anything required to be done under this approval); and (f) the carrying out of any additional monitoring or mitigation measures.	Project Management Plans, this Plan and sub-plans
A5	Where the terms of this approval require a document or monitoring program to be prepared or a review to be undertaken in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Planning Secretary with the document. The evidence must include: (a) documentation of the engagement with the party(s) identified in the condition of approval that has occurred before submitting the document for approval; (b) log of the points of engagement or attempted engagement with the identified party(s) and a summary of the issues raised by them;	Project Management Plans, this Plan and sub-plans

CoA	Condition requirements	Document reference
	(c) documentation of the follow-up with the identified party(s) where feedback has not been provided to confirm that they have none or have failed to provide feedback after repeated requests; (d) outline of the issues raised by the identified party(s) and how they have been addressed; and (e) a description of the outstanding issues raised by the identified party(s) and the reasons why they have not been addressed.	
A6	In the event that there are differing interpretations of the terms of this approval, including in relation to a condition of this approval, the Planning Secretary's interpretation is final.	Per the terms of this approval, if there are any conflicting interpretations, particularly concerning a condition of this approval, the final interpretation rests with the Planning Secretary.
A8	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.	All references in the terms of this approval to any guideline, protocol, Australian Standard, or policy shall pertain to those guidelines, protocols, Standards, or policies as they exist on the date of this approval.
A9	Any document that must be submitted within a timeframe specified in or under the conditions of this approval may be submitted within a later timeframe agreed with the Planning Secretary. This condition does not apply to the immediate written notification required in respect to an incident under Condition A36.	Documents required within a specified timeframe as per the conditions of this approval can be submitted later with the Planning Secretary's agreement. However, please note that this provision does not extend to the immediate written notification required for incidents under Condition A36.
A12	The CSSI may be constructed and operated in stages. Where staged Construction or Operation is proposed, a Staging Report (for either or both Construction and Operation as the case may be) must be prepared and submitted to the Planning Secretary for information. The Staging Report must be submitted to the Planning Secretary no later than one (1) month before the commencement of Construction of the first of the proposed stages of Construction (or if only staged Operation is proposed, one (1) month before the commencement of Operation of the first of the proposed stages of Operation).	Project Staging Reports
A13	The Staging Report must: (a) if staged Construction is proposed, set out how the Construction of the whole of the CSSI will be staged, including details of Work and other activities to be carried out in each stage and the general timing of when Construction of each stage will commence and finish; (b) if staged Operation is proposed, set out how the Operation of the whole of the CSSI will be staged, including details of Work and other activities to be carried out in each stage and the general timing of when Operation of each stage will commence; (c) specify the relevant conditions of approval that apply to each stage and how compliance with conditions will be achieved	Sydenham to Bankstown Staging Report

CoA	Condition requirements	Document reference
	across and between each of the stages of the CSSI; and (d) set out mechanisms for managing any cumulative impacts arising from the proposed staging.	
A14	The CSSI must be staged in accordance with the Staging Report, as submitted to the Planning Secretary.	Project Staging Reports
A15	Where staging is proposed, the terms of this approval that apply or are relevant to the Work or activities to be carried out in a specific stage must be complied with at the relevant time for that stage.	Project Staging Reports
A16	Ancillary facilities that are not identified by description and location in the documents listed Condition A1 can only be established and used in each case if: a) they are located within the Construction boundary of the CSSI; and b) they are not located next to a sensitive receiver (including access roads) (unless landowners and occupiers have accepted in writing the carrying out of the relevant facility in the proposed location); and c) they have no impacts on heritage items (including areas of archaeological sensitivity), and threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.	Section 3.13.1
A17	Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 and do not meet the requirements of Condition A16, can only be established and used with the approval of the Planning Secretary except where they are located within the rail corridor, in which case they may be endorsed by the ER. A review of environmental impacts must be submitted with the request for Planning Secretary's approval or ER's endorsement.	Section 3.13.1
A18	The use of an ancillary facility for Construction must not commence until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C3 and relevant Construction Monitoring Programs required by Condition C8 have been approved by the Planning Secretary.	Section 1.2
A19	Lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed Condition A1 , can be established where they satisfy the following criteria: a) are located within the Construction boundary; and b) have been assessed by the ER to have - i. minor amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and ii. minor environmental impact with respect to waste management and flooding, and iii. no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.	Section 3.13.1
A20	Boundary screening must be erected around all ancillary facilities that are adjacent to sensitive receivers for the duration of Construction of the CSSI unless otherwise agreed with relevant council(s), and affected residents, business operators or landowners.	Section 3.13.2
A21	Boundary screening required under Condition A20 of this approval must minimise visual, noise and air quality impacts on	Section 3.13.2

CoA	Condition requirements	Document reference
	adjacent sensitive receivers.	
A22	Work must not commence until an ER has been approved by the Planning Secretary and engaged by the Proponent.	Section 3.3
A23	The Planning Secretary's approval of an ER must be sought no later than one (1) month before the commencement of Work.	Section 3.3
A24	The proposed ER must be a suitably qualified and experienced person who was not involved in the preparation of the EIS, SPIR or Submissions Report and is independent from the design and Construction personnel for the CSSI and those involved in the delivery of it.	Section 3.3
A25	The Proponent may engage more than one ER for the CSSI, in which case the functions to be exercised by an ER under the terms of this approval may be carried out by any ER that is approved by the Planning Secretary for the purposes of the CSSI.	Sydney Metro scope
A26	For the duration of the Work until the commencement of Operation, or as agreed with the Planning Secretary, the approved ER must: a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI; b) consider and inform the Planning Secretary on matters specified in the terms of this approval; c) consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community; d) review documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: i. make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or ii. make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Secretary); e) regularly monitor the implementation of the documents listed in Conditions C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval; f) as may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A34 of this approval; g) as may be requested by the Planning Secretary, assist the Department in the resolution of community complaints; h) assess the impacts of minor ancillary facilities as required by Condition A19 of this approval; i) consider any minor amendments to be made to the documents listed in Conditions C1, C3 and C8 and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and j) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The k) Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI.	Section 3.3

CoA	Condition requirements	Document reference
A27	The Proponent must provide the ER with all documentation requested by the ER in order for the ER to perform their functions specified in Condition A26 (including preparation of the ER monthly report), as well as: (a) any complaints received (to be provided on a daily basis); and (b) a copy of any assessment carried out by the Proponent of whether proposed Work is consistent with the approval (which must be provided to the ER before the commencement of the subject Work).	Section 3.3 Section 3.8.4
A28	The Planning Secretary may at any time commission an audit of an ER's exercise of its functions under Condition A26. The Proponent must: (a) facilitate and assist the Planning Secretary in any such audit; and (b) make it a term of their engagement of an ER that the ER facilitate and assist the Planning Secretary in any such audit.	Section 3.3
A29	Before the commencement of Construction, a Compliance Monitoring and Reporting Program must be prepared, endorsed by the ER and submitted to the Planning Secretary for information.	Section 443.10 and 3.11
A30	Compliance reports of the CSSI must be carried out for the duration of Construction and for a minimum of one (1) year following commencement of Operation. The Department must be notified of the commencement dates of Construction and Operation of the CSSI in the pre-Construction and pre-Operational compliance reports (respectively).	Table 10 Section 3.10.4 <i>Note, Martinus will have no operational involvement for this project. Once construction is completed, all assets will be handed over to Sydney Metro for operation.</i>
A31	The Construction Compliance Report must provide details of any review of, and minor amendments made to, the CEMP (which must be approved by the ER), resulting from Construction carried out during the reporting period.	Section 3.10.4
A32	The Compliance Monitoring and Reporting Program in the form required under Condition A29 of this approval must be implemented for the duration of Construction and for a minimum of one (1) year following commencement of Operation, or for a longer period as determined by the Planning Secretary based on the outcomes of independent audits, Environmental Representative Reports and regular compliance reviews submitted through Compliance Reports. If staged Operation is proposed, or Operation is commenced of part of the CSSI, the Compliance Monitoring and Reporting Program must be implemented for the relevant period of each stage or part of the CSSI.	Section 443.10 and 3.11 <i>Note, Martinus will have no operational involvement for this project. Once construction is completed, all assets will be handed over to Sydney Metro for operation.</i>
A34	Independent audits of the CSSI must be carried out in accordance with: a) the Independent Audit Program submitted to the Planning Secretary under Condition A33 of this approval and Independent Audit Reports prepared.	Section 3.10.3
A35	The Proponent must: a) review and respond to each Independent Audit Report prepared under Condition A34 of this approval; and b) submit the response to the Planning Secretary within six (6) weeks of completing the audit.	Section 3.10.3 Error! Reference source not found.
A36	The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident.	Section 3.11

CoA	Condition requirements	Document reference
A37	Subsequent notification must be given, and reports submitted in accordance with the requirements set out in Appendix A	Section 3.11 Error! Reference source not found.
B1	A Community Communication Strategy must be prepared to provide mechanisms to facilitate communication between the Proponent, the relevant council(s) and the community (including adjoining affected landowners and businesses, and others directly impacted by the CSSI), during the design and Construction of the CSSI and for a minimum of 12 months following the completion of Construction of the CSSI.	Section 3.8.4 Community Communication Strategy
B2	The Community Communication Strategy must: (a) identify people and organisations to be consulted during the design and Work stages; (b) identify community demographics and approaches to address the needs of LOTE and CALD and vulnerable communities; (c) set out procedures and mechanisms for the regular distribution of accessible information, including to LOTE and CALD communities, about or relevant to the CSSI. The information to be distributed must include information regarding current site Construction activities, schedules and milestones at each Construction site; (d) provide for the formation of issue or location-based community forums that focus on key environmental management issues of concern to the relevant communities; (e) establish place managers for each construction site to engage with the local community; and (f) set out procedures and mechanisms: (i) through which the community can discuss or provide feedback to the Proponent; (ii) through which the Proponent will respond to enquiries or feedback from the community; and (iii) to resolve any issues and mediate any disputes that may arise in relation to Construction of the CSSI.	Section 3.8.4 Community Communication Strategy
B3	The Community Communication Strategy must be submitted to the Planning Secretary for approval no later than one (1) month before commencement of any Work.	Section 3.8.4 Community Communication Strategy
B4	Work for the purposes of the CSSI must not commence until the Community Communication Strategy has been approved by the Planning Secretary.	Section 3.8.4 Community Communication Strategy
B5	A Complaints Management System must be prepared and implemented before the commencement of Work and maintained for the duration of Construction and for a minimum for 12 months following completion of Construction of the CSSI.	Section 3.8.4 Community Communication Strategy
B6	The following information must be available to facilitate community enquiries and manage complaints one (1) month before the commencement of Work and for 12 months following the completion of Construction: (a) a 24- hour telephone number for the registration of complaints and enquiries about the CSSI; (b) a postal address to which written complaints and enquires may be sent; (c) an email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system for complaints unable to be resolved.	Section 3.8.4 Community Communication Strategy
B7	The telephone number, postal address, website URL and email address required under Condition B6 of this approval must be published in a newspaper circulating in the relevant local area and on site hoarding at each Construction site before the	Section 3.8.4 Community Communication

CoA	Condition requirements	Document reference
	commencement of Construction and published in the same way again before the commencement of Operation. This information must also be provided on the website required under Condition B14 of this approval.	Strategy
B8	A Complaints Register must be maintained recording information on all complaints received about the CSSI during the carrying out of Work and for a minimum of 12 months following the completion of Construction. The Complaints Register must record the: (a) number of complaints received; (b) number of people affected in relation to a complaint; and (c) means by which the complaint was addressed and whether resolution was reached, with or without mediation.	Section 3.8.4 Community Communication Strategy
B9	The Complaints Register must be provided to the Planning Secretary upon request, within the timeframe stated in the request.	Section 3.8.4 Community Communication Strategy
B10	A Community Complaints Mediator that is independent of the design and construction personnel must be nominated by the Proponent, approved by the Planning Secretary and engaged during Work associated with the CSSI. The request nominating the Community Complaints Mediator must be submitted to the Planning Secretary for approval within one (1) month of the date of this approval.	Community Communication Strategy
B11	The role of the Community Complaints Mediator must address any complaint where a member of the public is not satisfied by the Proponent's response. Any member of the public that has lodged a complaint which is registered in and executed through the Complaints Management System identified in Condition B5 may ask the Community Complaints Mediator to review the Proponent's response. The application must be submitted in writing and the Community Complaints Mediator must respond within 28 days of the request being made or other specified timeframe agreed between the Community Complaints Mediator and the member of the public.	Community Communication Strategy
B12	The Community Complaints Mediator will: (a) review disputes between the project and members of the public if the procedures and mechanisms under Condition B5 or Condition B2(f)(iii) do not satisfactorily address the complainants concerns; and (b) make recommendations to the Proponent to satisfactorily address complaints, resolve disputes or mitigate against the occurrence of future complaints or disputes.	Community Communication Strategy
B13	The Community Complaints Mediator will not act before the Complaints Management System required by Condition B5, including any internal escalation process, has been executed for a complaint and will not consider issues such as property acquisition, where other dispute processes are provided for in this approval or clear government policy and resolution processes are available, or matters which are not within the scope of the CSSI.	Community Communication Strategy
B14	A website or webpage providing information in relation to the CSSI must be established before commencement of Work and maintained for the duration of Construction, and for a minimum of 12 months following the completion of Construction. Up-to-date information (excluding confidential, private and/or commercial information or other documents as agreed to by the Planning Secretary) must be published on the website before the relevant Work commencing and maintained on the website including: (a) review disputes between the project and members of the public if the procedures and mechanisms under Condition B5 or	Section 3.8.4 Community Communication Strategy

CoA	Condition requirements	Document reference
	Condition B2(f)(iii) do not satisfactorily address the complainants concerns; and (b) information on the current implementation status of the CSSI; (c) the telephone number, postal address and email address required under Condition B6; (d) a copy of the documents listed in Condition A1 and Condition A2 of this approval and any documentation relating to any modifications made to the CSSI or the terms of this approval; (e) a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval; (f) a copy of EPL required and obtained in relation to the CSSI; (g) a current copy of each document required under the terms of this approval, which must be published before the commencement of any relevant activity to which they relate or before their implementation, as the case may be; and (h) a copy of the compliance reports required under Condition A29, and Condition A32 of this approval. Note: Where a document referred to in (f) above is superseded, or the management of activities covered by a document referred to in (f) above have been subsumed into another document, the current applicable and, where required, approved document must be available on the website/webpage. Any superseded document must be available in an archived section or similar of the website/webpage.	
C1	A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the documents listed in Condition A1 to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1 will be implemented and achieved during Construction.	This Plan and sub-plans
C2	The CEMP must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one (1) month before the commencement of Construction.	This Plan and sub-plans
C3	The CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan and be consistent with the CEMF and CEMP referred to in Condition C1: Consultation required for CEMP Sub-plans Relevant government agencies to be consulted for CEMP Sub-plans (a) Noise and vibration Relevant council(s) (b) Soil and water Relevant council(s), DoI, OEH (c) Waste and spoil Relevant council(s) (d) Heritage Heritage Council (or its delegate) and relevant council(s)	This Plan and sub-plans
C4	The CEMP Sub-plans must be prepared in accordance with the CEMF.	This Plan and sub-plans
C5	Details of all information requested by an agency to be included in a CEMP Sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant CEMP Sub-Plan.	This Plan and sub-plans
C6	Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before Construction.	This Plan and sub-plans
C7	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and sub-plans for that stage have been approved by the Planning Secretary.	Section 1.2Error! Reference source not found. This Plan and sub-plans
C8	The following Construction Monitoring Programs must be prepared in consultation with the relevant government agencies	Section 3.10.2

CoA	Condition requirements	Document reference
	identified for each to compare actual performance of Construction of the CSSI against the predicted performance. Consultation required for Construction Monitoring Programs Relevant government agencies to be consulted for Construction Monitoring Programs (a) Noise and Vibration Relevant council(s) (b) Water Quality Relevant council(s)	
C9	Each Construction Monitoring Program must provide: (a) details of baseline data available; (b) details of baseline data to be obtained and when; (c) details of all monitoring of the project to be undertaken; (d) the parameters of the project to be monitored; (e) the frequency of monitoring to be undertaken; (f) the location of monitoring; (g) the reporting of monitoring results; (h) procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory; and (i) any consultation to be undertaken in relation to the monitoring programs.	Noise and Vibration Management Plan
C10	The Construction Monitoring Programs must be developed in consultation with relevant government agencies as identified in Condition C8 of this approval and must include reasonable information requested by an agency to be included in a Construction Monitoring Programs during such consultation. Details of all information requested by an agency including copies of all correspondence from those agencies, must be provided with the relevant Construction Monitoring Program.	Section 3.10.2 Noise and Vibration Management Plan
C11	The Construction Monitoring Programs must be endorsed by the ER and then submitted to the Planning Secretary for approval at least one (1) month before the commencement of Construction.	Section 3.10.2 Noise and Vibration Management Plan
C12	Construction must not commence until the Planning Secretary has approved all of the required Construction Monitoring Programs.	Section 3.10.2 Noise and Vibration Management Plan
C13	The Construction Monitoring Programs, as approved by the Planning Secretary including any minor amendments approved by the ER must be implemented for the duration of Construction and for any longer period set out in the monitoring program or specified by the Planning Secretary, whichever is the greater.	Section 3.10.2 Noise and Vibration Management Plan
C14	The results of the Construction Monitoring Programs must be submitted to the Planning Secretary, and relevant regulatory agencies, for information in the form of a Construction Monitoring Report at the frequency identified in the relevant Construction Monitoring Program.	Section 3.10.2 Noise and Vibration Management Plan
C15	Where a relevant CEMP Sub-plan exists, the relevant Construction Monitoring Program may be incorporated into that CEMP Sub-plan.	Section 3.10.2 Noise and Vibration Management Plan
D1	An Operational Management Plan (OEMP) must be prepared to detail how the performance outcomes, commitments and mitigation measures made and identified in the documents listed in Condition A1 will be implemented and achieved during	Sydney Metro Scope

CoA	Condition requirements	Document reference
	Operation. This condition (Condition D1) does not apply if Condition D2 of this approval applies.	
E1	The Proponent must manage operational and asset interface risks to ensure the successful operational integration of the CSSI and the heavy railway network and the protection of physical and operational Sydney Trains assets and services during construction and operation.	Sydney Metro Scope
E2	In addition to the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1, all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the Construction and Operation of the CSSI.	Appendix E – Procedure 3: Air Quality
E3	Where impacts to threatened ecological communities or endangered species cannot be avoided, they must be offset in accordance with the requirements of the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014) in agreement with OEH. <i>Note: the SPIR proposal does not require offsetting under the Framework for Biodiversity Assessment as it does not have any impacts to threatened ecological communities or threatened species.</i>	Appendix E – Procedure 1: Biodiversity
E4	The CSSI must be designed to retain as many trees as possible. Where trees are to be removed, the Proponent must provide a 2:1 ratio replacement of trees. Replacement trees must be planted within the project boundary or on public land up to 500 metres from the project boundary. Replacement tree plantings can be undertaken beyond 500 metres on public land within the local government areas to which the CSSI approval applies if requested by the relevant council(s) or where no more practicable land for planting can be found within and up to 500 metres from the CSSI boundary. The location of replacement trees must be determined in consultation with the relevant council(s).	Appendix E – Procedure 1: Biodiversity
E5	The Proponent must commission an independent experienced and suitably qualified arborist, to prepare a comprehensive Tree Report(s) before removing any trees as detailed in the documents listed in Condition A1. The Tree Report may be prepared for the entire CSSI or separate reports may be prepared for individual areas where trees are required to be removed. The report(s) must identify the impacts of the CSSI on trees and vegetation within and adjacent to the Construction footprint. The report(s) must include: (a) assess compliance with the requirements of this approval; (b) a description of the conditions of the tree(s) and its amenity and visual value; (c) consideration of all options to avoid tree removal, including relocation of services, redesign or relocation of ancillary components (such as substations, fencing etc.) and reduction of standard offsets to underground services; and (d) measures to avoid the removal of trees or minimise damage to existing trees and ensure the health and stability of those trees to be protected. This includes details of any proposed canopy or root pruning, root protection zone, excavation, site controls on waste disposal, vehicular access, storage of materials and protection of public utilities. A copy of the report(s) must be submitted to the Planning Secretary before the removal or pruning of any trees, including those affected by site establishment Work. All recommendations of the report must be implemented by the Proponent, unless otherwise agreed by the Planning Secretary.	Appendix E – Procedure 1: Biodiversity
E7	The Proponent must submit to the Planning Secretary a report which details the type, size, number and location of replacement trees. The report must demonstrate how any replacement plantings with a pot size less than 75 litres are consistent with the requirements of Condition E6. The report must be submitted to the Planning Secretary before Operation unless otherwise agreed by the Planning Secretary.	Appendix E – Procedure 1: Biodiversity

CoA	Condition requirements	Document reference
E8	The location of Construction compounds must not worsen the existing flooding characteristics of the area.	Ancillary facilities do not worsen flooding characteristics. Section 3.13.1 Environmental Control Maps
E9	Where the CSSI will worsen flooding impacts, the Proponent is responsible for implementing measures to address those impacts.	Ancillary facilities do not worsen flooding characteristics. Section 3.13.1 Environmental Control Maps
E10	Following completion of Work described in the documents listed in Conditions A1 and A2 in relation to heritage items, a Heritage Report including the details of any archival recording, further historical research either undertaken or to be carried out and archaeological excavations (with artefact analysis and identification of a final repository for finds), must be prepared in accordance with any guidelines and standards required by the Heritage Council of NSW and Heritage NSW.	Heritage Management Plan
E11	An Excavation Director's Report (EDR) must be prepared for any heritage items of State significance that are discovered during Work. The EDR must be prepared in consultation with Heritage NSW.	Heritage Management Plan
E12	The Heritage Report and Excavation Director's Report must be submitted to the Planning Secretary, the Heritage Council of NSW and Heritage NSW for information no later than 24 months after the completion of the work referred to in Condition E10.	Heritage Management Plan
E14	A Heritage Interpretation Plan(s) must be prepared, consistent with the Heritage Interpretation Strategy which identifies heritage items to be used in the final design of the project. The plan(s) must identify how items will be interpreted and provide a timeframe for their implementation which must be no later than the commencement of Operation. Heritage interpretation in any station precinct must be identified in the relevant Station Design and Precinct Plan(s) required in Condition E56. The Heritage Interpretation Plan must be prepared in accordance with the NSW Heritage Manual, the NSW Heritage Office's Interpreting Heritage Places and Items: Guidelines (August 2005), and the NSW Heritage Council's Heritage Interpretation Policy.	Heritage Management Plan
E15	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.	Heritage Management Plan
E16	The Unexpected Heritage Finds and Human Remains Procedure must be prepared by a suitably qualified and experienced heritage specialist in consultation with the Heritage Council of NSW and submitted to the Planning Secretary for information no later than one (1) month before the commencement of Construction.	Heritage Management Plan
E17	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Construction and during Operational maintenance Work. Note: Human remains that are found unexpectedly during Work are under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.	Heritage Management Plan

CoA	Condition requirements	Document reference
E18	A detailed land use survey must be undertaken to confirm sensitive receivers (including critical working areas such as operating theatres and precision laboratories) potentially exposed to Construction noise and vibration, Construction ground-borne noise and Operational noise. The survey may be undertaken on a progressive basis but must be undertaken in any one area before the commencement of Work which generate Construction or Operational noise, vibration or ground-borne noise in that area. The results of the survey must be included in the Construction Noise and Vibration Impact Statement(s).	Noise and Vibration Monitoring Plan
E19	Work must only be undertaken during the following Construction hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; (b) 8:00am to 6:00pm Saturdays; and (c) at no time on Sundays or public holidays,	Noise and Vibration Monitoring Plan
E20	Notwithstanding Conditions E19 and E24 Work may be undertaken outside the hours specified in the following circumstances: (a) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or (b) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm; or (c) where different Construction hours are permitted or required under an EPL in force in respect of the CSSI; or (d) Work approved under an Out-of-Hours Work Protocol for Work not subject to an EPL as required by Condition E25; or (e) Construction that causes LAeq(15 minute) noise levels: (i) no more than 5 dB(A) above the rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009), and (ii) no more than the 'Noise affected' noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC, 2009) at other sensitive land uses, and (iii) continuous or impulsive vibration values, measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), and (iv) intermittent vibration values measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006); or (f) where a negotiated agreement has been reached with a substantial majority of sensitive receivers who are within the vicinity of and may be potentially affected by the particular Construction, and the noise management levels and/or limit for ground-borne noise and vibration (human comfort) cannot be achieved. All agreements must be in writing and a copy forwarded to the Planning Secretary at least one (1) week before the commencement of activities. Note: Section 5.24(1)(e) of the EP&A Act requires that an EPL be substantially consistent with this approval.	Noise and Vibration Monitoring Plan
E21	On becoming aware of the need for emergency Work in accordance with Condition E20(b), the Proponent must notify the ER and the EPA (if a EPL applies) of the need for that Work. The Proponent must use best endeavours to notify all noise and/or vibration affected sensitive receivers of the likely impact and duration of those Work.	Noise and Vibration Monitoring Plan

CoA	Condition requirements	Document reference
E22	Out-of-Hours Work that are regulated by an EPL as per Condition E20(c) or through the Out-of-Hours Work Protocol as per Condition E25 include: (a) Work which could result in a high risk to construction personnel or public safety, based on a risk assessment carried out in accordance with AS/NZS ISO 31000:2009 "Risk Management – Principles and Guidelines"; or (b) where the relevant road authority has advised the Proponent in writing that carrying out the activities could result in a high risk to road network operational performance; or (c) where the relevant utility service operator has advised the Proponent in writing that carrying out the activities could result in a high risk to the operation and integrity of the utility network; or (d) where the Transport for NSW Transport Management Centre (or other road authority) has advised the Proponent in writing that a road occupancy licence is required and will not be issued for the activities during the hours specified in Condition E19 and Condition E20; or (e) where Sydney Trains (or other rail authority) has advised the Proponent in writing that a Rail Possession is required. Note: Other Out-of-Hours Work can be undertaken with the approval of an EPL, or through the project's Out-of-Hours Work Protocol for Work not subject to a EPL.	Noise and Vibration Monitoring Plan
E23	In order to undertake Out-of-Hours Work, the Proponent must identify appropriate respite periods for the Out-of-Hours Work in consultation with the community at each affected location on a regular basis. This consultation must include (but not be limited to) providing the community with: (a) a schedule of likely Out-of-Hours Work for a period no less than two (2) months; (b) the potential work, location and duration; (c) the noise characteristics and likely noise levels of the Work; and (d) likely mitigation and management measures. The outcomes of the community consultation, the identified respite periods and the scheduling of the likely Out-of-Hours Work must be provided to the EPA (if an EPL applies) and the Planning Secretary (for high risk activities after 9pm) upon request.	Noise and Vibration Monitoring Plan
E24	Except as permitted by an EPL, highly noise intensive Work that result in an exceedance of the applicable Noise Management Level at the same receiver must only be undertaken: (a) between the hours of 8:00 am to 6:00 pm Monday to Friday; (b) between the hours of 8:00 am to 1:00 pm Saturday; and (c) in continuous blocks not exceeding three (3) hours each with a minimum respite from those activities and Works of not less than one (1) hour between each block. For the purposes of this condition, 'continuous' includes any period during which there is less than a one (1) hour respite between ceasing and recommencing any of the work that are the subject of this condition.	Noise and Vibration Monitoring Plan

CoA	Condition requirements	Document reference
E25	An Out-of-Hours Work Protocol must be prepared to identify a process for the consideration, management and approval of Work which are outside the hours defined in Conditions E19, and that are not subject to an EPL. The Protocol must be approved by the Planning Secretary before commencement of the Work. The Protocol must: (a) provide a process for the consideration of Out-of-Hours Work against the relevant noise and vibration criteria, including the determination of low and high-risk activities; (b) provide a process for the identification of mitigation measures for residual impacts, including respite periods in consultation with the community at each affected location, consistent with the requirements of Condition E23; (c) identify procedures to facilitate the coordination of Out-of-Hours Work approved by an EPL to ensure appropriate respite is provided; (d) identify an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where: (i) low risk activities and high risk activities that cease by 9pm can be approved by the ER, and (ii) all other high risk activities must be approved by the Planning Secretary; and (e) identify Planning Secretary, EPA and community notification arrangements for approved Out-of-Hours Work, which maybe detailed in the Community Communication Strategy.	Noise and Vibration Monitoring Plan
E26	Work undertaken for the delivery of the CSSI, including those undertaken by third parties (such as utility relocations), must be coordinated to ensure respite periods are provided. The Proponent must: (a) reschedule Work to provide respite to impacted noise sensitive receivers so that the respite is achieved in accordance with Condition E23; or (b) consider the provision of alternative respite or mitigation to impacted noise sensitive receivers; and (c) provide documentary evidence to the ER in support of any decision made by the Proponent in relation to respite or mitigation.	Noise and Vibration Monitoring Plan
E27	Construction Noise and Vibration Impact Statements must be prepared for Construction sites before Construction noise and vibration impacts commence and include specific mitigation measures identified through consultation with affected sensitive receivers. The Statements must augment the Construction Noise and Vibration Management Sub-plan and must be implemented for the duration of Work. The Statements must be informed by a suite of potential management/mitigation options provided in the Construction Noise and Vibration Sub-plan.	Noise and Vibration Monitoring Plan
E28	Noise generating Work in the vicinity of potentially-affected community, religious, or educational institutions resulting in noise levels above the noise management levels must not be timetabled within sensitive periods, unless other reasonable arrangements with the affected institutions are made at no cost to the affected institution or as otherwise approved by the Planning Secretary.	Noise and Vibration Monitoring Plan

CoA	Condition requirements	Document reference
E29	Mitigation measures must be implemented with the aim of achieving the following Construction noise management levels and vibration criteria: (a) Construction 'Noise affected' noise management levels established using the Interim Construction Noise Guideline (DECC, 2009); (b) vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure); (c) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and (d) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage). Note: The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the Construction Noise Management Level.	Noise and Vibration Monitoring Plan
E30	The Proponent must seek the advice of a heritage specialist on methods and locations for installing equipment used for vibration, movement and noise monitoring at heritage-listed structures.	Noise and Vibration Monitoring Plan
E31	The Proponent must prepare an Operational Noise and Vibration Review (ONVR) to confirm noise and vibration control measures that would be implemented for the Operation of the CSSI. The ONVR must be prepared as part of the iterative design development and in consultation with the Planning Secretary, relevant council(s), and other relevant stakeholders and must: (a) identify appropriate Operational noise and vibration objectives and levels for surrounding development, including existing sensitive receivers; (b) confirm the Operational noise predictions based on the expected final design. Confirmation must be based on an appropriately calibrated noise model (which has incorporated data obtained from noise monitoring); (c) examine all noise and vibration mitigation measures, with a focus on source control and design; (d) identify specific physical and other mitigation measures for controlling noise and vibration at the source and at the receiver (if relevant) including location, type and timing of mitigation measures; (e) where noise and vibration objectives cannot be achieved, the ONVR must present an analysis of all noise and vibration mitigation measures and the 'best practice' achievable noise and vibration outcome for each activity; (f) fully describe the design, assumptions, calculation process, mitigation strategy, and other relevant factors; and (g) include a consultation strategy to seek feedback from directly affected landowners on the noise and vibration mitigation measures being offered. The ONVR must be verified by a suitably qualified and experienced noise and vibration expert. The ONVR must be undertaken at the Proponent's expense and submitted to the Planning Secretary for approval before the implementation of mitigation measures. The Proponent must implement the identified noise and vibration control measures and make the ONVR publicly available.	Sydney Metro Scope

CoA	Condition requirements	Document reference
E33	Where implementation of Operational noise mitigation measures will be physically affected by Construction such that they cannot be implemented within six (6) months of the commencement of Construction in accordance with Condition E32, the Proponent must submit to the Secretary a report providing justification as to why, along with details of temporary measures that would be implemented to address construction noise impacts until such time that the Operational noise mitigation measures identified in Condition E31 are implemented. The report must be submitted to the ER for review. When the ER is satisfied that the justification and alternative measures are appropriate to address construction noise impacts, and within six (6) months of the commencement of Construction which would affect the identified sensitive receivers, the report must be submitted to the Planning Secretary for information.	Heritage Management Plan Noise and Vibration Management Plan
E34	Within 12 months of the commencement of Operation of the CSSI, the Proponent must undertake monitoring of Operational noise to compare actual noise performance of the CSSI against the noise performance predicted in the review of noise mitigation measures required by Condition E31. The Proponent must prepare an Operational Noise Compliance Report to document this monitoring. The Report must include, but not necessarily be limited to: (a) noise monitoring to assess compliance with the Operational noise levels predicted in the review of Operational noise mitigation measures required under Condition E31; (b) a review of the Operational noise levels in terms of criteria and noise goals established in the NSW Rail Infrastructure Noise Guideline 2013; (c) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which CSSI noise levels are ascertained, with specific reference to locations indicative of impacts on receivers; (d) details of any complaints and enquiries received in relation to Operational noise generated by the CSSI between the date of commencement of Operation and the date the report was prepared; (e) any required recalibrations of the noise model taking into consideration factors such as noise monitoring; (f) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of mitigation measures; and (g) identification of additional measures to those identified in the review of noise mitigation measures required by Condition E31, that would be implemented with the objective of meeting the criteria outlined in the NSW Rail Infrastructure Noise Guideline 2013 and Noise Policy for Industry (EPA, 2017), when these measures would be implemented and how their effectiveness would be measured and reported to the Planning Secretary and the EPA. The Operational Noise Compliance Report must be submitted to the Planning Secretary and the EPA within 60 days of completing the Operational noise monitoring and made publicly available.	Sydney Metro Scope
E35	The Proponent must establish an Independent Property Assessment Panel before Construction commences. The Panel will be responsible for the resolution of property damage disputes. Either the affected property owner or the Proponent may refer unresolved disputes arising from potential and/or actual property impacts to the Panel for resolution. All costs incurred in establishing and implementing the Panel must be borne by the Proponent.	Sydney Metro Scope
E36	The Proponent must determine viable alternative accommodation options for community facilities/groups (including the Canterbury Theatre Guild) where facilities used by the group(s) are not available to them during Construction in consultation with the relevant council(s), community groups and key stakeholders.	Sydney Metro Scope

CoA	Condition requirements	Document reference
E37	The Proponent must prepare and implement a Business Management Plan to minimise impact on businesses around stations during Construction. The Plan must be prepared before Construction and must include but not necessarily be limited to: (a) measures to address amenity, vehicular and pedestrian access during business hours and visibility of the business appropriate to its reliance on such, and other reasonable matters raised in consultation with affected business; (b) establishing a Business Consultation forum linked to the Community Communication Strategy required by Condition B1; (c) preparation of Business Management Strategies for each station precinct or Construction site (and/or activity), identifying affected businesses and associated management strategies, including the employment of place managers, cultural liaison specialists and specific measures to be put in place to assist small business owners adversely impacted by the construction of the CSSI; (d) implementing the established Small Business Owners' Support Program to assist small business owners adversely impacted by construction of the CSSI. The Program must be administered by an Advisory/Support Panel established by the Proponent. The Program must have appropriate specialist representatives, including CALD representatives and must report to the Proponent; (e) a monitoring program to assess the effectiveness of the measures including the nomination of performance parameters and criteria against which effectiveness of the measures will be measured; and (f) provision for reporting of monitoring results to the Planning Secretary, in accordance with the Compliance Tracking Program required in Condition A29.	Sydney Metro Scope
E38	All reasonably practicable erosion and sediment controls must be installed and appropriately maintained to minimise water pollution. When implementing such controls, any relevant guidance in the Managing Urban Stormwater series must be considered.	Environmental Control Maps Section 3.2.3
E39	An Unexpected Contaminated Land Procedure and Asbestos Finds Procedure must be prepared and must be followed should unexpected contaminated land or asbestos be excavated or otherwise discovered during Construction.	Appendix E – Procedure 6: Unexpected Finds
E40	The Unexpected Contaminated Land Procedure and Asbestos Finds Procedure must be implemented throughout Construction.	Appendix E – Procedure 6: Unexpected Finds
E41	Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with: (a) All relevant Australian Standards; (b) For liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and (c) The Environment Protection Manual for Authorised Officers: Bunding and Spill Management technical bulletin (EPA, 1997) In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.	Section 2.5 Section Error! Reference source not found.
E43	The Sustainability Strategy must be submitted to the Planning Secretary within six (6) months of the date of this approval and must be implemented throughout Construction and Operation.	Sydney Metro Scope

CoA	Condition requirements	Document reference
E46	The Proponent must establish a Traffic and Transport Liaison Group(s) (TTLGs) to inform traffic and transport management measures during Construction and Operation of the CSSI. Management measures must be coordinated with the RMS following engagement with the Sydney Coordination Office and consultation with the Relevant Roads Authority. The TTLG must comprise representatives from the Relevant Road Authority(ies), transport operators (including bus and taxi operators) and emergency services as required. The TTLG must be consulted to inform preparation of the Construction Traffic Management Plan(s).	Sydney Metro Scope
E47	Construction Traffic Management Plans (TRAFFIC MANAGEMENT PLANS) must be prepared for each Construction site or stage (or Low Impact Activity where required) in accordance with the CEMF and relevant Austroads, Australian Standards and RMS requirements. The TRAFFIC MANAGEMENT PLANS must be submitted to the RMS following engagement with the Sydney Coordination Office and before Construction commences at the relevant Construction site or stage. A copy of the Construction Traffic Management Plans must be submitted to the Planning Secretary for information.	Traffic Guidance Schemes Road Occupancy Licences
E48	The Proponent must prepare a Temporary Transport Management Plan in accordance with the Temporary Transport Strategy included in documents listed in Condition A1 one (1) month before the implementation of the Plan.	Traffic Management Plan
E49	Before any local road is used by a heavy vehicle for the purposes of Construction of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the relevant council(s) within four (4) weeks of completion of the survey and at least two (2) weeks before the road is used by heavy vehicles associated with the Construction of the CSSI.	Traffic Management Plan
E50	If damage to roads occurs as a result of Construction of the CSSI, the Proponent must either (at the relevant road authority's discretion): (a) compensate the relevant road authority for the damage so caused. The amount of compensation may be agreed with the relevant road authority; or (b) rectify the damage to restore the road to at least the condition it was in pre-Construction as identified in the Road Dilapidation Report(s).	Traffic Management Plan
E51	During Construction, all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access must be provided, and opportunities for parking arrangements must be investigated in consultation with affected businesses/properties and implemented before the disruption. Adequate signage and directions to businesses/properties must be provided before, and for the duration of, any disruption.	Traffic Management Plan

CoA	Condition requirements	Document reference
E52	Safe pedestrian and cyclist access must be maintained around Work sites during Construction. In circumstances where pedestrian and cyclist access is restricted or removed due to Construction activities, an alternate route which complies with the relevant standards must be provided and signposted.	Environmental Control Maps Traffic Management Plan
E53	The Proponent must prepare a Walking and Cycling Strategy to identify opportunities and works to connect stations with the surrounding communities, by connecting to or enhancing existing pedestrian and cyclist paths. The Walking and Cycling Strategy must also identify opportunities and works to improve east-west pedestrian and cyclist facilities between Sydenham and Bankstown. The Walking and Cycling Strategy must be prepared in consultation with relevant council(s), local bike user groups and relevant stakeholder(s). Identified opportunities and works, where relevant, must be integrated with the relevant Station Design and Precinct Plan(s). Works that are identified as being the responsibility of the Proponent, including those associated with east-west pedestrian and cyclist facilities must be delivered within twelve (12) months following commencement of Operation.	Sydney Metro Scope
E54	The Proponent must construct and operate the CSSI with the objective of minimising light spillage to surrounding properties. All lighting associated with the Construction and Operation of the CSSI must be consistent with the requirements of <i>Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting</i> and relevant Australian Standards in the series <i>AS/NZ 1158 – Lighting for Roads and Public Spaces</i> .	Refer to VAMP Section 3.2.3
E69	The Proponent must co-ordinate utility providers and relevant council(s) to identify opportunities for maintenance, replacement or augmentation of utilities that cross the rail corridor and facilitate and co-ordinate requests by the utility providers and relevant council(s) to undertake the Work during rail shutdowns, with particular reference to the final three (3) to six (6) month shutdown before metro services commence.	Sydney Metro Scope
E70	Nothing in this approval allows for the undertaking of any third-party utility Work identified through the implementation of Condition E69 and not required for the purposes of the CSSI. Note: Third-party utility Work, including but not limited to drainage, water or energy supply etc. identified not required for the project is not the responsibility of the Proponent and is subject to separate approvals process.	Noted
E71	A Utilities Management Strategy must be prepared and implemented in line with the Utilities Management Framework, described in Appendix H of the SPIR for all utility Work. The Strategy must identify how utility Work will be defined and managed. The Utilities Management Strategy must include: (a) the functions of the Utility Coordination Manager as required by Condition E72; (b) a description of all utility Work to be undertaken; and (c) management measures to be implemented to manage dust, noise, traffic, access and lighting impacts associated with utility Work. The Utilities Management Strategy must be submitted to the Planning Secretary for approval at least one (1) month before the	Utilities Management Plan

CoA	Condition requirements	Document reference
	commencement of utility Work.	
E72	A Utility Coordination Manager must be appointed for the duration of the CSSI Work. The role of the Utility Coordination Manager must include, but not be limited to: (a) the management and coordination of all utility Work associated with the delivery of the CSSI, to ensure respite is provided to the community, as required under Condition E22; (b) investigating complaints received from the Community Complaints Mediator relating to utility Work and providing a response to the Community Complaints Mediator.	Section 263.3
E73	Any items or infrastructure that are salvageable must be identified in the relevant CEMP Sub- plan (Condition C3). <i>Note: reuse of items may include signal boxes, indicators, ballast or other rail infrastructure. These items should be offered to Sydney Trains or reuse.</i>	Appendix E – Procedure 4: Waste and Spoil
E74	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the Protection of the Environment Operations Act 1997, under the Protection of the Environment Operations (Waste) Regulation 2014, and orders or exemptions made under the regulation.	Appendix E – Procedure 4: Waste and Spoil
E75	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste.	Appendix E – Procedure 4: Waste and Spoil
E76	All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	Appendix E – Procedure 4: Waste and Spoil

CEMF compliance matrix

Clause	Requirement	Document Reference
1.3	Transport for NSW (TfNSW) has developed an Environment and Sustainability Policy (Appendix A) for Sydney Metro Delivery Office (SMDO). Principal Contractors will be required to undertake their works in accordance with this policy. The policy reflects a commitment in the delivery of the project to: - Align with, and support, Transport for NSW (TfNSW) Environment & Sustainability Policy. - Optimise sustainability outcomes, transport service quality, and cost effectiveness. - Develop effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and community expectation, and heritage and biodiversity conservation. - Be environmentally responsible, by avoiding pollution, enhancing the natural environment and reducing the project ecological footprint, while complying with all applicable environmental laws, regulations and statutory obligations. - Be socially responsible by delivering a workforce legacy which benefits individuals, communities, the project and industry, and is achieved through collaboration and partnerships.	Section 1.3 Appendix D

Clause	Requirement	Document Reference
2	The key environmental obligations to be addressed are contained within: - Legislative requirements. - Project approval documentation. - Conditions of Approval. - Environment Protection Licences. - Other permits, approval and licences. - Standards and guidelines.	Section 2
2.1	Table 1.1 (of the CEMF) identifies key NSW environmental legislative requirements and their application to Sydney Metro C&SW construction works, current as at the date of this document. TfNSW and its Contractors should regularly review their legislative requirements.	Section 2
2.2	Sydney Metro Northwest is classified as Critical State Significant Infrastructure and was approved under the following in accordance with Section 115W of the Environmental Protection and Assessment Act 1997: - Staged State Infrastructure Approval (1 October 2011, modified on 25 September 2012) - Stage 1 – Major Civil Construction Works (25 September 2012, modified on 18 April 2013) - Stage 2 – Stations, Rail Infrastructure and Systems (8 May 2013, modified on 20 May 2014). Some components of Sydney Metro Northwest (such as the conversion of the Epping to Chatswood component of the project) have also been approved under Part 5 of the Environmental Protection and Assessment Act. in which case TfNSW is the consent authority. Sydney Metro City and Southwest is also classified as Critical State Significant Infrastructure and requires approval from a consent authority under the requirements of the Environmental Protection and Assessment Act 1997 (Section 115W). Two separate approvals will be sought: - Sydney Metro City and Southwest – Chatswood to Sydenham - Sydney Metro City and Southwest - Sydenham to Bankstown The requirements of the approval are required to be complied with by TfNSW. Responsibility for implementing mitigation measures and conditions of approval will be allocated between TfNSW and Principal Contractors as appropriate. Typically TfNSW will produce a Staging Report which sets out the applicability and allocation of approval requirements within the project's program of works.	Section 2 Appendix A
2.3	Sydney Metro projects often meet the definition of a number of scheduled activities under Schedule 1 of the Protection of the Environmental Operation Act 1997 (POEO Act) and as such our contractors may be required to obtain an Environment Protection Licence (EPL) or work under the existing EPL held by Sydney Trains. Where required, Sydney Metro Principal Contractors will: Apply for and be granted an EPL from the EPA.	Section 2.6

Clause	Requirement	Document Reference
	b. Hold an EPL which covers their scope of works as necessary under the POEO Act. c. Undertake their scope of works in accordance with the conditions of the applicable EPLs as issued by the EPA. d. Work under the existing Sydney Trains EPL.	
2.4	Numerous environmental publications, standards, codes of practice and guidelines are relevant to TfNSW construction and are referenced throughout this Construction Environmental Management Framework. A summary of these applicable standards and guidelines is provided below: • ISO14001 Environmental Management System – Requirements with Guidelines for Use • Interim Construction Noise Guidelines (Department of Environment and Climate Change, 2009) • Managing Urban Stormwater: Soil and Construction (Landcom, 2008) AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting • Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2008) • AS 1742.3 Manual of uniform traffic control devices Part 3: Traffic control for works on roads • RMS Traffic Control at Worksites Manual • Australian and New Zealand Guidelines for Fresh and Marine Water Quality	Section 2.5
3.1(a)	Principal Contractors are required to have a corporate Environmental Management System certified under AS/NZS ISO 14001:2004 and to have transitioned this accreditation into AS/NZS ISO 14001:2015 by September 2018.	This plan
3.1(b)	Principal Contractors are required to develop a project-based Environment and Sustainability Management System (E&SMS). The E&SMS will: (i) Be consistent with the Principal Contractors corporate Environmental Management System and AS/NZS ISO 14001:2004 or 2015; (ii) Be supported by a process for identifying and responding to changing legislative or other requirements; (iii) Include processes for assessing design or construction methodology changes for consistency against the planning approvals; (iv) Include processes for tracking and reporting performance against sustainability and compliance targets; (v) Include a procedure for the identification and management of project specific environmental risks and appropriate control measures; and (vi) Be consistent with the Sydney Metro C&SW Sustainability Strategy and Sydney Metro Environment and Sustainability Policy	This plan
3.1(c)	All sub-contractors engaged by the Principal Contractor will be required to work under the Principal Contractor's E&SMS.	Section 3.5
3.1(d)	The relationship between key documents within the Sydney Metro Environment and Sustainability Management System and the Principal Contractor's Environment and Sustainability Management System is shown in Figure 2 (of the CEMF).	This Plan

Clause	Requirement	Document Reference
3.1(e)	The Principal Contractors Sustainability Plan and its Sub-plans will capture governance and design requirements as well as social sustainability initiatives as required by the Sydney Metro Sustainability Strategies.	Refer to Sustainability Management Plan
3.1(f)	These plans vary in scope across different delivery packages.	Noted
3.4(a)	Subject to Section 3.3(b) and Section 3.2(b) the Principal Contractor will prepare issue-specific environmental Sub-plans to the CEMP and SMP which address each of the relevant environmental impacts at a particular site or stage of the project. Issue specific Sub-plans can include: (i) Spoil management; (ii) Groundwater management; (iii) Traffic and transport; (iv) Noise and vibration management; (v) Heritage management; (vi) Flora and fauna management; (vii) Visual amenity management; (viii) Carbon and energy management; (ix) Materials management; (x) Soil and water management; (xi) Air quality management; and (xii) Waste management and recycling.	Refer to Section 4 and Staging Report
3.5(a)	The Principal Contractor will prepare and implement activity specific environmental procedures. These procedures should support environmental management Sub-plans, but may substitute for Sub-plans in agreement with TfNSW if a reasonable risk based justification can be made and the Sub-plans in agreement with TfNSW if a reasonable risk based justification can be made and the sub plan is not a requirement of any approval.	Appendix E
3.5(b)	The procedures will include; (i) A breakdown of the work tasks relevant to the specific activity and indicate responsibility for each task; (ii) Potential impacts associated with each task; (iii) A risk rating for each of the identified potential impacts; (iv) Mitigation measures relevant to each of the work tasks; and (v) Responsibility to ensure the implementation of the mitigation measures	Appendix E
3.5(c)	The Principal Contractor will prepare and implement site based progressive Environmental Control Maps (ECM's) which as a minimum: (i) Is a progressive document depicting a current representation of the site;	Section 3.2.3

Clause	Requirement	Document Reference
	(ii) Indicates which environmental procedures, environmental approvals, or licences are applicable; (iii) Illustrates the site showing significant structures, work areas and boundaries; (iv) Illustrates environmental control measures and environmentally sensitive receivers; (v) Is endorsed by the Principal Contractors Environmental Manager or delegate; and (vi) Relevant workers will be trained in the requirements of and will sign off the procedures prior to commencing works on the specific site and / or activity.	
3.6(a)	Where the requirement for an additional environmental assessment is identified, this will be undertaken prior to undertaking any physical works. The environmental assessment will include: (i) A description of the existing surrounding environment; (ii) Details of the ancillary works and construction activities required to be carried out including the hours of works; (iii) An assessment of the environmental impacts of the works, including, but not necessarily limited to, traffic, noise and vibration, air quality, soil and water, ecology and heritage; (iv) Details of mitigation measures and monitoring specific to the works that would be implemented to minimise environmental impacts; and (v) Identification of the timing for completion of the construction works, and how the sites would be reinstated (including any necessary rehabilitation).	Section 2.4
3.7(a)	Prior to the commencement of construction the Principal Contractors will offer Pre-construction Building Condition Surveys, in writing, to the owners of buildings where there is a potential for construction activities to cause cosmetic or structural damage. If accepted, the Principal Contractor will produce a comprehensive written and photographic condition report produced by an appropriate professional prior to relevant works commencing.	Refer to Construction Noise and Vibration Management Plan.
3.7 (b)	Prior to the commencement of construction the Principal Contractor will prepare a Road Dilapidation Report for all local public roads proposed to be used by heavy vehicles.	Refer to Construction Traffic Management Plan
3.8(a)	Principal Contractors will identify hold points, beyond which approval is required to proceed with a certain activity. Example activities include vegetation removal and water discharge. Hold points will be documented in relevant CEMPs.	Section Error! Reference source not found.
3.8(b)	Table 1.4 (of the CEMF) provides the structure for the register of hold points as well as a preliminary list of hold points which will be implemented.	Section Error! Reference source not found.
3.9(a)	Principal Contractors will be responsible for determining the training needs of their personnel. As a minimum this will include site induction, regular toolbox talks and topic specific environmental training as follows: i. The site induction will be provided to all site personnel and will include, as a minimum: • Training purpose, objectives and key issues; • Contractor's environmental policy and key performance indicators; • Due diligence, duty of care and responsibilities; • Relevant conditions of any environmental licence and/or the relevant conditions of approval;	Section 3.6

Clause	Requirement	Document Reference
	- Site specific issues and controls including those described in the environmental procedures; - Reporting procedure for environmental hazards and incidents; - Communication protocols. ii. Toolbox talks will be held on a regular basis in order to provide a project or site wide update, including any key or recurring environmental issues; and iii. Topic specific environmental training, e.g. erosion and sediment control training will be undertaken for relevant site personnel as determined by the Principal Contractor	
3.9(b)	Principal Contractors will conduct a Training Needs Analysis which: i. Identifies that all staff are to receive an environmental induction and undertake environmental incident management training ii. Identifies the competency requirements of staff that hold environmental roles and responsibilities documented within the Construction Environmental Management Plan and Sub-plans iii. Identifies appropriate training courses/events and the frequency of training to achieve and/or maintain these competency requirements iv. Implements and documents as part of the CEMP a training schedule that plans attendance at environmental training events, provides mechanisms to notify staff of their training requirements, and identifies staff who do not attend scheduled training events or who have overdue training requirements	Section 3.6
3.10(a)	Principal Contractors will develop and implement a Pollution Incident Response Management Plan, in accordance with the requirements of the POEO Act. Contractors' emergency and incident response procedures will also be consistent with any relevant SMDO procedures and will include: i. Categories for environmental emergencies and incidents ii. Notification protocols for each category of environmental emergency or incident, including notification of TfNSW and notification to owners / occupiers in the vicinity of the incident. This is to include relevant contact details iii. Identification of personnel who have the authority to take immediate action to shut down any activity, or to affect any environmental control measure (including as directed by an authorised officer of the EPA) iv. A process for undertaking appropriate levels of investigation for all incidents and the identification, implementation and assessment of corrective and preventative actions; and v. Notification protocols of incidents to the EPA, DPHI or OEH that are made by the Contractor or TfNSW.	Sections 3.11 and 3.9
3.10(b)	The Contractor will make all personnel aware of the plan and their responsibilities.	Section 3.3
3.11(a)	Independent Environmental Representatives a. TfNSW will engage Independent Environmental Representatives (ERs) to undertake the following, along with any additional roles as required:	Section 3.3

Clause	Requirement	Document Reference
	i. Review, provide comment on and endorse (where required) any relevant environmental documentation to verify it is prepared in accordance with relevant environmental legislation, planning approval conditions, relevant standards and this CEMP. ii. Monitor and report on the implementation and performance of the above mentioned documentation and other relevant documentation. iii. Provide independent guidance and advice to TfNSW and the Contractors in relation to environmental compliance issues and the interpretation of planning approval conditions. iv. Be the principal point of advice for the DPHI in relation to all questions and complaints concerning the environmental performance of the project. v. Ensure that environmental auditing is undertaken in accordance with all relevant project requirements. vi. Recommend reasonable steps, including 'stop works', to be taken to avoid or minimise adverse environmental impacts.	
3.12(a)	In relation to Roles and Responsibilities the CEMP will: i. Describe the relationship between the Principal Contractor, TfNSW, key regulatory stakeholders, the independent environmental representative and the independent certifier ii. For each role that has environmental accountabilities or responsibilities, including key personnel, provide a tabulated description of the authority and roles of key personnel, lines of responsibility and communication, minimum skill level requirements and their interface with the overall project organisation structure iii. Provide details of each specialist environment, sustainability or planning consultant who is employed by the Principal Contractor including the scope of their work iv. Provide an overview of the role and responsibilities of the Independent Environmental Representative, the Independent Certifier and other regulatory stakeholders.	Section 3.3
3.12(b)	All sub-contractors engaged by the Principal Contractor will be required to operate within the EMS documentation of that Principal Contractor	Section 3.5
3.13(a)	Issue specific environmental monitoring will be undertaken as required or as additionally required by approval, permit or licence conditions	Refer to relevant Sub-plans
3.13(b)	The results of any monitoring undertaken as a requirement of the EPL will be published on the Principal Contractor's, or a project specific, website within 14 days of obtaining the results	Section 2.6
3.13(c)	Environmental inspections will include: i. Surveillance of environmental mitigation measures by the Site Foreman. ii. Periodic inspections by the Principal Contractor's Environmental Manager (or delegate) to verify the adequacy of all environmental mitigation measures. This will be documented in a formal inspection record.	Section 3.10.1
3.13(d)	Regular site inspections by the ERs and TfNSW representatives at a frequency to be agreed with the Principal Contractor	Section 3.10.1
3.13(e)	Principal Contractors will be required to undertake internal environmental audits. Internal audits will include: i. Compliance with approval, permit and licence conditions.	Section 3.10.3

Clause	Requirement	Document Reference
	ii. Compliance with the E&SMS, CEMP, SMP, Sub-plans and procedures. iii. Community consultation and complaint response. iv. Environmental training records. v. Environmental monitoring and inspection results	
3.13(f)	TfNSW (or an independent environmental auditor) will also undertake periodic audits of the Principal Contractor's E&SMS and compliance with the environmental aspects of contract documentation, including this Construction Environmental Management Framework.	Section 3.10.3
3.14(a)	Environmental Non-compliances Principal Contractors will document and detail any non-compliances arising out of the above monitoring, inspections and audits. TfNSW will be made aware of all non-compliances in a timely manner	Section 3.11
3.14(b)	Principal Contractors will develop and implement corrective actions to rectify the non-compliances and preventative actions in order to prevent the re-occurrence of the non-compliance. Contractors will also maintain a register non compliances, corrective actions and preventative actions	Section 3.11
3.14(c)	TfNSW or the Environmental Representative may raise non-compliances against environmental requirements.	Noted
3.15(a)	Principal Contractors will maintain appropriate records of the following: i. Site inspections, audits, monitoring, reviews or remedial actions. ii. Documentation as required by performance conditions, approvals, licences and legislation. iii. Modifications to site environmental documentation (e.g. CEMP, Sub-plans and procedures). iv. Other records as required by this Construction Environmental Management Framework	Section 3.16
3.15(b)	Records will be retained onsite for the duration of works	Section 3.16
3.15(c)	Additionally records will be retained by the Principal Contractor for a period of no less than 7 years in total. Records will be made available in a timely manner to TfNSW (or their representative) upon request	Section 3.16
3.15(d)	Compliance reports detailing the outcome of any environmental surveillance activity including internal and external audits (refer to Section 3.13) will be produced by the Principal Contractors Environmental Manager or delegate. These reports will be submitted to TfNSW at an agreed frequency	Section 3.10.4
3.16(a)	Principal Contractors will ensure the continual review and improvement of the E&SMS. This will generally occur in response to: i. Issues raised during environmental surveillance and monitoring ii. Expanded scope of works iii. Environmental incidents iv. Environmental non-conformances.	Section 3.17 and 3.18

Clause	Requirement	Document Reference
3.16(b)	A formal review of the E&SMS by the Principal Contractor's Senior Management Team will also occur on an annual basis, as a minimum. This review will generate actions for the continual improvement of the E&SMS and supporting management plans.	Section 3.17
5.1(a)	Standard working hours are between 7am – 6pm on weekdays and 8am – 1pm on Saturdays.	Section 3.7 Noise and Vibration Management Plan
5.1(b)	Works which can be undertaken outside of standard construction hours without any further approval include: Those which have been described in respective environmental assessments as being required to take place 24/7. For example, tunnelling and underground excavations and supporting activities will be required 24/7 Works which are determined to comply with the relevant Noise Management Level at sensitive receivers The delivery of materials outside of approved hours as required by the Police or other authorities (including RMS) for safety reasons Where it is required to avoid the loss of lives, property and / or to prevent environmental harm in an emergency Where written agreement is reached with all affected receivers.	Section 3.7 Noise and Vibration Management Plan
5.1(c)	Principal Contractors may apply for EPA approval to undertake works outside of normal working hours under their respective Environment Protection Licences	Noise and Vibration Management Plan
5.2(a)	Principal Contractors will consider the following in the layout of construction sites: i. The location of noise intensive works and 24 hour activities in relation to noise sensitive receivers ii. The location of site access and egress points in relation to noise and light sensitive receivers, especially for sites proposed to be utilised 24 hours per day iii. The use of site buildings to shield noisy activities from receivers iv. The use of noise barriers and / or acoustic sheds where feasible and reasonable for sites proposed to be regularly used outside of daytime hours v. Aim to minimise the requirement for reversing, especially of heavy vehicles.	Noise and Vibration Management Plan
5.3(a)	Mitigation measures for reinstatement will be produced in consultation with TfNSW, the community and stakeholders.	Section 3.15
5.3(b)	Mitigation measures required for reinstatement will be incorporated into the CEMP and will include as a minimum: i. Principal Contractors will clear and clean all working areas and accesses at project completion ii. At the completion of construction all plant, temporary buildings or vehicles not required for the subsequent stage of construction will be removed from the site iii. All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better iv. Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of construction.	Section 3.15

Clause	Requirement	Document Reference
6.1 (a)	The following spoil management objectives will apply to the construction of the project: i. Minimise spoil generation where possible; ii. The project will mandate 100% reuse or recycling (on or off-site) of usable spoil; iii. Spoil will be managed with consideration to minimising adverse traffic and transport related issues; iv. Spoil will be managed to avoid contamination of land or water; v. Spoil will be managed with consideration of the impacts on residents and other sensitive receivers; and vi. Site contamination will be effectively managed to limit the potential risk to human health and the environment.	Appendix E – Procedure 4: Waste and Spoil Appendix E –Procedure 8: Soil and Water
6.2 (a)	Principal Contractors will develop and implement a Spoil Management Plan for their scope of works. The Spoil Management Plan will include as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
6.3 (a)	Examples of spoil mitigation measures include: i. Implementing the spoil re-use hierarchy; ii. Handling spoil to minimise potential for air and water pollution; and iii. Minimise traffic impacts associated with spoil removal.	Appendix E – Procedure 4: Waste and Spoil
7.1 (a)	The following groundwater management objectives will apply to construction: i. Reduce the potential for drawdown of surrounding groundwater resources; ii. Prevent the pollution of groundwater through appropriate controls; and iii. Reduce the potential impacts of groundwater dependent ecosystems.	Appendix E – Procedure 2: Groundwater
7.2 (a)	The following content may be provided within other sub plans such as the Soil and Water Management Plan and the Flora and Fauna Management Plan	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
7.2 (b)	Principal Contractor's will develop and implement a Groundwater Management Plan for their scope of works. The Groundwater Management Plan include as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
7.3 (a)	Examples of groundwater mitigation measures include: i. Implementing all feasible and reasonable mitigation measures to limit groundwater inflows to stations and crossovers; and ii. Undertaking groundwater monitoring during construction (levels and quality) in areas identified as 'likely' and 'potential groundwater dependent ecosystems.	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
11.1 (a)	The following flora and fauna objectives will apply to construction: i. Minimise impacts on flora and fauna; ii. Design waterway modifications and crossings to incorporate best practice principles; iii. Retain and enhance existing flora and fauna habitat wherever possible; and iv. Appropriately manage the spread of weeds and plant pathogens.	Appendix E – Procedure 1: Biodiversity 11.1(a) ii. Is not relevant to this Project as no waterway modifications or crossings are proposed.

Clause	Requirement	Document Reference
11.2 (a)	Principal Contractor's will develop and implement a Flora and Fauna Management Plan which will include as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
11.2 (b)	Principal Contractors would undertake the following ecological monitoring as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
11.2 (c)	The Principal Contractor's regular inspections will include a check on the ecological mitigation measures and project boundary fencing.	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
11.2 (d)	The following compliance records would be kept by the Principal Contractor: i. Records of pre-clearing inspections undertaken; ii. Records of the release of the pre-clearing hold point; and iii. Records of ecological inspections undertaken.	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
11.3 (a)	Examples of flora and fauna mitigation measures include: i. Areas to be retained and adjacent habitat areas will be fenced off prior to works to prevent damage or accidental over clearing; ii. Clearing will follow a two-stage process as follows: • - Non-habitat trees will be cleared first after sign-off of the pre-clearing inspection; and • - Habitat trees will be cleared no sooner than 48 hours after non-habitat trees have been cleared. A suitably qualified ecologist will be present on site during the clearing of habitat trees. Felled habitat trees will be left on the ground for 24 hours or inspected by the ecologist prior to further processing. iii. Weed management is to be undertaken in areas affected by construction prior to any clearing works in accordance with the Noxious Weeds Act 1993.	Appendix E – Procedure 1: Biodiversity
16.1 (a)	The following air quality management objectives will apply to construction: i. Minimise gaseous and particulate pollutant emissions from construction activities as far as feasible and reasonable; and ii. Identify and control potential dust and air pollutant sources.	Appendix E – Procedure 3: Air Quality
16.2 (a)	Principal Contractors will develop and implement an Air Quality Management Plan which will include, as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
16.2 (b)	Air quality and dust monitoring will involve the following as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.

Clause	Requirement	Document Reference
16.2 (c)	The following compliance records will be kept by the Principal Contractor: [...]	As outlined in the Sydenham to Bankstown Staging Report (rev 6) this is not applicable to the Project.
16.3 (a)	Examples of air quality mitigation measures include: i. Plant and equipment will be serviced and maintained in good working order to reduce unnecessary emissions from exhaust fumes; ii. Water suppression will be used for active earthwork areas, stockpiles, unsurfaced haul roads and loads of soil being transported to reduce wind-blown dust emissions; iii. Wheel-wash facilities or rumble grids will be provided and used near the site exit points, as appropriate; and iv. Dust extraction and filtration systems will be installed for tunnel excavation works and deep excavation with limited surface exposure.	Appendix E – Procedure 3: Air Quality 16.3 (a) iv. Is not relevant to this Project as no tunnel excavation works or deep excavations are proposed
17.1 (a)	The following waste objectives will apply to construction: i. Minimise waste throughout the project life-cycle; and ii. Waste management strategies will be implemented in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> management hierarchy as follows: • - Avoidance of unnecessary resource consumption; • - Resource recovery (including reuse, reprocessing, recycling and energy recovery); and • - Disposal.	Appendix E – Procedure 4: Waste and Spoil
17.1 (b)	Targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil will be provided by the Principal Contractor.	Appendix E – Procedure 4: Waste and Spoil
17.2 (a)	Principal Contractors will develop and implement a Waste Management and Recycling Plan which will include as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (Rev 6) this is not applicable to the Project.
17.2 (b)	Principal Contractors will undertake the following waste monitoring as a minimum: [...]	As outlined in the Sydenham to Bankstown Staging Report (Rev 6) this is not applicable to the Project.
17.2 (c)	Principal Contractors will report all necessary waste and purchasing information to TfNSW as required for TfNSW to fulfil their WRAPP reporting requirements.	As outlined in the Sydenham to Bankstown Staging Report (Rev 6) this is not applicable to the Project.
17.2 (d)	Compliance records will be retained by the Principal Contractors in relation to waste management including records of inspections and waste dockets for all waste removed from the site.	As outlined in the Sydenham to Bankstown Staging Report (Rev 6) this is not applicable to the Project.
17.3 (a)	Examples of waste management and recycling mitigation measures include: i. All waste materials removed from the sites will be directed to an appropriately licensed waste management facility;	Appendix E – Procedure 4: Waste and Spoil

Clause	Requirement	Document Reference
	ii. The use of raw materials (noise hoarding, site fencing, etc...) will be reused or shared, between sites and between construction contractors where feasible and reasonable; and iii. Recyclable wastes, including paper at site offices, will be stored separately from other wastes.	

Revised Environmental Mitigation Measures Compliance Matrix

REMM No.	REMM Requirement	Timing	Document Reference
B1	Detailed design and construction planning would avoid direct impacts to vegetation mapped as threatened ecological communities or native plant community types, specifically Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine - Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box.	Design/pre-construction	Appendix E – Procedure 1: Biodiversity
B2	Pre-clearing surveys and inspections for endangered and threatened flora and fauna species would be undertaken by qualified ecologists prior to any clearing occurring. The surveys and inspections, and any subsequent relocation of species, would be undertaken in accordance with the measures provided in the biodiversity assessment report.	Design/pre-construction	Appendix E – Procedure 1: Biodiversity
B3	Areas of biodiversity value outside the project area would be marked on plans, and fenced or signposted where practicable, to prevent unnecessary disturbance.	Construction	Appendix E – Procedure 1: Biodiversity
B4	Impacts to Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine - Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box would be avoided. The locations of these species and communities would be marked on plans, fenced on site, and avoided.	Construction	Appendix E – Procedure 1: Biodiversity
B5	Equipment storage and stockpiling would be restricted to identified compound sites and already cleared land.	Construction	Appendix E – Procedure 1: Biodiversity
B6	A trained ecologist would be present during the clearing of native vegetation or removal of potential fauna habitat to avoid impacts on resident fauna and to salvage habitat resources as far as is practicable.	Construction	Appendix E – Procedure 1: Biodiversity
B7	Priority weeds would be managed in accordance with the Biosecurity Act 2015. Weeds of national environmental significance would be managed in accordance with the Weeds of National Significance Weed Management Guide.	Construction	Appendix E – Procedure 1: Biodiversity
TC1	Guided by the Temporary Transport Strategy, detailed temporary transport plan/s would be developed prior to construction to manage the movement of people along the T3 Bankstown Line during possession periods. The plans would be developed in consultation with key stakeholders (including Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, Sydney Trains, local councils, emergency services, and bus operators), and would address the requirements specified by the Temporary Transport Strategy. The	Pre-construction/construction	Possession specific transport / pedestrian diversion plans

REMM No.	REMM Requirement	Timing	Document Reference
	development of each plan would consider, as a minimum: • a review of the road network constraints along any proposed rail replacement bus route • further traffic analysis of key intersections used by rail replacement buses • potential impacts to local road networks affected by rail passengers diverting to cars to reach their destinations • the design of temporary facilities at bus stop locations in consultation with the relevant road authority • expected changes to parking demand at other stations, displacement of existing parking, and any upgrades that may be required.		
TC3	The impacts on the surrounding road network of lane closures resulting from bridge works across the rail corridor would be assessed in detail, to identify the suite of management measures to be implemented for each closure required. This would be undertaken in consultation with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, the Inner West and Canterbury-Bankstown councils, emergency services, and relevant bus operators. Planning for partial bridge closures would consider bus rerouting and timetabling, with the intention of minimising impacts to bus customers and bus operators.	Construction	Traffic Guidance Schemes Road Occupancy Licences
TC4	Opportunities to reduce the loss of existing on and off street car parking (including the amount of spaces reduced and the time associated with this reduction) would be reviewed during detailed design and construction planning.	Design/pre-construction	Environmental Control Maps Traffic Guidance Schemes
TC5	Where parking spaces are lost or access is impeded, particularly for extended periods, alternative parking would be provided wherever feasible and reasonable. This would include consideration of other privately owned (or vacant) land within close proximity to affected stations.	Construction	Environmental Control Maps Traffic Guidance Schemes
TC6	Further consideration of the need for intersection modifications would be undertaken, to improve intersection performance at locations most affected by the addition of construction heavy vehicles and rail replacement buses. This would be undertaken in consultation with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, and the relevant road authority. The improvements considered would include: • modification to the existing traffic signal phasing • lane priority changes • changing lane designations (line markings and signage) • kerbside changes (such as removing on street parking or implementing no standing zones at peak times to increase lane capacity) • physical geometric changes (such as minor kerb cut-backs to enable large vehicles to safely move through intersections) • restricting turning movements where traffic demand is low.	N/A	Sydney Metro Scope

REMM No.	REMM Requirement	Timing	Document Reference
TC7	Where existing cycle facilities (e.g. bike parking) would be temporarily unavailable at a station, suitable replacement facilities would be provided while the facility is unavailable.		Traffic Guidance Schemes Road Occupancy Licences
TC8	A construction Traffic Management Plan would be prepared and implemented prior to construction. The plan would be prepared in accordance with the Construction Environmental Management Framework, and would detail, as a minimum: • how traffic would be managed when construction works are being carried out • the activities proposed and their impact on the road network and on road users • how these impacts would be addressed. The plan would be prepared in consultation with the Traffic and Transport Liaison Group, and would be approved by the relevant authority before construction commences.		Traffic Management Plan
TC9	Modification of existing bus stops, or implementation of new stops and alterations to service patterns, would be carried out by Sydney Metro in consultation with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and bus operators.		Sydney Metro scope
TC10	Sydney Metro would undertake an extensive community awareness and information campaign before changes to public transport services are implemented. This would include a range of communication activities such as: • information at stations • wayfinding signage • clearly marked bus stop locations • letter box drops • web based information and transport 'app' where changes to travel are found in a single place • information via 131 500 • advertising in local papers • email information bulletins.		Sydney Metro scope
TC11	Consideration of special events would be undertaken as part of construction work programming. For special events that require specific traffic and pedestrian management, measures would be developed and implemented in consultation with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and the organisers of the event.		Traffic Guidance Schemes Road Occupancy Licences
TC12	Vehicle access to and from construction sites would be managed to ensure pedestrian, cyclist, and motorist safety. Depending on the location, this may require manual supervision, barrier placement, temporary traffic signals, modifications to existing traffic signals, or police assistance.		Traffic Management Plan Construction Programming

REMM No.	REMM Requirement	Timing	Document Reference
TC13	Construction vehicles (including contractor staff vehicles) would be managed to: • minimise parking or queuing on public roads • minimise use of residential streets to gain access to work sites or compounds • minimise vehicle movements near schools, particularly during school start and finish times.		Environmental Control Maps
TC14	Directional signage and line marking would be used to direct and guide drivers, pedestrians, and other road users past construction compounds and work sites, and on the surrounding road network. This may be supplemented by variable message signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternate routes.		Traffic Management Plan
TC15	Construction sites would be managed to minimise construction worker parking on surrounding streets. A worker car parking strategy would be developed in consultation with the relevant local council to identify measures to reduce the impact on the availability of on street and off street parking. The strategy would identify potential mitigation measures including alternative parking locations. The strategy would encourage contractor staff to: • use public transport • car share • park in a designated off site area and access construction sites via shuttle bus.		Traffic Management Plan
TC16	In the event of a traffic related incident, co-ordination would be carried out with the Sydney Coordination Office and Transport Management Centre's Operations Manager.		Traffic Management Plan
TC17	The community would be notified in advance of proposed road and pedestrian network changes through appropriate forms of community notification.		Community Notifications Road Occupancy Licences
TC18	A condition survey would be undertaken to confirm changes to routes proposed to be used by pedestrians and/or cyclists are suitable (e.g. suitably paved and lit), with identified modification requirements discussed with the Inner West and/or Canterbury-Bankstown councils and implemented prior to use of the routes.		Traffic Management Plan
TC19	Pedestrian, cyclist, and motorist safety in the vicinity of the construction sites would be addressed during construction planning and development of the construction Traffic Management Plan. Measures that may be implemented to assist in multi modal traffic management include: • speed awareness signs in conjunction with variable message signs near construction sites to provide alerts to drivers • a community engagement program to provide road safety education and awareness to road users about sharing the road safely with heavy vehicles • heavy vehicle training for drivers to understand route constraints, safety issues, and limiting the use of compression braking • safety technology and equipment installed on heavy vehicles to enhance vehicle visibility,		Traffic Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
	eliminate vehicles' blind spots, and monitor vehicle location, speeding compliance, and driver behaviour.		
TC20	Access for residents, businesses, and community infrastructure would be maintained. Where disruption to access cannot be avoided, consultation would be undertaken with the owners and occupants of affected properties, to confirm their access requirements and to discuss alternatives.		Traffic Management Plan
TC21	Access to stations and surrounding properties for emergency vehicles would be provided at all times. Emergency service providers (i.e. police and ambulance) would be consulted throughout construction to ensure they are aware of station closures, changes to access, including bridge lane closures, and changes to station or rail corridor access.		Traffic Management Plan
TC22	The potential cumulative effects of construction traffic from multiple construction sites within the project would be further considered during development of the construction Traffic Management Plan. Where there is potential for cumulative impacts across the project, these issues would be addressed with the assistance of the Traffic and Transport Liaison Group.		Traffic Management Plan
NVC1	In accordance with the Construction Noise and Vibration Strategy, construction noise impact statements would be prepared prior to the commencement of construction components, to consider the scale and duration of construction noise impacts, and identify measures to minimise impacts to sensitive receivers. This would include noise modelling to confirm the results of modelling undertaken as part of the Environmental Impact Statement and Submissions and Preferred Infrastructure Report. Where exceedances of the noise management levels are identified, feasible and reasonable mitigation measures would be identified.		Noise and Vibration Management Plan Monitoring Reports
NVC2	In accordance with the Construction Noise and Vibration Strategy, all employees, contractors and subcontractors would receive an environmental induction. The induction must at least include: • relevant project specific and standard noise and vibration mitigation measures • relevant licence and approval conditions • permissible hours of work • any limitations on high noise generating activities • location of nearest sensitive receivers • designated loading/unloading areas and procedures • site opening/closing times (including deliveries).		Noise and Vibration Management Plan Environmental Control Maps
NVC3	Where vibration levels are predicted to exceed the vibration screening level, a more detailed assessment of the structure would be carried out to determine the appropriate vibration limits for that structure.		OOHW Environmental Control Maps

REMM No.	REMM Requirement	Timing	Document Reference
NVC4	For heritage items where vibration screening levels are predicted to be exceeded, the more detailed assessment would include condition assessment and specifically consider the heritage values of the structure in consultation with a heritage specialist to ensure sensitive heritage fabric is adequately monitored and managed.		Noise and Vibration Management Plan
NVO1	An operational noise and vibration review would be undertaken to guide the approach to identifying reasonable and feasible mitigation measures to incorporate in the detailed design. This would include noise modelling to confirm the results of modelling previously undertaken. Where exceedances of the operational noise objectives in the Rail Infrastructure Noise Guidelines (EPA, 2013) are identified reasonable and feasible mitigation measures would be identified.		Noise and Vibration Management Plan
NVO2	The height and extent of noise barriers adjacent to the project would be confirmed during detailed design with the aim of not exceeding trigger levels from the Rail Infrastructure Noise Guidelines (EPA, 2013). At-property treatments would be offered either on their own or in combination with a noise barrier where there are residual exceedances of the noise trigger levels. Where practicable, operational stage noise mitigation would be installed early to assist with the management of construction noise.		Noise and Vibration Management Plan
NVO3	Operational noise from substations would be controlled by inclusion of appropriate mitigation, such as shielding or enclosures, and specification of equipment selection, to comply with the Industrial Noise Policy (EPA, 2000).		Noise and Vibration Management Plan
NVC5	The Construction Noise and Vibration Strategy would be implemented with the aim of achieving the noise management levels where feasible and reasonable. This may include the following example mitigation measures alone or in combination, where feasible and reasonable: • The provision of noise barriers around each construction site. • The coincidence of noisy plant working simultaneously close together would be avoided. • Residential grade mufflers would be fitted to all mobile plant. • Non-tonal reversing alarms would be fitted to all permanent mobile plant. • High noise generating activities would be scheduled for less sensitive periods considering the nearby receivers, where reasonable and feasible. • The layout of construction sites would consider opportunities to shield receivers from noise. • Stationary noise sources would be enclosed or shielded whilst ensuring that the occupational health and safety of workers is maintained. • Loading and unloading of materials/deliveries is to occur as far as possible from noise sensitive receivers. • Select site access points and roads as far as possible away from noise sensitive receivers. • Dedicated loading/unloading areas to be shielded if close to noise sensitive receivers		Noise and Vibration Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
	wherever feasible and reasonable. • Use quieter and less vibration emitting construction methods where feasible and reasonable. • The noise levels of plant and equipment must have operating Sound Power Levels compliant with the criteria in the Construction Noise and Vibration Strategy. • Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site. • Where feasible and reasonable, the offset distance between noisy plant items and nearby noise sensitive receivers would be as great as possible. • Where reasonable and feasible heavy vehicle movements would be limited to daytime and evening hours, with night-time movements avoided where possible. • Active community consultation and the maintenance of positive, cooperative relationships with schools, local residents and building owners and occupiers, through: – periodic notification or work activities and progress (e.g. regular letterbox drops, e-consult) – specific notification (letter-box drop) prior to especially noisy activities – comprehensive website information – project information and construction response telephone line – email distribution lists. • Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site. • Where feasible and reasonable, the offset distance between noisy plant items and nearby noise sensitive receivers would be as great as possible. • Where reasonable and feasible heavy vehicle movements would be limited to daytime and evening hours, with night-time movements avoided where possible. • Active community consultation and the maintenance of positive, cooperative relationships with schools, local residents and building owners and occupiers, through: – periodic notification or work activities and progress (e.g. regular letterbox drops, e-consult) – specific notification (letter-box drop) prior to especially noisy activities – comprehensive website information – project information and construction response telephone line – email distribution lists. • Plan traffic flow, parking and loading/unloading areas to minimise reversing movements within the site. • Where feasible and reasonable, the offset distance between noisy plant items and nearby noise sensitive receivers would be as great as possible. • Where reasonable and feasible heavy vehicle movements would be limited to daytime and evening hours, with night-time movements avoided where possible. • Active community consultation and the maintenance of positive, cooperative relationships with schools, local residents and building owners and occupiers, through: – periodic notification or work activities and progress (e.g. regular letterbox drops, e-consult) – specific notification (letter-box drop) prior to especially noisy activities		

REMM No.	REMM Requirement	Timing	Document Reference
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NVC6	Noise intensive plant for construction activities, including ballast tampers would not be used during the night-time period (10pm to 7am) unless: • during a weekend rail possession or shut down • a requirement of a road authority, emergency services or Sydney Coordination Office requires works to be undertaken during this period.		Noise and Vibration Management Plan
NVC7	When working adjacent to schools, medical facilities and child care centres, particularly noisy activities would be scheduled outside normal working hours, where reasonable and feasible.		Noise and Vibration Management Plan
NVC8	When working adjacent to churches and places of worship, particularly noisy activities would be scheduled outside services, where reasonable and feasible.		Noise and Vibration Management Plan
NVC9	Alternative accommodation may be offered to residents living in close proximity to construction works where detailed construction planning identifies unreasonably high noise impacts over a prolonged period. Alternative accommodation arrangements would be offered and discussed with residents on a case-by-case basis.		Noise and Vibration Management Plan
NVC10	High noise and vibration generating activities including ballast tamping may only be carried out in continuous blocks, not exceeding 3 hours each, with a minimum respite period of one hour between each block and these works.		Noise and Vibration Management Plan
NVC11	Ongoing noise monitoring would be undertaken during construction at sensitive receivers during critical periods (i.e. times when noise emissions are expected to be at their highest to identify and assist in managing high risk noise events.		Noise and Vibration Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
NVC12	Where vibration levels are predicted to exceed the vibration screening level, attended vibration monitoring would be carried out to ensure vibration levels remain below appropriate limits for that structure.		Noise and Vibration Management Plan
NVC13	Reasonable and feasible measures would be implemented in accordance with the Construction Noise and Vibration Strategy to minimise groundbourne noise where exceedances are predicted.		Noise and Vibration Management Plan OOHW 1 - MR-00H1-001 OOHW 2 - MR-00H2-001 OOHW 3 - MR-00H3-001 OOHW 4 - MR-00H4-001
NVC14	Reasonable and feasible mitigation measures would be implemented where power supply works would result in elevated noise levels at receivers. This could include: • carrying out works during the daytime period when in the vicinity of residential receivers • where out of hours works are required, scheduling the noisiest activities to occur in the evening period (up to 10pm) • use of portable noise barriers around particularly noisy equipment.		Noise and Vibration Management Plan
NVC15	The routes for construction haulage vehicles and bus services associated with the Temporary Transport Strategy would be selected on the basis of compliance with the relevant road traffic noise criteria, where reasonable and feasible. Where compliance with the noise criteria is not possible, reasonable and feasible noise mitigation would be implemented.		Environmental Control Maps
NVC16	An Out of Hours Work Strategy would be prepared, in consultation with the Environment Protection Authority, to guide the assessment, management, and approval of works outside recommended standard hours.		Noise and Vibration Management Plan OOHW 1 - MR-00H1-001 OOHW 2 - MR-00H2-001 OOHW 3 - MR-00H3-001 OOHW 4 - MR-00H4-001
NAH1	The project design would minimise adverse impacts to heritage buildings, elements, fabric, spaces and vistas that contribute to the overall heritage significance of the Bankstown Line.		Heritage Management Plan OOHW 1 - MR-00H1-001 OOHW 2 - MR-00H2-001 OOHW 3 - MR-00H3-001 OOHW 4 - MR-00H4-002
NAH2	The project design would maximise the retention and legibility of heritage buildings, structures, fabric, spaces and vistas that are individually significant and contribute to the overall heritage significance of the Bankstown Line.		Heritage Management Plan
NAH3	The project design would complement retained heritage buildings, elements, fabric, spaces and vistas to avoid outcomes that compromise the significance of these heritage items.		Heritage Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
NAH4	The project design would be developed with guidance from an appropriately qualified and experienced conservation architect.		Heritage Management Plan
NAH5	Where heritage significant items or elements are to be retained within the operational area, an adaptive reuse strategy would be prepared by an appropriately qualified and experienced heritage architect.		Heritage Management Plan
NAH6	A Heritage Interpretation Plan would be prepared to document the development of the Bankstown Line and detail the history of each station and its contribution to both the Bankstown Line and the surrounding suburbs. Appropriate heritage interpretation would be incorporated in the design and would provide legible connection between stations.		Heritage Management Plan
NAH7	A moveable heritage item strategy would be prepared by an appropriately qualified and experienced heritage specialist in consultation with Sydney Trains, and would include a comprehensive record of significant railway elements to be impacted. This would include items contained within station and platform buildings as well as of any other significant equipment within the curtilage of the heritage railway stations. The moveable heritage item strategy would form part of the broader interpretation strategy.		Heritage Management Plan
NAH8	Where significant buildings are to be re-purposed or refreshed: - the inherent character of the building should be retained with new additions, including form, palette and materiality, sympathetic to its heritage values - a suitably qualified and experienced heritage architect should advise on appropriate materials and finishes which would be sympathetic to the heritage values of each individual station - the internal layout of the building should be retained where possible, and rooms should not be subdivided unless it can be completed without adverse impact and/or is reversible without any long term adverse impact - a significant element register should be prepared by a suitably qualified and experienced heritage architect. The register should list significant fabric, assess its condition, tolerance for change and recommend retention or salvage - where fabric of high significance is to be removed, adequate assessment should be carried out that outlines impact and justification in accordance with the Statements of Heritage Impact guidelines (NSW Heritage Council 2002)		No buildings to be re-purposed or refreshed as part of the CIRA works
NAH12	The archaeological research design, including any mitigation measures identified in the Archaeological Assessment and Research Design report, would be implemented.		Landscape and Visual Plan
NAH14	An unexpected finds procedure would be developed and included in the construction heritage management plan.		Heritage Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
NAH15	Methodologies for the removal of existing structures and construction of new structures would be developed and implemented during construction to minimise direct and indirect impacts to other elements within the curtilages of the heritage items, or to heritage items located in the vicinity of works.		Heritage Management Plan
NAH16	All retained heritage buildings, structures, fabric and moveable heritage items would be protected to avoid damage during works in the vicinity of these items, including from vibration. Retained significant buildings or elements susceptible to damage would be protected by hoardings or screens.		Heritage Management Plan
NAH17	Prior to construction commencing, a detailed inventory of all buildings, structures, fabric, spaces and vistas of heritage significance that are to be retained or removed would be prepared by appropriately qualified and experienced heritage specialists. The inventory must provide an assessment of the heritage impact based on the significance of each element and sub-element that comprises it and include recommendations for protection and conservation relative to the identified level of heritage significance. In the event that unexpected archaeological remains, relics, or potential heritage items are discovered during construction, all works in the immediate area would cease, and the unexpected finds procedure would be implemented.		Heritage Management Plan
NAH18	In the event that unexpected archaeological remains, relics, or potential heritage items are discovered during construction, all works in the immediate area would cease, and the unexpected finds procedure would be implemented.		Heritage Management Plan
NAH19	In the event that a potential burial site or potential human skeletal material is exposed during construction, the Transport for NSW Exhumation Management Plan would be implemented.		Heritage Management Plan
NAH20	All works to conserve, protect or remove significant heritage fabric would be undertaken by skilled tradespeople with experience working on heritage sites, in consultation with an appropriately qualified conservation heritage architect.		Heritage Management Plan
NAH21	A conservation management plan would be prepared for all State Heritage Register listed stations, in accordance with NSW Heritage Council guidelines. The plan would address any changes to the item, including updated assessment of significance of elements and recommendations on curtilage changes. It would also provide suggested site specific exemptions and management policies.		Heritage Management Plan
NAH22	A conservation management strategy would be prepared for nominated Section 170 register listed stations not listed on the State Heritage Register, in accordance with NSW Heritage Council guidelines.		Heritage Management Plan
AH1	Aboriginal stakeholder consultation would continue to be undertaken in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECC, 2010).		Heritage Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
AH2	The Aboriginal Cultural Heritage Assessment Report would be implemented.		Heritage Management Plan
AH5	If potential Aboriginal items are uncovered during the works, all works in the immediate area would cease, and the unexpected finds procedure included in the construction heritage management plan would be implemented. During pre-work briefings, employees would be made aware of the unexpected finds procedures and obligations under the National Parks and Wildlife Act 1974.		Heritage Management Plan
LU3	Sydney Metro would establish a working group with Canterbury-Bankstown Council to investigate improved precinct outcomes in the vicinity of Campsie Station.		Heritage Management Plan
LU4	Temporary use areas, including public open space, would be restored to their pre-existing condition (as a minimum) as soon as practicable following completion of construction. This would be undertaken in consultation with the relevant council and/or the landowner.		Heritage Management Plan
SO1	Sydney Metro would continue to work with stakeholders and the community to ensure they are informed about the project and have opportunities to provide feedback to the project team. The existing community contact and information tools would remain in place throughout the duration of the project. Consultation prior to and during construction would involve the use of appropriate tools, including, but not limited to, tools such as community information sessions, forums, briefings, and displays; distribution of project materials in a variety of languages; door knocks; Place Managers; and site signage.		Sydney Metro scope
SO2	Prior to construction, consultation would be undertaken with sensitive community facilities (including aged care, childcare centres, educational institutions, and places of worship). Consultation would aim to identify and develop measures to manage the specific construction impacts for individual sensitive community facilities. These measures would be incorporated into the relevant management plans.		Heritage Management Plan
SO3	Access to community facilities and infrastructure would be maintained during construction, where possible. Where alternative access arrangements need to be made, these would be developed in consultation with relevant service providers, and communicated to users.		Traffic Guidance Schemes Environmental Control Maps Road Occupancy Licences
SO4	A workforce development plan would be prepared and implemented during construction, to support local employment and business opportunities, provide skills development, and increase workplace diversity.		Construction Workforce Development Plan
BI1	A business management plan would be prepared and implemented during construction, to define the location specific measures and strategies to minimise impacts on individual businesses during construction. The plan would also include:		Business Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
	- a business consultation forum - roles and responsibilities - monitoring, auditing, reporting, and complaints management procedures.		
BI2	The Sydney Metro City & Southwest Small Business Owners Support Program would be implemented to provide assistance to small business owners adversely impacted by construction. The program would be administered by a retail advisory/support panel established by Sydney Metro.		Sydney Metro scope
LV1	The design would be guided by the Transport for NSW Around the Tracks – urban design for heavy and light rail.		Design reports Urban Design Plan
LV4	The management of trees during detailed design and construction planning would be guided by the project's Tree Management Strategy, which would be developed in consultation with councils and include consideration of relevant local plans and strategies. Where removal cannot be avoided, trees would be replaced in accordance with the Tree Management Strategy, including replacement of removed trees in a two for one ratio. Opportunities to retain and protect existing trees would be defined during detailed design and construction planning, in accordance with the project's Tree Management Strategy. The design would aim to reduce tree removal to the extent practicable, particularly where they contribute to screening vegetation or landscape character.	Design/preconstruction	Most vegetation was removed as part of the construction of the stations. CIRA works require minimal vegetation removal which is identified in the Tree Reports
LV5	Lighting would be designed in accordance with AS 4282 Control of the Obtrusive Effects of Outdoor Lighting. Lighting would be designed to minimise light spill and glare into adjoining areas.		Urban Design Plan
LV6	The selection of materials and colours for noise barriers and hoardings would aim to minimise their visual prominence.		Urban Design Plan
LV7	The use of transparent panels in noise barriers would be considered where views to local landscape features and district views would be obstructed.		Urban Design Plan
LV8	Fencing would be designed to be of a high quality urban finish near stations.		Urban Design Plan
LV10	A visual amenity management plan would be prepared and implemented during construction, to define the measures to minimise visual impacts during construction. The plan would include requirements in relation to construction site remediation.		Visual Amenity Plan
LV11	Mitigation measures for landscape and visual impacts would be implemented as soon as feasible and reasonable after the commencement of construction, and remain for the duration of the construction period.		Visual Amenity Plan
LV12	Trees to be retained would be protected prior to the commencement of construction in accordance with AS4970-2009 Protection of trees on development sites and the project's		Tree Reports where applicable

REMM No.	REMM Requirement	Timing	Document Reference
	Tree Management Strategy. Any tree pruning would be undertaken in accordance with the project's Tree Management Strategy, guided by a tree report prepared by a qualified arborist.		
LV13	The design and maintenance of construction compound hoardings would aim to minimise visual amenity and landscape character impacts. Graffiti would be removed promptly, and public art opportunities would be considered.		Ancillary Facilities Approval Visual Amenity Plan
LV14	The selection of materials and colours would aim to minimise their visual prominence.		Visual Amenity Plan
LV15	Lighting of work areas, compounds and work sites would be oriented to minimise glare and light spill impact on adjacent receivers.		Visual Amenity Plan
LV16	Following completion of construction, site restoration would be undertaken in accordance with the visual amenity management plan. Temporary impacts to public open space would be rehabilitated in consultation with the relevant local council and/or landowner.		Visual Amenity Plan
SC1	Erosion and sediment control measures would be implemented in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) and Managing Urban Stormwater: Soils and Construction Volume 2A (DECC, 2008). Measures would be designed as a minimum for the 80th percentile, five day rainfall event.		Environmental Control Maps Erosion and Sediment Plan
SC2	Prior to ground disturbance in high probability acid sulfate areas, testing would be carried out to determine the presence of acid sulfate soils. If acid sulfate soils are encountered, they would be managed in accordance with the Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998) and the Waste Classification Guidelines - Part 4: Acid Sulfate Soils (EPA, 2014).		Classification Reports
SC3	Prior to ground disturbance in areas of potential soil salinity, testing would be carried out to confirm the presence of saline soils. If saline soils are encountered, they would be managed in accordance with Site Investigations for Urban Salinity (DLWC, 2002).		Classification Reports
SC4	WorkCover dangerous goods searches would be carried out for properties that have potential contamination near Belmore Station, to provide additional site characterisation and identify the risk of contamination in these areas.		Environmental Control Maps
SC5	Prior to ground disturbance, a detailed contamination assessment would be undertaken in areas with a medium to high risk of contamination, to confirm the nature and extent of contamination, specific requirements for further investigation and remediation, and/or management requirements of any contamination.		Environmental Control Maps
SC6	Hazardous materials surveys would be undertaken during detailed design for all proposed demolition activities, and for utility adjustments as required.		Environmental Control Maps

REMM No.	REMM Requirement	Timing	Document Reference
SC7	In the event a Remediation Action Plan is required, it would be developed in accordance with Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (Department of Urban Affairs and Planning and Environment Protection Authority, 1998) and a NSW Environment Protection Authority Accredited site auditor would be engaged to audit the works.		Environmental Control Maps
SC8	In the event that indicators of contamination are encountered during construction (such as odours or visually contaminated materials), work in the area would cease, and the finds would be managed in accordance with the unexpected contamination finds procedure.		Contamination Reports
SC9	During any maintenance work where soils are exposed, sediment and erosion control devices would be installed in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004).		Section 3.2.3 Environmental Control Maps Erosion and Sediment Control Plans
FHW1	Where feasible and reasonable, detailed design would result in no net increase in stormwater runoff rates in all storm events, unless it can be demonstrated that increased runoff rates as a result of the project would not increase downstream flood risk.		Built into EIS Reporting
FHW2	Detailed design of the project would, as required at Bankstown between Stacey Street and Marion Street, take into account the impact of overland flooding for the full range of floods events up to the Probable Maximum Flood level.		Built into EIS Reporting
FHW5	Detailed construction planning would consider flood risk for all compounds and work sites. This would include identification of measures to not worsen existing flooding characteristics. Not worsen is defined as: • a maximum increase in flood levels of 50 mm in a one per cent AEP event • a maximum increase in time of inundation of one hour in a one per cent AEP event • no increase in the potential for soil erosion and scouring from any increase in flow velocity in a one per cent AEP flood event.		Staging Plan
FHW6	The site layout and staging of construction activities would: • avoid or minimise obstruction of overland flow paths and limit the extent of flow diversion required • consider how works would affect the existing stormwater network such that alternatives are in place prior to any disconnection or diversion of stormwater infrastructure.		Staging Plan Section 3.13.2
FHW7	Works within or near watercourses (including the Cooks River) would be undertaken with consideration given to the NSW Office of Water's guidelines for controlled activities.		Appendix E – Procedure 2: Groundwater Appendix E – Procedure 8: Soil and Water
FHW9	The water quality monitoring program would continue during construction, to monitor water quality at identified discharge points.		Water monitoring program not required as there is no Soil and Water Management Sub-plan required.

REMM No.	REMM Requirement	Timing	Document Reference
FHW11	Operational water discharges would be managed in accordance with the water quality management requirements specified in the environment protection licence.		Martinus is not working under an EPL.
AQ1	An air quality management plan would be prepared and implemented during construction, to define the measures to minimise air quality impacts during construction.		Section 4.6 Staging Report Appendix E – Procedure 3: Air Quality
SCC1	Sustainability initiatives and targets would be reviewed and incorporated into the detailed design to support the achievement of the project's sustainability objectives. A best practice level of performance would be targeted using relevant sustainability rating tools e.g. ISCA as built 'excellent' level rating.		Sustainability Management Plan
SCC2	A sustainable procurement strategy would be developed and implemented to apply to Principal Contractors, their subcontractors, and their suppliers.		Sustainability Management Plan
SCC3	A workforce development and industry participation strategy would be developed covering both construction and operation.		Sustainability Management Plan
SCC4	The need for climate change risk treatments would be assessed and incorporated into the detailed design, where required.		Sustainability Management Plan
SCC5	An iterative process of greenhouse gas assessments and design refinements would be carried out during detailed design and construction to identify opportunities to minimise greenhouse gas emissions. Performance would be measured in terms of a percentage reduction in greenhouse gas emissions from a defined reference footprint.		Sustainability Management Plan
SCC6	Sustainability reporting (and corrective action where required) would be undertaken during construction.		Sustainability Management Plan
SCC7	The construction workforce development plan would be implemented.		Sustainability Management Plan
SCC8	25 per cent of the greenhouse gas emissions associated with consumption of electricity during construction would be offset.		Sustainability Management Plan
HRS1	A hazard analysis would be undertaken during the detailed design stage to identify risks to public safety from the project, and how these can be mitigated through safety in design.		Hazard Reports Environmental Control Maps
HRS3	All utilities adjustments or relocation would be undertaken in accordance with the Utilities Management Framework.		Hazard Reports Environmental Control Maps
HRS4	All hazardous substances that may be required for construction and operation would be stored and managed in accordance with the Storage and Handling of Dangerous Goods		Hazard Reports Environmental Control Maps

REMM No.	REMM Requirement	Timing	Document Reference
	Code of Practice (WorkCover NSW, 2005) and the Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (Department of Planning, 2011).		
WM1	Detailed design would include measures to minimise excess spoil generation. This would include a focus on optimising the design to minimise spoil volumes, and the reuse of material on-site.		Waste Management and Recycling Plan
WM2	A recycling target of at least 90 per cent would be adopted.		Waste Management and Recycling Plan
WM3	Spoil would be managed in accordance with the spoil management hierarchy.		Waste Management and Recycling Plan
WM4	Target 100 per cent reuse of reusable spoil.		Waste Management and Recycling Plan
WM5	Construction waste would be minimised by accurately calculating materials brought to the site and limiting materials packaging.		Waste Management and Recycling Plan
WM6	All waste would be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).		Waste Management and Recycling Plan
WM7	Waste segregation bins would be located at various locations within the project area, if space permits, to facilitate segregation and prevent cross contamination.		Waste Management and Recycling Plan
CI1	Sydney Metro would manage and co-ordinate the interface with projects under construction at the same time. Co-ordination and consultation with the following stakeholders would occur, where required: • Department of Planning and Environment • Roads and Maritime Services • Sydney Trains • NSW Trains • Sydney Buses • Inner West Council • Canterbury-Bankstown Council • Sydney Motorways Corporation • emergency service providers • utility providers • construction contractors. Co-ordination and consultation with these stakeholders would include: • provision of regular updates to the detailed construction program, construction sites and haul routes • identification of key potential conflict points with other construction projects • developing mitigation strategies in order to manage conflicts. Depending on the nature of the conflict, this could involve:		Community Land Management Plan

REMM No.	REMM Requirement	Timing	Document Reference
	– adjustments to the construction program, work activities or haul routes; or adjustments to the program, activities or haul routes of Sydney Metro or other construction projects • co-ordination of traffic management arrangements between projects.		

APPENDIX B – Legal & Other Requirements

Legal requirements

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
Commonwealth requirements		
<i>Environment Protection and Biodiversity Conservation Act, 1999</i>	National environment law that provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, defined in the Act as matters of national environmental significance.	No Relevance The Project will not impact on any matters of national environmental significance or Commonwealth land
<i>National Greenhouse and Energy Reporting Act 2007</i>	Corporations emitting more than 50kT of carbon dioxide equivalent units are required to register and report their Scope 1 and Scope 2 emissions for all Facilities in which they have Operational Control. Facilities emitting more than 25kT of carbon dioxide equivalent units must register and report Scope 1 and Scope 2 emissions.	High Relevance Where the Principal Contractor has Operational Control, the Scope 1 and Scope 2 emissions associated with the project must be reported. This includes the collation and reporting of subcontractors site emissions.
<i>Ozone Protection Act 1989</i>	This Act provides for a system of controls and to regulate and prohibit the manufacture, sale, distribution, use, emission, re-cycling & disposal of stratospheric ozone depleting substances and articles that contain these substances. The impact is that appropriately qualified people in accordance with this Act must undertake all servicing and maintenance of this type of equipment.	Low Relevance The relevance of this Act will relate to the use of refrigerators and air conditioning units in site buildings and vehicles which still contain CFCs. Such items are unlikely to be found on site.
NSW requirements		
<i>Biodiversity Conservation Act 2016</i>	The <i>Biodiversity Conservation Act 2016</i> provides provision for listing of species and ecological communities in NSW, protection of animals and plants, private land conservation agreements, the biodiversity offsetting scheme, Biodiversity Assessment under the EP&A Act 1979, biodiversity certification of land, public consultation on biodiversity matters, the functions of the Biodiversity Conservation Trust, regulatory compliance mechanisms, investigative powers and criminal proceedings under the Act.	Medium Relevance SSI projects are exempt for regulatory compliance mechanisms set out under Part 11 of the <i>Biodiversity Conservation Act</i> . Species listed within the act are recognised and are to be protected.
<i>Biosecurity Act 2015</i> <i>Biosecurity Regulation 2017</i>	This Act relates to diseases and pests that may cause harm to human, animal or plant health or the environment, and for related purposes. Declared weeds are listed in Schedule 8 of the Biosecurity Regulation 2017. This act repeals the <i>Noxious Weeds Act 1993</i> .	Low Relevance The Act relates to the management of vegetation during and removal activities and the duty to notify should certain pests and

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
		diseases be identified. No such species have been identified on the Project's works sites.
Contaminated Land Management Act 1997	This Act provides for a process to investigate and remediate land that has been contaminated and presents a significant risk of harm to human health. Section 60 of the Act is a "Duty to Report Contamination". This duty applies to owners of land and persons who become aware their activities have contaminated the land.	Medium Relevance The relevance of this Act to the Principal Contractor will be in the event suspected or potentially contaminated ground is found during Construction activities.
Dangerous Goods (Road and Rail Transport) Act 2008	The purpose of this Act is to regulate the transport of Dangerous Goods by road and rail in order to promote public safety and protect property and the environment. The transport of Dangerous Goods is required to be appropriately licensed (both vehicle and driver). Depending on the quantities being transported, the Act outlines specific requirements for including appropriate placards on the transport vehicle, emergency procedures, Personal Protective Equipment, manifest documentation and fire extinguishers.	High Relevance The relevance of the Act is in respect to the transport of dangerous good to & from the site. The project will require the use of a variety of dangerous goods. The Principal Contractor will need to review and ensure Dangerous Goods requirements are addressed where transported by its vehicles, plant and equipment.
Environmentally Hazardous Chemicals Act 1985	This Act prohibits the manufacturing, processing, keeping, distributing, conveying, using, selling or disposing of an environmental hazardous chemical or waste (prescribed activity) except under the provisions of a chemical control or a licence. The EPA is required to prepare inventories of environmentally hazardous chemicals and declared chemical wastes.	Low Relevance It is not anticipated any environmentally hazardous chemicals or declared chemical waste will be used or stored on site. The Act therefore has little relevance to the sites other than being aware of the existence of registers of declared chemical wastes and environmentally hazardous chemicals.
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals in NSW.	High Relevance The Project has been declared Critical State Significant Infrastructure (CSSI) by virtue of Schedule 5, clause 4 of <i>State Environmental Planning Policy (State and Regional Development) 2011</i> . The development consent conditions and obligations are incorporated into the CEMP.
Fisheries Management Act 1994	This Act is applicable to all waters within the state including private and public waters and all permanent and intermittent waters. The Act is most relevant in respect to maintaining water quality and ensuring no polluted water from site works enters streams, creeks and waterways. In addition this Act also has relevance for the removal of marine vegetation.	Low Relevance Along with the POEO Act water discharging from the site must not pollute the adjacent streams or watercourses. Projects assessed under Division 5.2 of the EP&A Act are exempt from permits required under sections 201, 205 or 219.

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
Heritage Act 1977	This Act provides for the preservation and conservation of heritage items such as building, works, relic, places of historic interest, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance. Under this Act a relic means any deposit, object or material evidence which is 50 or more years old and relates to the settlement of the area (not being an aboriginal settlement). It is an offence under this Act to wilfully and knowingly damage or destroy items of heritage value. Do not demolish damage, move or develop around any place, building, work, relic, moveable object, precinct, or land that is the subject of an interim heritage order or listing on the State Heritage Register or heritage listing in a Local Environmental Plan without an approval from the Heritage Council (NSW) or local council.	High Relevance
National Parks and Wildlife Act 1974	The relevance of this Act is firstly in respect to the protection and preservation of Aboriginal artefacts. Discovery of material on site suspected as being of Aboriginal origin must be reported and protected pending assessment and direction by the Client's Representative. Secondly it is an offence under Part 8A of this Act to pick or harm threatened species.	Low Relevance No identified Aboriginal artefacts have been identified within the Project's Construction area. Projects assessed under Division 5.2 of the EP&A Act are exempt from obtaining an Aboriginal Heritage Impact Permit required under section 90.
Pesticides Act 1999 Pesticides Regulation 1995	This Act and Regulation establish a legislative framework to regulate the use of pesticides. They have the objective to promote the protection of human health, the environment, property and trade in relation to pesticides. It is an offence under this Act and Regulation to wilfully or negligently misuse pesticides.	Low Relevance It is not envisaged that pesticides will be used on the project by the Principal Contractor.
Protection of the Environment Operations Act 1997	This Act is of most relevance to work being carried out under this contract. It integrates into one Act all the controls necessary to regulate pollution and reduce degradation of the environment, provides for licensing of scheduled development work, scheduled activities and for offences and prosecution under this Act.	High Relevance The POEO Act provides for the issuing of environmental protection notices to control work and activities not covered by licences. Section 148 of the Act requires a pollution incident causing or threatening material harm to the environment to be notified to the EPA and other authorities immediately. If an EPL is required for this Project, then this CEMP and Sub-plans will be revised to reflect the EPL's requirements.
Roads Act 1993	This Act and associated Regulation primarily provide for such things as the opening and closing of public roads, identification of road boundaries and road widening, road levels, classification of public roads, road work, protection of	Medium Relevance This act governs Road Occupancy Licences (ROL) that will be required for works on and round roads. An ROL cannot be refused

Legal and Other Requirements	Summary of Obligations	Relevance to the Project / Notes and System
	public road and regulation of traffic, regulation of work, structures and activities.	to carry out works required under an SSI approval as per Section 115ZH of the EP&A Act.
Rural Fires Act 1997	This Act is intended to prevent, mitigate and suppress bush and other fires. It places a duty on the Principal Contractor as the occupier of the site to extinguish fires during bush fire danger periods or if unable to do so notify appropriate firefighting authorities of the existence of the fire and its location.	Low Relevance The Project's work sites and surrounding areas are not prone to bush fires.
Sydney Water Act 1994 Sydney Water Regulation 1994	This Act and Regulation establishes the Sydney Water Corporation as a statutory State owned corporation. The functions of the Sydney Water Corporation is to supply and store water, provide sewerage services, provide stormwater drainage and dispose of waste water within it area of operations.	High Relevance Coordination will be required with Sydney Water during the works.
Waste Avoidance and Resource Recovery Act 2001	This Act repeals the <i>Waste Minimisation and Management Act 1995</i> . The purpose of the Act is to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecological sustainable development. The Act provides for the making of policies and strategies to achieve these ends. It is an offence under the <i>Protection of the Environment Operations Act</i> to wilfully or negligently dispose of waste in a manner that harms or is likely to harm the environment.	High Relevance The relevance of the Act to this project is to implement the strategies by adopting the hierarchy of avoidance; avoidance of unnecessary resource consumption; resource recovery (including reuse, reprocessing, recycling and energy recovery), disposal (as a last resort).
Water Act 1912	This Act provides for licences to extract water for Construction purposes either from surface or artesian sources. Should Construction water be extracted from surface (other than sedimentation ponds) or artesian sources a licence will be required.	Low Relevance It is not proposed that Construction water will be obtained from surface (e.g. creeks, lakes etc.) or artesian sources.
Water Management Act 2000 Water Management (General) Regulation 2004	This Act repeals the Rivers and Foreshores Improvement Act, 1948 and the Water Act, 1912. The provisions of both the aforesaid Acts are progressively rescinded as Water Management Plans are prepared and gazetted for catchment areas within the state. This Act and Regulation provide for the protection, conservation and ecologically sustainable development of water sources of the State and in particular to protect, enhance and restore water sources and their associated ecosystems.	No Relevance Projects assessed under Division 5.2 of the EP&A Act are exempt from obtaining water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91.

Other requirements

Approval / Licence	Requirement	Relevant section of CEMP
Section 143 notice of POEO Act	Prior to transportation of waste to receiving facility	Appendix E - Procedure 4: Waste and Spoil
Road Occupancy Licences	Prior to commencement of traffic related works that require access to roads	Section 2.2 and Appendix B

APPENDIX C – Risk Assessment

This appendix includes an indicative risk assessment for the Project. Martinus will be responsible for revising this risk assessment to adequately reflect any changes to the scope of works and/or methodologies, and to conform to the E&SMS.

All indicative environmental issues have been assessed in accordance with the table below:

Risk Assessment Rankings:

- >31 Very High;
- 22 to 30 High;
- 11 to 21 Medium; and
- 1 to 10 Low.

Risks will be reassessed following the consideration of control measures. Martinus will be responsible for nominating an owner for the implementation of management measures.

Issues or activities that represent a Very High risk after the application of control measures are not to be undertaken.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
Approvals and Licensing									
Not identifying appropriate approvals, licenses or permits required and proceeding without them	Works delayed, infringements, prosecution, poor community relations and reputational loss.	L4	C3	17	Review the project planning approval and statutory documentation for requirements relevant to the Project. Identify and implement approval requirements within the CEMP, sub-plans.. Check contract documentation. Identify and implement requirements from the Contract. Establish a register of approvals, licenses and permits.	L5	C3	13	Maintain Compliance Risk Matrix Undertake environmental audits as per Section 3.9 of this plan
Noise									
Noise from general construction activities resulting in impact to residents	Disturbance to residents or neighbouring businesses. Potential for complaints.	L2	C5	18	Mitigation measures as per NVMP are to be implemented. Respond to community enquiries and complaints in accordance with Sydney Metro requirements and implement the OCCS. Consult with the community in relation to upcoming activities that may result in concern. Monitor noise for compliance as the works progress at receiver locations. Provide periods of respite for high noise generating activities. Apply noise mitigation measures during entire project. Noise efficient equipment to be used on site.	L3	C5	12	Noise performance will be continually monitored as per the requirements of the NVMP. The Sydney Metro Construction Noise and Vibration Strategy is to be implemented

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
Noise during works required to be undertaken out of standard construction hours	Disturbance to residents or neighbouring businesses with potential for complaints.	L2	C5	18	Implement noise mitigation strategies for OOHW. Monitor noise for compliance to project goals. Control Measures as per the NVMP are to be implemented.	L3	C4	11	Noise performance will be continually monitored as per the requirements of the NVMP. The Sydney Metro Construction Noise and Vibration Strategy (CNVS) is to be implemented
Vibration									
Vibration intensive activities undertaken on the site such as hammering, vibratory rolling, etc	Disruption, annoyance and nuisance to residents. Potential damage to adjacent residential and commercial residences and structures. Disruption to businesses as a result of vibration nuisance	L3	C5	12	Mitigation measures as per the NVMP are to be implemented. Determine vibration limits and structure/receiver offset distances. Consult with potentially affected parties prior to commencement of works on their upcoming activities that may be impacted by construction vibration. Ongoing vibration monitoring during vibration intensive works, where required.	L4	C5	7	Standard and additional mitigation measures for sensitive receptors around the Project works will be applied as per the CNVS, NVMP and the CNVIS.
Water Quality, Erosion and Sedimentation									
Sediment laden runoff from construction works leaving site	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life. Fines for sediment escaping site.	L4	C4	11	Mitigation Measures as per any ECM to be implemented. Install erosion and sediment controls within the project area. Ensure measures are inspected and maintained as the works progress and also prior to and post rainfall events. Provide training and awareness on the need to prevent pollution.	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					Relevant people to undertake Erosion and Sediment Control training.				
Stockpiling of vegetation and topsoil	Wind and water erosion causing weed/seed dispersion offsite. Location of stockpiling next to waterways causing weeds/seeds to disperse from construction site.	L4	C3	17	Develop Environmental Control Maps to show stockpile areas. Use temporary stockpiling.	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Non-compliant water from construction works discharged from site	Non-compliant water entering stormwater system waterways (i.e. polluting - not compliant with discharge criteria).	L4	C4	11	Induction and toolbox talks Toolbox training on site procedures for dewatering procedure and consequences if not implemented. Educate site staff on requirements and consequences of prosecution.	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Works with the potential to intercept groundwater table	Ground water entering excavations Without appropriate safeguards onsite could lead to ground water contamination Spreading contamination via groundwater management	L3	C4	16	Implement the controls within Appendix E - Procedure 2: Groundwater Induction and toolbox talks Toolbox training on site procedures for water discharge Educate site staff on requirements and consequences of prosecution	L4	C4	11	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Waste									

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
Waste disposal during construction	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	L3	C5	12	Implement the controls within Appendix E - Procedure 4: Waste and Spoil Identify opportunities to incorporate recovered materials into the permanent works. Provide facilities on site for source separation and recycling. Ensure accurate waste records are retained. Removal of wastes from the site will only be undertaken by a licensed contractor as required by the POEO Act and with appropriate approvals, if required, for contaminated materials, etc. All material to be recovered off-site to be appropriately classified in accordance with the Resource Recovery Exemptions. All material that requires off-site disposal to be appropriately tested and classified against the Waste Classification Guidelines (NSW EPA, 2014)	L4	C5	7	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Monitor and ensure reporting of all movements of waste from the worksite.
Earthworks spoil disposal	Incorrect classification of waste (spoil) resulting in incorrect / illegal disposal/reuse.	L3	C5	12	Inductions, toolbox talks and training on recycling facilities and waste segregation practices. Separation of waste on site. Tracking of disposal processes. All contamination hotspots will be clearly marked in the field (where possible). Hotspots will be shown within contamination mapping and	L4	C5	7	Regular inspections of work areas Monitor and ensure reporting of all movements of waste from the worksite

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					will be included in the Permit to Disturb process.				
Washout of concrete in undesignated areas.	Sediment laden/alkaline water polluting surrounding stormwater system /watercourses.	L3	C4	16	Concrete washout areas clearly marked on Environmental Control Maps and delineated. Inductions on designated concrete washout areas. Subcontractor's agreements to include project compliant waste management principles.	L5	C4	8	Regular inspections of concrete washout areas and controls
Contamination									
Management of contaminated or untreated materials	Non-compliant material and contaminated water entering surrounding waterways. Decrease in health of nearby ecosystems.	L3	C4	16	Implement contamination management procedures Identify any contamination hotspots and incorporate procedures for these locations into construction documentation. Apply the unexpected finds procedure Induct personnel on unexpected finds procedure.	L4	C4	11	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Monitor and ensure reporting of all movements of waste from the worksite.
Potential for discovery of unexpected contaminated spoil during construction.	Health effects resulting from airborne contamination, e.g. asbestos. Complaints received from odours released during excavations. Classification of spoil is changed and disposal	L4	C4	11	If contaminated soil is encountered, all works are to stop in the vicinity of the find and investigations commence. Unexpected finds procedure to be implemented. Induct personnel on location, type, nature, concentration of contaminants on site if found.	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Complete regular toolbox talks on how to manage unexpected finds.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
	options altered, costs incurred associated with disposal of higher classification of waste.								
Encountering asbestos / contaminated material on site	Transfer of material into previously uncontaminated area (outside work site) causing new contamination.	L3	C4	16	Inspections of excavated and filled surfaces will be made during Construction to determine the presence of visible asbestos. Conduct further site investigations to determine the presence and extent of contamination prior to Construction works commencing. Contaminated soils will not be stockpiled on the structural fill layer or formation layers to avoid cross contamination.	L4	C4	11	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Complete regular toolbox talks on how to manage unexpected finds.
Hazardous Materials									
Storage of hazardous substances, leaking plant and equipment and spillage from refuelling.	Localised ground contamination / pollution of stormwater and requiring clean-up and/or receiving fines. Risk of igniting volatile substances. Unauthorised access to site / potential vandalism/damage leading to pollution.	L3	C4	16	Induction, toolbox talks and training on appropriate handling and storage of liquids. All storm water drains should be identified prior to works and protection installed. Storage areas to be away from sensitive areas and appropriately bunded. SDS approved prior to bringing hazardous substances on site including risk assessment. Environmental Control Maps show storage locations and associated controls e.g. spill kits, etc. Training in use of spill kits.	L5	C4	8	Regular inspections of storage areas

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					Contingency plans will be developed to deal with any spills which might occur during Construction. Clearly label containers. Regular auditing and inspection of storage areas and materials. Make storage areas restricted access areas. Reduce/eliminate need for hazardous substances. Ensure all work sites are secure before leaving the site. All liquids i.e. paint etc. are to be securely locked away at the end of each day				
Fuel contaminated runoff from construction works leaving site	Fuel contaminated runoff entering stormwater or waterways (i.e. polluting – not compliant with discharge criteria).	L3	C4	16	All storm water drains should be identified prior to works and controls implemented. Appropriate bunding/storage of substances. Toolbox on site procedures for sediment controls and chemical storage. Educate site staff on requirements and consequences of prosecution.	L4	C4	11	Regular inspections of works site to ensure all controls are in good condition and working.
Acid Sulfate Soils									
Disturbance of Potential Acid Sulphate soils (PASS) and Actual Acid Sulphate Soils (ASS) during excavations.	Mobilisation of metals within runoff to levels toxic to natural systems. Release of acidic runoff.	L4	C5	7	Assess risk for acid sulphate soils, and if the risk is determined to be high then implement the Acid Sulphate Soils Procedure Awareness training in the identification and management of ASS.	L5	C5	4	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					Provide containment and treatment facility on site. Ensure ASS material is left under the water table, disposed off-site or appropriately treated in a bunded area with sump.				
Heritage									
Unexpected heritage items encountered.	Work delays, additional studies, approvals required, damage to heritage item.	L3	C4	16	Implement the mitigation measures within the HMP. General inductions toolbox training on heritage management protocols. Label any known heritage items on Environmental Control Maps. If suspected heritage item encountered. Works to stop immediately and implement the Sydney Metro Unexpected Heritage Finds Procedure (refer to HMP). Clearly highlight no-go zones on the ECM and communicate requirements to construction personnel during pre-start briefs, inductions and tool-box talks.	L4	C4	11	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Provide frequent toolbox talks on Unexpected Heritage Finds Procedure
Impact to Heritage Items	Damage to heritage fabric of heritage items by Project works	L3	C3	24	Implement the mitigation measures within the HMP. General inductions toolbox training on heritage management protocols. Label any known heritage items on Environmental Control Maps. Work within the safe working distances nominated in the NVMP. Undertake vibration compliance monitoring as per the NVMP.	L4	C3	17	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Provide frequent toolbox talks on managing change.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					Clearly highlight no-go zones on the ECM and communicate requirements to construction personnel during pre-start briefs, inductions and tool-box talks. Demarcation of worksites and communicate it clearly with all construction personnel. The method for the demolition of existing elements at the Project sites will be developed to minimise direct and indirect impacts to adjacent and / or adjoining heritage items.				
Biodiversity									
Vegetation trimming / clearing required outside approved work area	Unauthorised works / removal of vegetation outside defined work area, possibility of removing threatened species, fines incurred.	L4	C4	11	Implement the controls within Appendix E – Procedure 1: Biodiversity Induction and tool box training on clearance zones and required protection measures If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment will be undertaken in accordance with the CEMF and CoA. If trees require trimming or removal, the requirements of CoA E5 will be implemented. Inspections during clearing activities. Fencing in place/ clear marking of trees to be retained and cleared / demarcation areas / plans showing clearing areas.	L5	C4	8	Implement Vegetation Removal Permit System. Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					Pre clearing checklist to be completed before any clearing of vegetation.				
Clearing and grubbing of vegetation within work site.	Erosion of soils, uncontrolled runoff, sediment deposited into surrounding vegetated areas and water courses, and invasion of weeds. Wrong vegetation removed. Potential for injury to native fauna.	L3	C4	16	Implement the controls within Appendix E – Procedure 1: Biodiversity Inductions and toolbox training on erosion and sediment controls. Where possible works to be staged so environmental controls can be implemented after clearance works. If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment will be undertaken in accordance with the CEMF and CoA. If trees require trimming or removal, the requirements of CoA E5 will be implemented. A Tree Report is to be prepared for trees to be removed or pruned. Approved Erosion and Sediment Control Plans in place prior to starting works. Where applicable, mature trees and other native vegetation to be retained will be clearly delineated, with all Construction activities excluded from these areas. Pre clearing checklist to be completed before any clearing of vegetation.	L4	C4	11	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Loss, damage or injury to	Removal, death, damage or injury to endangered or	L4	C3	17	Implement the controls within Appendix E – Procedure 1: Biodiversity	L5	C3	13	Implement Vegetation Removal Permit System.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
endangered or threatened species.	threatened species by plant and equipment				All personnel attending site will be advised of controls and management during the onsite induction. Toolbox talks will be carried out prior to ground disturbance /site clearing works to ensure onsite personnel are made aware of potential loss of endangered species. If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment will be undertaken in accordance with the CEMF and CoA. If trees require trimming or removal, the requirements of CoA E5 will be implemented. If threatened flora or fauna species are identified on site, work in the vicinity of these species will stop immediately. spotter/catcher/botanist will be engaged to survey the				Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Air Quality									
General Construction works; site establishment, excavations, piling	Dust activity in close proximity to residential and commercial premises, complaints received.	L3	C5	12	Implement the controls within Appendix E – Procedure 3: Air Quality Toolbox training on dust and air quality Management. Provide dust mitigation measures through water sprays/misting as required.	L4	C5	7	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					Cover stockpiles that are not to be worked on for a period of greater than 10 days. Erosion and Sediment Control Plans approved before works commence.				
Exhaust from plant and equipment.	Emissions resulting in air pollution.	L3	C5	12	Inductions and toolbox training on dust and air quality management. Well maintained plant/ equipment and prestart checks and servicing. Non-compliant vehicles removed from site / repaired.	L4	C5	7	Review plant check list prior to operating on site. Undertake verification checks as required.
Traffic									
Loss of on-street car parking in adjacent residential streets and commercial areas during construction.	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	L3	C5	12	Community notifications in accordance with the OCCS. Site vehicles shall be parked within the rail corridor and not affect public parking area where possible. Develop TRAFFIC MANAGEMENT PLAN / Traffic control procedures. Limited street parking available around the Project sites.	L4	C5	7	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Undertake regular inspections of worksite and adjacent streets. Supervisor and traffic controller to enforce traffic management requirements
General construction traffic disturbing public access between local roads.	Disturbance to local residents resulting in complaints being made, limited access, potential for delays at local road access points resulting in complaints.	L3	C5	12	Deliveries of plant and materials shall be undertaken outside of peak periods where possible. Site vehicles shall be parked within the rail corridor and not affect public parking areas. Scheduled road movements shall be minimised where possible. Oversized deliveries will be undertaken in accordance with the	L4	C5	7	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Undertake regular inspections of worksite and adjacent streets.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
					requirements of NSW Police or Roads and Maritime Services. Approved Traffic Management Plans in consultation with relevant authorities. Detour routes to be advertised/ notified. Approved access routes, detailed Traffic Control Plans. Clear notifications / signage				
Management of heavy vehicles / access routes.	Complaints from sensitive receivers due to increased level and frequency of noise.	L3	C5	12	Deliveries of plant and materials shall be undertaken outside of peak periods where possible. Site vehicles shall be parked within the rail corridor and not affect public parking areas. Scheduled road movements shall be minimised where possible. Oversized deliveries will be undertaken in accordance with the requirements of NSW Police or Roads and Maritime Services. Designated access routes. Approved TRAFFIC MANAGEMENT PLAN. Community Notifications. Pedestrian management with traffic controller in place where required.	L4	C5	7	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Permits from local council and/or RMS
Truck deliveries out of normal working hours	Un-approved deliveries resulting in non-conformance with project requirements.	L3	C5	12	Personnel training of noise awareness to community included in induction and toolboxes. Induction on Construction Hours for deliveries.	L4	C5	7	Delivery drivers provided with haulage routes prior to travelling to site and delivery times. Complete regular toolbox talks on how to minimise impacts in relation to traffic.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
	Noise impact to community / potential complaints.				Communication of delivery times to suppliers. Community Notifications on project activities occurring locally. Code of conduct / selection criteria in place for subcontractors. Out of hours works approval where required. Approved traffic/access routes. Planning and staging of works in approved hours as much as practical.				
Visual Amenity									
Building Materials Stockpiles Temporary construction sheds and storage containers Plant and equipment movement Lighting	Surrounding aesthetic temporary altered during construction Lighting towers used during out of hours works may spill on nearby residents	L3	C5	12	The work area shall be maintained in an orderly manner Lighting required during night works shall be directed towards the work area and are from adjacent sensitive receivers	L4	C5	7	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Ancillary facilities									
Appropriate selection and management of the ancillary facilities	Inadequate assessment of impacts to surrounding business and residential receivers and environmental receptors.	L4	C4	11	Any ancillary facility not identified in the project Planning Approval, must comply with the relevant CoA (A16-A18). Use of site compounds will comply with the requirements of the CEMP and Sub-plans, CoA, REMM and CEMF to ensure environmental impacts are adequately managed.	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
	Potential for complaints.								
Utilities									
Utility Management	Service strike leading to environmental degradation	L3	C4	16	Develop and implement the Utilities Management Strategy in accordance with the Utilities Management Framework Engage a Utilities Coordination Manager (UCM) to oversee the coordination of utility works across the project and with third part service providers. The UCM will collaborate with the Community and Stakeholder Manager, the Place Manager and, where required, the Community Complaint Mediator to mitigate impacts to the local community during utility works and to resolve any community complaints relating to utility works. Implement a Permit to Disturb Induction and toolbox talks Detailed Site Survey to be managed by an appropriately qualified surveyor.	L5	C4	8	Permit to Disturb Service searching Detailed Site Survey management

Sydney Metro Consequence Criteria

	ENTERPRISE RISK CONSEQUENCES					
	C6 Insignificant	C5 Minor	C4 Moderate	C3 Major	C2 Severe	C1 Catastrophic
Environment	No appreciable changes to environment and/or highly localised event.	Change from normal conditions within environmental regulatory limits & environmental effects are within site boundaries.	Short-term and/or well-contained environmental effects. Minor remedial actions probably required.	Impacts external ecosystem & considerable remediation is required.	Long-term environmental impairment in neighbouring or valued ecosystems. Extensive remediation required.	Irreversible large-scale environmental impact with loss of valued ecosystems.

Sydney Metro Likelihood Criteria and Risk Matrix

	One off event How likely?		Repeated How often?	Likelihood		Consequences					
						C6	C5	C4	C3	C2	C1
						Insignificant	Minor	Moderate	Major	Severe	Catastrophic Transformational for opportunities
Probability	Expected to occur frequently during time of activity or project. Greater than a 90% chance of occurring.	Frequency	10 times or more every year	Almost certain	L1	20	22	29	32	34	36
	Expected to occur occasionally during time of activity or project. A 75-90% chance of occurring.		1-10 times every year	Very Likely	L2	14	18	23	28	31	35
	More likely to occur than not occur during time of activity or project. A 50-75% chance of occurring.		Once each year	Likely	L3	9	12	16	24	27	33
	More likely not to occur than occur during time of activity or project. A 25-50% chance of occurring.		Once every 1 to 10 years	Unlikely	L4	6	7	11	17	25	30
	Not expected to occur during the time of activity or project. A 10-25% chance of occurring.		Once every 10 to 100 years	Very Unlikely	L5	3	4	8	13	19	26
	Not expected to ever occur during time of activity or project. Less than 10% chance of occurring.		Less than once every 100 years	Almost Unprecedented	L6	1	2	5	10	15	21

APPENDIX D – Martinus Environment and Sustainability Policies

Policy	
Environmental Policy	
Doc No.: MR-ES-001	Version: 1.1



Environmental Policy

Martinus Rail is a world leader in the provision of project and construction management services including design, supply, installation, commissioning, maintenance and decommissioning of railway and associated infrastructures including roads and bridges.

This Environmental Policy is established by senior management to provide the framework to develop and improve the Environmental Management System, planned and executed in conjunction with other management functions, such that quality awareness is an integral part of the business strategy. This Environmental Policy aims highlights our commitment to establishing and promoting sound environmental practice in our operations.

Management will set the required criteria and regularly monitor and support progress to ensure the achievement of the goals of the organisation and environmental objectives. Management further acknowledges that without the total support of every team member these goals and objectives cannot be achieved.

To minimise environmental impacts concerning our activities, products, and services, we shall:

- Implement and maintain an environmental management system, establishing progressive objectives to develop and promote a cycle of sustainable continuous improvement.
- Comply with applicable legal requirements and other requirements to which the Company subscribes which relate to its environmental aspects.
- Prevent pollution through environmental preservation techniques.
- Reduce waste and promote the proper waste separation.
- Minimise the consumption of resources.
- Promote sustainability, and avoid where possible the depletion of natural resources in order to maintain an ecological balance.
- Promote environmental education and training.
- Motivate employees to carry out tasks in an environmentally responsible manner.
- Encourage environmental protection among suppliers and subcontractors.

The Company is committed to continual improvement of environmental performance. This Policy will be communicated to all staff, contractors and suppliers, and be available for the public.

Authorised by:


Treaven Martinus
Managing Director

Dated: 27/01/2022

Revision V1.1

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Policy	
Sustainability Policy	
Doc No.: MR-SS-001	Version: 1.1



Sustainability Policy

Martinus has grown to become one of the leading rail infrastructure construction companies in Australia and New Zealand.

Our approach to sustainability encompasses our organisational commitment to deliver on management of governance, environmental, social, and economic objectives.

The sustainability policy is our guiding document when integrating a philosophy of sustainable development into organisational activities and operations and to ensure sustainability is embedded in every part of our business.

The four pillars which compose the strategy are interrelated, representing an integral nature of driving sustainable outcomes for our business. We will engage with our key stakeholders to ensure objectives of the policy are aligned with our companies' strategic vision, business needs and stakeholder priorities.

Our sustainability vision is to achieve excellent environmental, social, and economic outcomes concerning our activities, products and services that connects the community in an environmentally sustainable manner.

To achieve this sustainability vision, we shall:

- Embed environmental, economic, and social outcomes by establishing robust sustainability objectives and targets that encourage restorative actions and are aligned with Martinus Culture, the United Nations Sustainability Development Goals, and the Australian Sustainable Development Goals.
- Demonstrate corporate social responsibility excellence by operating in a fair, ethical, and philanthropic manner.
- Manage resources efficiently through incorporating energy, water and material saving initiatives into our activities and products.
- Support and enhance social, cultural and community wellbeing by sourcing people, equipment, and products from local suppliers where practicable, and engaging with local indigenous and community groups.
- Report on sustainability performance and be accountable for meeting environmental and social responsibilities.
- Implement sustainable procurement process and work with suppliers who promote sound sustainability practices.
- Encourage the pioneering of innovation in sustainable design, process or advocacy that seeks continuous improvement to promote new ideas and thinking.
- Engage with clients to understand their expectations and to deliver projects in a sustainable manner.

The Company is committed to continual improvement of sustainability performance. This Policy will be communicated to all staff, contractors, and suppliers, and be available for the public.

Authorised by:


Treaven Martinus
Managing Director

Dated: 1/12/2022

APPENDIX E – Environmental Procedures

Procedure 1: Biodiversity

Impact: Biodiversity impacts related to the Project are expected to be minor. There will be some removal of trees and vegetation associated with Construction of Errant and Hostile Vehicle Mitigation Treatments works. Pre-clearance inspections will be undertaken prior to the removal of any trees.

Objective	To comply with contractual and legislative requirements and ensure that native fauna and flora are protected from Construction activities			
Targets	No death or injury to fauna No unapproved destruction of flora			
Legal, Contractual & Other Requirements	Planning consent conditions – SSI 8256			
Site specific planning / approval conditions / licence conditions	CoA – E3-E6 Mitigation measures committed in the EIS & SPIR CEMF Section 11			
Potential impacts and Initial Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Initial Risk Rating		
		P X	C	Risk
	Death or injury of fauna	L4	C3	17
	Unapproved damage or removal to threatened plant species, threatened vegetation community or habitat resources	L4	C3	17
	Unapproved removal or trimming of vegetation	L4	C5	7

Controls (means & resources)	Commitments & Mitigation Measures outlined in the EIS / SPIR:		
	Mitigation Measure	Applicable to the Project	Responsibility
	Environmental Performance Outcome (EPO) Biodiversity 1 - The project is designed to minimise impacts on biodiversity. Where practicable, the design minimises the need to clear vegetation.	Applicable	Environmental Manager Design Manager
	EPO Biodiversity 2 - Potential impacts on biodiversity are managed in accordance with relevant legislation, including the EP&A Act, BC Act, EPBC Act, and the Noxious Weeds Act 1993.	Applicable	Environmental Manager Construction Manager Site Supervisor
	EPO Biodiversity 3 – The biodiversity outcome is consistent with the Framework for Biodiversity Assessment (OEH, 2014a).	Applicable	Environmental Manager Construction Manager Site Supervisor
	EPO Biodiversity 4 - Offsets are provided in accordance with the NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014).	Applicable	Environmental Manager Construction Manager
	REMM B1 - Detailed design and Construction planning will avoid direct impacts to vegetation mapped as threatened ecological communities or native plant community types, specifically Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine - Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box.	Applicable	Environmental Manager Design Manager Construction Manager Site Supervisor
	REMM B2 - Pre-clearing surveys and inspections for endangered and threatened flora and fauna species will be undertaken by qualified ecologists prior to any clearing occurring. The surveys and inspections, and any subsequent relocation of species, will be undertaken in accordance with the measures provided in the biodiversity assessment report.	Applicable	Environmental Manager Construction Manager Site Supervisor

	REMM B3 - Areas of biodiversity value outside the project area will be marked on plans, and fenced or signposted where practicable, to prevent unnecessary disturbance.	Applicable	Environmental Manager Construction Manager Site Supervisor
	REMM B4 - Impacts to Downy Wattle Turpentine - Grey Ironbark open forest on shale, Degraded Turpentine – Grey Ironbark open forest on shale and Broad-leaved Ironbark – Grey Box will be avoided. The locations of these species and communities will be marked on plans, fenced on site, and avoided.	Applicable	Environmental Manager Construction Manager Site Supervisor
	REMM B5 - Equipment storage and stockpiling will be restricted to identified compound sites and already cleared land.	Applicable	Environmental Manager Construction Manager Site Supervisor
	REMM B6 - A trained ecologist will be present during the clearing of native vegetation or removal of potential fauna habitat to avoid impacts on resident fauna and to salvage habitat resources as far as is practicable.	Applicable	Environmental Manager Construction Manager Site Supervisor
	REMM B7 - Priority weeds will be managed in accordance with the Biosecurity Act 2015. Weeds of national environmental significance will be managed in accordance with the Weeds of National Significance Weed Management Guide.	Applicable	Environmental Manager Construction Manager Site Supervisor

	REMM LV4 - The management of trees during detailed design and construction planning will be guided by the project's Tree Management Strategy, which will be developed in consultation with councils and include consideration of relevant local plans and strategies. Where removal cannot be avoided, trees will be replaced in accordance with the Tree Management Strategy, including replacement of removed trees in a two for one ratio. Opportunities to retain and protect existing trees will be defined during detailed design and construction planning, in accordance with the project's Tree Management Strategy. The design will aim to reduce tree removal to the extent practicable, particularly where they contribute to screening vegetation or landscape character.	Applicable	Environmental Manager Construction Manager Site Supervisor					
	REMM LV12 - Trees to be retained will be protected prior to the commencement of construction in accordance with AS4970-2009 Protection of trees on development sites and the project's Tree Management Strategy. Any tree pruning will be undertaken in accordance with the project's Tree Management Strategy, guided by a tree report prepared by a qualified arborist.	Applicable	Environmental Manager Construction Manager Site Supervisor					
	Site Specific Mitigation & Control Measures developed as part of this CEMP: <table><tr><th>Mitigation Measure</th><th>Responsible</th></tr><tr><td>The design will take into consideration the location of vegetation and will aim to minimise vegetation clearing, tree trimming and tree removal, particularly in relation to threatened plant species, threatened vegetation communities and habitat resources. Appropriate justification will be provided for impacts to trees within the Tree Report</td><td>Design Manager Environmental Manager</td></tr><tr><td>A Tree Report is to be produced by a qualified arborist in consultation with the design team and Environmental Manager.</td><td>Environmental Manager Construction Manager</td></tr></table>			Mitigation Measure	Responsible	The design will take into consideration the location of vegetation and will aim to minimise vegetation clearing, tree trimming and tree removal, particularly in relation to threatened plant species, threatened vegetation communities and habitat resources. Appropriate justification will be provided for impacts to trees within the Tree Report	Design Manager Environmental Manager	A Tree Report is to be produced by a qualified arborist in consultation with the design team and Environmental Manager.
Mitigation Measure	Responsible							
The design will take into consideration the location of vegetation and will aim to minimise vegetation clearing, tree trimming and tree removal, particularly in relation to threatened plant species, threatened vegetation communities and habitat resources. Appropriate justification will be provided for impacts to trees within the Tree Report	Design Manager Environmental Manager							
A Tree Report is to be produced by a qualified arborist in consultation with the design team and Environmental Manager.	Environmental Manager Construction Manager							

	Appropriately trained and qualified tree removal contractors to be used.	Construction Manager Site Supervisor
	Awareness training in the need to preserve vegetation to be retained.	Environmental Manager Construction Manager
	Provide barricading or other suitable protection measures for trees to be retained	Construction Manager Site Supervisor
	Biodiversity offsetting will occur in accordance with CoA E3 where impacts to threatened ecological communities or endangered species cannot be avoided.	Environmental Manager
	Where required in accordance with the design some trees will be removed and offset in accordance with requirements of CoA E4 and CoA E6.	Environmental Manager Site Supervisor
	If native fauna is identified within the disturbance footprint, the Environmental Manager will be contacted immediately. All necessary steps to minimise harm and mortality to such animals is required.	Construction Manager Site Supervisor
	Open excavations and storage areas to be inspected regularly for the presence of fauna species.	Site Supervisor
	No clearing or vegetation removal to occur without approval.	Environmental Manager Construction Manager Site Supervisor
	All vegetation to be retained shall be protected and demarcated. These areas will be highlighted on the Environmental Control Maps. The clearing limits and protected vegetation is to be clearly communicated to site personnel during site inductions and toolbox talks.	Environmental Manager Construction Manager Site Supervisor
	Works will only be undertaken in designated areas.	Construction Manager Site Supervisor
	Identify and remove any weeds within work area. Any weeds will be lawfully disposed of to a licenced facility.	Environmental Manager Construction Manager Site Supervisor

Segregate weed impacted waste material and dispose of to a licenced facility.	Construction Manager Site Supervisor
Inspect plant and machinery before entering and leaving worksite to ensure no dirt remains as it may cause weeds to spread.	Construction Manager Site Supervisor
Educate work force on common weeds within Bankstown rail corridor.	Environmental Manager
Plant and equipment brought on to site must be cleaned and free of deleterious material, mud and other material that may harbour weed seeds.	Site Supervisor
Construction plant, equipment and materials are not to be stored within the dripline of any trees or vegetation to be retained.	Construction Manager Site Supervisor
The following clearing procedure will be implemented should additional clearing be required.	See flow chart

	<u>1. Delineation of area to be cleared</u> Vegetation to be cleared will be clearly marked. Habitat trees in close proximity to construction activities will be clearly marked and protected. Marked boundaries will be cross-referenced to the approved impact area. In circumstances where native vegetation or mature tree clearing is required outside of the approved development footprint, an ecologist will inspect the proposed area and provide advice on the impact to flora and fauna and appropriate management. <u>2. Pre-clearance inspections</u> - Pre-clearance inspections will be undertaken within two weeks prior to the commencement of vegetation clearing. - The pre-clearance inspections will include identification and inspection of trees containing hollows. Any isolated trees that have been identified as providing hollows, and which are located close to the construction areas, will be protected during construction. - Should any threatened species be identified within the project area, the Environment Manager shall be notified immediately. <u>3. Vegetation clearance and fauna handling procedures</u> - Mature trees will be inspected for fauna immediately before and after felling. - Animals found prior to or during clearing activities will be released to surrounding suitable habitat. - If any animal is injured, contact the relevant local wildlife rescue agency (e.g. WIRES) and/or veterinary surgery as soon as practical. Until the animal can be cared for by a suitably qualified animal handler, if possible minimise stress to the animal and reduce the risk of further injury by: - Handling fauna with care and as little as possible. - Covering larger animals with a towel or blanket and placing in a large cardboard box. - Placing small animals in a cotton bag, tied at the top. Keeping the animal in a quiet, warm, ventilated and dark location. - In the case of arboreal or flying mammals attempts will be made to relocate the den or roost. After capture, the animal(s) will be held by a trained wildlife carer for a period of no longer than two weeks until the roost or den can be relocated, either as an entire tree or part thereof. - Work may recommence once the animal(s) have been captured and removed from the area. - Felled trees will be placed between cleared and remnant bushland where possible to provide runways of ground cover for dispersal of animals. - Excess material may be mulched and used on site. Environment Manager Site Supervisor Environment Manager Environment Manager
Timeframe	Duration of the works.
Monitoring & Reporting	Tree Report Weekly inspections Vegetation Removal or Trimming Permits Pre-clearance inspections Daily Clearance reports

Potential impacts and Residual Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Residual Risk Rating		
		P X	C	Risk
	Death or injury of fauna	L5	C3	13
	Unapproved damage or removal to threatened plant species, threatened vegetation community or habitat resources	L5	C3	13
	Unapproved removal or trimming of vegetation	L5	C5	4

Procedure 2: Groundwater

Impact: There is some potential for piles and underline crossing to intersect the groundwater table

Objective	• To comply with contractual and legislative requirements in relations to the management of groundwater • Reduce the potential for drawdown of surrounding groundwater resources • Prevent the pollution of groundwater through appropriate controls • Reduce the potential impacts of groundwater dependant ecosystems			
Targets	• All groundwater to be tested before dewatering occurs			
Legal, Contractual & Other Requirements	• Planning consent conditions – SSI 8256 • CEMF Section 7 • Water Management Act 2000 • NSW Aquifer Interference Policy (NSW Office of Water, 2012) • Protection of the Environment Operations Act 1997			
Site specific planning / approval conditions / licence conditions	• In accordance with the Sydney Metro City & Southwest –Sydenham to Bankstown Staging Report the Project does not require a specific Groundwater Management Plan as the likelihood of impacting on groundwater during the works are low. As such, management of any groundwater encountered during the works is to be managed in accordance with this procedure.			
Potential impacts and Initial Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Initial Risk Rating		
	Inappropriate dewatering of groundwater impacting on receiving environment or groundwater source	P X L4	C C5	Risk 7
Controls (means and resources)	• Commitments & Mitigation Measures outlined in the EIS / SPIR			
	Mitigation Measure	Applicable to the Project	Responsible	
	N/A	N/A	N/A	

	Site Specific Mitigation & Control Measures developed as part of this CEMP: <table> <tr> <th>Mitigation Measure</th><th>Responsible</th></tr> <tr> <td> - A dewatering permit is to be in place for all dewatering activities, including the dewatering of any groundwater. </td><td> - Environmental Manager - Site Supervisor </td></tr> <tr> <td> - Awareness training is to be provided to workers as required. </td><td> - Environmental Manager - Site Supervisor </td></tr> <tr> <td> - Water treatment units are to be utilised and maintained where water testing indicates treatment is required. </td><td> - Environmental Manager - Construction Manager - Site Supervisor </td></tr> <tr> <td> - Dewatering will only occur on site or to licenced discharge points </td><td> - Environmental Manager - Construction Manager - Site Supervisor </td></tr> </table>	Mitigation Measure	Responsible	A dewatering permit is to be in place for all dewatering activities, including the dewatering of any groundwater.	- Environmental Manager - Site Supervisor	Awareness training is to be provided to workers as required.	- Environmental Manager - Site Supervisor	Water treatment units are to be utilised and maintained where water testing indicates treatment is required.	- Environmental Manager - Construction Manager - Site Supervisor	Dewatering will only occur on site or to licenced discharge points	- Environmental Manager - Construction Manager - Site Supervisor
Mitigation Measure	Responsible										
A dewatering permit is to be in place for all dewatering activities, including the dewatering of any groundwater.	- Environmental Manager - Site Supervisor										
Awareness training is to be provided to workers as required.	- Environmental Manager - Site Supervisor										
Water treatment units are to be utilised and maintained where water testing indicates treatment is required.	- Environmental Manager - Construction Manager - Site Supervisor										
Dewatering will only occur on site or to licenced discharge points	- Environmental Manager - Construction Manager - Site Supervisor										
Responsibilities	- Engineering personnel are responsible for identifying any works that may interact with known groundwater sources - Engineering personnel are responsible for determining any potential subsidence impacts associated with dewatering of groundwater - Martinus' Environmental Manager is to organise testing of any groundwater prior to discharge - Engineering personnel are responsible for implementing appropriate treatment methods based on the results of groundwater quality testing										
Timeframe	Duration of Construction										
Monitoring and Reporting	- Dewatering permit - Weekly inspections - Inspection and maintenance of treatment units (where applicable)										

	Incidents are to be recorded on form Environmental Incident and Complaint Report			
Potential impacts and Residual Risk Rating Refer to Appendix C for Risk Matrix	Potential impact Inappropriate dewatering of groundwater impacting on receiving environment or groundwater source	Residual Risk Rating		
		P X	C	Risk
		L5	C5	4

Procedure 3: Air Quality

Impact: Minimal impact expected due to the small area of disturbance associated with the works.

Objectives	- To comply with contractual and legislative requirements in relations to the management of air quality - Minimise gaseous and particulate pollutant emissions from Construction activities as far as feasible and reasonable - Identify and control potential dust and air pollution sources.			
Targets	- No dust impacting on offsite activities or surrounding residences - No release of contaminants, (odour, smoke etc.) into the air.			
Legal, Contractual and Other Requirements	- Planning consent conditions – SSI 8256 - CEMF Section 16 <i>Protection of the Environment Operations Act 1997</i> <i>Protection of the Environment Operations (Clean Air) Regulation 2010</i>			
Site specific planning / approval conditions / licence conditions	- CoA E2 - Mitigation measures committed in the EIS & SPIR			
Potential impacts and Initial Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Initial Risk Rating		
		P X	C	Risk
	Dust or plant emission impacting on the receiving environment and human health	L3	C5	12
	Abrasive blasting waste emissions impacting on the receiving environment and human health	L3	C4	16

	Odour from works causing disturbance to local receivers	L4	C5	7
Controls (means and resources)	• Commitments & Mitigation Measures outlined in the EIS / SPIR			
	Mitigation Measure	Applicable to the Project	Responsible	
	CoA E2 - In addition to the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1, all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the Construction and Operation of the CSSI.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor	
Site Specific Mitigation & Control Measures developed as part of this CEMP:				
The following are the minimum general control measures to be implemented on the project, however additional control measures may be required following the completion of the Construction process procedure/work method statement for the proposed activity.				
	Mitigation Measures	Responsible		
	All plant and machinery will be fitted with emission control devices complying with relevant Australian Standards.	• Construction Manager • Site Supervisor		
	Machinery will be turned off when not in use and not left to idle for prolonged periods.	• Site Supervisor		
	Machinery and plant that will be kept on site will be serviced as per manufactures specifications.	• Site Supervisor		
	Vehicle movements will be limited to designed entries and exits, haulage routes and parking areas.	• Construction Manager • Site Supervisor		
	Dust generation will be monitored visually, and where required, dust control measures such as water spraying will be implemented to control the generation of dust.	• Environmental Manager • Site Supervisor		
	Materials transported to and from the site will be covered to reduce dust generation in transit.	• Site Supervisor		

Access points will be inspected to determine whether sediment is being transferred to the surrounding road network. If required, sediment will be promptly removed from roads to minimise dust generation.	• Environmental Manager • Site Supervisor
Provide shaker grids, rumble strip or equivalent stabilisation at site egress points.	• Site Supervisor
Remove mud from haul vehicles prior to entering public roads.	• Site Supervisor
Stabilisation of any exposed surfaces as soon as practicable, including implementation of final landscaping as early as possible.	• Construction Manager • Site Supervisor
Shade cloth will be fastened to the perimeter fence on the project site, where practicable, to minimise dust transported from the site during Construction.	• Construction Manager • Site Supervisor
Daily inspections and regular surveillance will be undertaken to identify any vehicles, plant or equipment that is causing visible emissions. If any defective vehicles, plants or equipment are identified, operation of this machinery will cease and service/maintenance will be undertaken.	• Site Supervisor
Works (including the spraying of paint and other materials) will be suspended during strong winds or in weather conditions where high levels of dust or airborne particulates are likely.	• Construction Manager • Site Supervisor
Stockpiles will be maintained and contained appropriately, which could include covering or regular watering to minimise dust.	• Construction Manager • Site Supervisor
Provision of Water tankers where necessary.	• Construction Manager • Site Supervisor
Cover haul vehicles loads & ensure tail gates are closed when operating on public roads.	• Construction Manager • Site Supervisor
Provide awareness training in the need to minimise dust.	• Environmental Manager

	Note any odours during site inspections, particularly from any effluent tanks, and apply de-odourising agents as required.	• Environmental Manager • Construction Manager • Site Supervisor		
Responsibilities	• The Site Manager to implement the requirements of this procedure • Site Manager and Environmental Manager (or delegate) are to inspect the works at regular intervals.			
Timeframe	Duration of Construction			
Monitoring and Reporting	• Weekly inspections. Incidents or complaints to be recorded on form Environmental Incident and Complaint Report			
Potential impacts and Residual Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Residual Risk Rating		
		P X	C	Risk
	Dust or plant emission impacting on the receiving environment and human health	L4	C5	7
	Abrasive blasting waste emissions impacting on the receiving environment and human health	L4	C4	7
	Odour from works causing disturbance to local receivers	L5	C5	4

Procedure 4: Waste and Spoil

Impact: Minimal impact expected due to the small amount of waste generated and spoil to be handled.

Objectives	- Minimise spoil generation where possible - The project will mandate 100% reuse or recycling (on or off site) of usable spoil - Spoil will be managed with consideration to minimising adverse traffic related issues - Spoil will be managed to avoid contamination of land or water - Spoil will be managed with consideration of the impacts on residents and other sensitive receivers - Site contamination will be effectively managed to limit the potential risk to human health and the environment - Minimise waste throughout the project life-cycle - Waste management strategies will be implemented in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> management hierarchy as follows: - Avoidance of unnecessary resource consumption - Resource recovery (including reuse, reprocessing, recycling and energy recovery)
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	o Disposal.		
Targets	100% reuse or recycling of usable spoil. 90% recycling target (in accordance with REMM WM2) - Waste tracking to occur throughout project and records to be maintained - The principles of the waste management hierarchy will be adopted.		
Legal, Contractual and Other Requirements	- Planning consent conditions – SSI 8256, CoA C3(c) - CEMF Section 6 and Section 17 <i>Protection of the Environment Operations Act 1997</i> <i>Protection of the Environment Operations (Waste) Regulation 2014</i>		
Site specific planning / approval conditions / licence conditions	CoA – E73 to E76 REMM – WM1 to WM7 Mitigation measures committed in the EIS & SPIR		
Potential impacts and Initial Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Initial Risk Rating	
	Inappropriate waste disposal impacting on environmental receivers	P X	C Risk
Controls (means and resources)	Commitments & Mitigation Measures outlined in the EIS / SPIR		
	Mitigation Measure	Applicable to Project Locality	Responsible
	CoA E73 - Any items or infrastructure that are salvageable must be identified in the relevant CEMP Sub-plan (Condition C3). Note: reuse of items may include signal boxes, indicators, ballast or other rail infrastructure. These items should be offered to Sydney Trains or reuse.	Applicable	- Construction Manager - Site Supervisor

	CoA E74 - The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the <i>Protection of the Environment Operations Act 1997</i> , under the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> , and orders or exemptions made under the regulation.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	CoA E75 - Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> , or to any other place that can lawfully accept such waste.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	CoA E76 - All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM WM1 - Detailed design will include measures to minimise excess spoil generation. This will include a focus on optimising the design to minimise spoil volumes, and the reuse of material on-site.	Applicable	• Design Manager • Sustainability Manager • Environmental Manager • Construction Manager
	REMM WM2 - A recycling target of at least 90 per cent will be adopted.	Applicable	• Sustainability Manager • Environmental Manager • Construction Manager • Site Supervisor

	REMM WM3 - Spoil will be managed in accordance with the spoil management hierarchy.	Applicable	• Sustainability Manager • Environmental Manager • Construction Manager • Site Supervisor
	REMM WM4 - Target 100 per cent reuse of reusable spoil.	Applicable	• Sustainability Manager • Environmental Manager • Construction Manager • Site Supervisor
	REMM WM5 - Construction waste will be minimised by accurately calculating materials brought to the site and limiting materials packaging.	Applicable	• Sustainability Manager • Environmental Manager • Construction Manager • Site Supervisor
	REMM WM6 - All waste will be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	Applicable	• Environmental Manager • Construction Manager • Site Supervisor

	REMM WM7 - Waste segregation bins will be located at various locations within the project area, if space permits, to facilitate segregation and prevent cross contamination.	Applicable	• Sustainability Manager • Environmental Manager • Construction Manager • Site Supervisor										
Site Specific Mitigation & Control Measures developed as part of this CEMP: The following are the minimum general control measures to be implemented on the project, however additional control measures may be required following the completion of the Construction process procedure/work method statement for the proposed activity.													
	<table><tr><th>Mitigation Measures</th><th>Responsible</th></tr><tr><td>Minimise spoil generation where possible by undertaking a cut/fill balance exercise</td><td> • Construction Manager • Site Supervisor </td></tr><tr><td>Minimise spoil generation where possible by not over-excavating</td><td> • Construction Manager • Site Supervisor </td></tr><tr><td>Minimising adverse traffic related issues associated with spoil movement by primarily keeping any movements to within the corridor and by only using approved haulage routes under the Construction Traffic Management Plan</td><td> • Construction Manager • Site Supervisor </td></tr><tr><td>Spoil will be managed to avoid contamination of land or water by segregating soils known to contain contaminants</td><td> • Environmental Manager • Construction Manager • Site Supervisor </td></tr></table>	Mitigation Measures	Responsible	Minimise spoil generation where possible by undertaking a cut/fill balance exercise	• Construction Manager • Site Supervisor	Minimise spoil generation where possible by not over-excavating	• Construction Manager • Site Supervisor	Minimising adverse traffic related issues associated with spoil movement by primarily keeping any movements to within the corridor and by only using approved haulage routes under the Construction Traffic Management Plan	• Construction Manager • Site Supervisor	Spoil will be managed to avoid contamination of land or water by segregating soils known to contain contaminants	• Environmental Manager • Construction Manager • Site Supervisor		
Mitigation Measures	Responsible												
Minimise spoil generation where possible by undertaking a cut/fill balance exercise	• Construction Manager • Site Supervisor												
Minimise spoil generation where possible by not over-excavating	• Construction Manager • Site Supervisor												
Minimising adverse traffic related issues associated with spoil movement by primarily keeping any movements to within the corridor and by only using approved haulage routes under the Construction Traffic Management Plan	• Construction Manager • Site Supervisor												
Spoil will be managed to avoid contamination of land or water by segregating soils known to contain contaminants	• Environmental Manager • Construction Manager • Site Supervisor												

	Spoil will be managed to avoid contamination of land or water by implementing appropriate erosion and sedimentation controls, in particular by covering stockpiles where practicable	• Environmental Manager • Construction Manager • Site Supervisor
	Spoil will be managed to avoid contamination of land or water by avoiding overland flow paths and known flood zones as storage areas	• Environmental Manager • Construction Manager • Site Supervisor
	Spoil will be managed with consideration of the impacts on residents and other sensitive receivers by selecting laydown areas that are as far away from receivers as possible	• Environmental Manager • Construction Manager • Site Supervisor
	Spoil will be managed with consideration of the impacts on residents and other sensitive receivers by using approved haulage routes under the Construction Traffic Management Plan	• Construction Manager • Site Supervisor
	Site contamination will be effectively managed to limit the potential risk to human health and the environment by segregating contaminated spoil	• Environmental Manager • Construction Manager • Site Supervisor
	Site contamination will be effectively managed to limit the potential risk to human health and the environment by implementing the unexpected contamination finds procedure	• Environmental Manager • Construction Manager • Site Supervisor

	Implement the mitigation measures within the procedures in this CEMP.	• Environmental Manager • Construction Manager • Site Supervisor
	Maintain a waste tracking register, including a copy of all waste dockets	• Sustainability Manager
	Waste will be lawfully disposed of to a licenced facility	• Environmental Manager • Construction Manager • Site Supervisor
	Any materials sent from the Project sites to another project site will comply with the NSW EPA Resource Recovery Exemptions. Appropriate testing and reporting in accordance with the Resource Recovery Exemption will be undertaken by an Environmental Consultant. All records will be kept on file and provided to the receiver.	• Environmental Manager • Construction Manager
	A spoil import and export form will be completed for any spoil coming to and leaving from the site.	• Environmental Manager • Construction Manager
Responsibilities	• The Site Manager to implement the requirements of this procedure. • Site Manager and Environmental Manager (or delegate) are to inspect the works at regular intervals.	
Timeframe	• Duration of Construction until all waste obligations are met	
Monitoring and Reporting	• Skips monitored visually by the Site Manager on a daily basis. • Weekly inspections. • Incidents or complaints to be recorded on form Environmental Incident and Complaint Report • Waste disposal records to be recorded in Principal Contractor's Waste Register.	
	Potential impact	Residual Risk Rating

Potential impacts and Residual Risk Rating Refer to Appendix C for Risk Matrix		P X	C	Risk
	Inappropriate waste disposal impacting on environmental receivers	L4	C5	7

Procedure 5: Dewatering

FORM	
DEWATERING PERMIT	
Doc No.: MR-EF-006	Version: 1.0



DEWATERING PERMIT

PROJECT / POSSESSION:	PERMIT DATE: __/__/20__
DEWATERING LOCATION:	EXPIRY DATE: __/__/20__
DISCHARGE LOCATION:	VOLUME TO BE RELEASED (m³):
DEWATERING TYPE: (Select one)	OFFSITE (ENVIRONMENT) / ONSITE (CONTAINMENT)

This dewatering permit is to allow movement of water from one location to another. Dewatering Permits are only to be issued by the Environment Team or suitably trained delegates. Not all elements are required to be completed with consideration to be given to the dewatering and discharge locations, and project water quality objectives.

All actions must be closed out prior to dewatering commencing and Dewatering Permits saved in Project folder.

Compliance Achieved: Yes = Complies No = Corrective Action Required N/A = Not Applicable

DEWATERING DETAILS				
CONTROL MEASURES	Yes	No	N/A	Comments & Actions
Aquatic fauna inspection or salvage undertaken by suitably qualified personnel?				
Water Quality Monitoring Undertaken? Refer Overleaf.				
Discharge location is suitable based on monitoring results?				
No visible litter or hydrocarbons on water surface?				
Pump intake floating or suspended at the top of water column? Float valve to be used where required.				
Fine mesh screen on pump inlet to prevent aquatic species incursion?				
Pump outlet sited to ensure erosion is minimised at discharge point? Surface protection to be used where required.				
Has the pumping equipment been checked to be operational with an automatic shut off system in place?				
Is the pump self-bunded or protected from spills by a bund or spill tray?				
Discharge is being monitored to ensure the pumped discharge is always meets the required discharge standards?				
Other comments or conditions:				

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FORM	
DEWATERING PERMIT	
Doc No.: MR-EF-006	Version: 1.0



WATER QUALITY MONITORING

Prior to dewatering		During dewatering	
Parameter	Results	Parameter	Results
pH:		pH:	
NTU / TSS:		NTU / TSS:	
EC (mS/cm):		EC (mS/cm):	
DO (mg/L):		DO (mg/L):	
Temperature:		Temperature:	
Litter / hydrocarbons:		Litter / hydrocarbons:	
Other:		Other:	
Are project water quality objectives met for discharge location?		Are project water quality objectives met for discharge location?	

Drawing / Sketch of dewatering location

PERMIT APPROVAL			
PERMIT ISSUER: Environmental Representative or delegate)	NAME / SIGNATURE	DATE:	__/__/20__
PERMIT HOLDER: (Supervisor or delegate)	NAME / SIGNATURE	DATE:	__/__/20__

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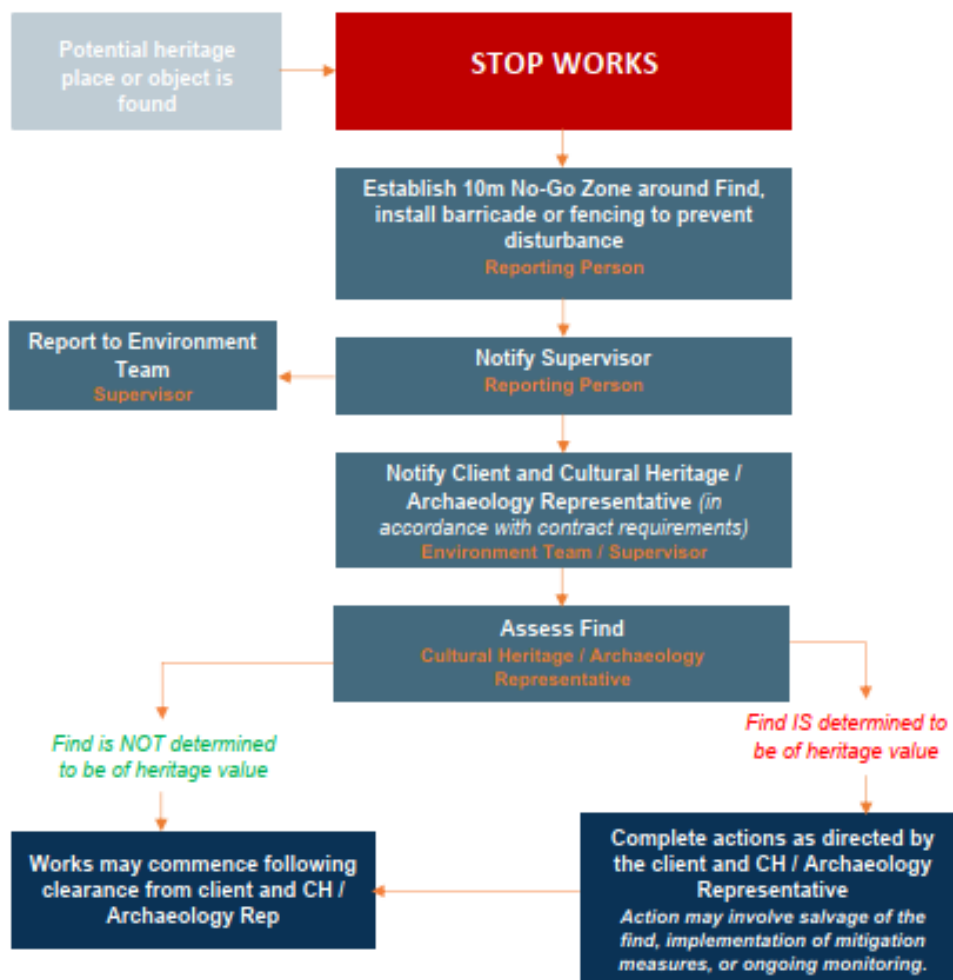
Procedure 6: Unexpected finds

PROCEDURE	
UNEXPECTED FINDS PROCESS	
Doc No.: MR-EA-006	Version: 1.0



ARCHAEOLOGY AND HERITAGE UNEXPECTED FINDS PROCESS

The following procedure should be adhered to in the event of the accidental discovery of a potential cultural heritage site or object (indigenous and non-indigenous), or potential archaeological find.



In the event of skeletal finds or potential remains, police must also be notified. Works should not recommence until clearance has been provided by the police and Cultural Heritage Representative.



Respect | Action | Integrity | Leadership

Procedure 7: Vegetation Removal Permit System

FORM	
VEGETATION CLEARING PERMIT	
Doc No.: MR-EF-003	Version: 2.0



VEGETATION CLEARING PERMIT

PROJECT / POSSESSION:	PERMIT DATE: __/__/20__
LOCATION:	EXPIRY DATE: __/__/20__
ENVIRONMENTAL APPROVAL:	AREA TO BE CLEARED (m²):
DESCRIPTION OF WORKS:	

This Vegetation Clearing Permit is to allow the clearing and / or grubbing of vegetation. Vegetation Clearing Permits are only to be issued by the Environment Team or suitably trained delegates in line with relevant environmental approvals for the project. Not all elements are required to be completed with consideration to be given to the scope of works and activity undertaken.

All actions must be closed out prior to clearing / grubbing commencing and Vegetation Clearing Permits saved in Project folder.

Compliance Achieved: Yes = Complies No = Corrective Action Required N/A = Not Applicable

CLEARING / GRUBBING DETAILS				
CONTROL MEASURES	Yes	No	N/A	Comments & Actions
Has the vegetation clearance limit been confirmed by a surveyor and clearly delineated?				
Have all trees / vegetation to be retained been identified and No-Go areas clearly delineated with 'No-Go Zone' signage in place? State how identified.				
Has a pre-clearance survey been completed by a Fauna Spotter Catcher / Ecologist?				
Have cultural heritage areas been given an appropriate exclusion zone?				
Is cultural heritage clearance given for this area, or traffic light colours complied with?				
Have waterways or drainage features been identified and appropriately protected?				
Are weed and seed hygiene mitigation measures in place?				
Have stockpile locations been identified?				
If soil disturbance is to occur, is there an approved Erosion Sediment Control Plan (ESCP) and ESC installed?				
If required, are dust, noise or vibration monitoring or mitigation methods in place?				
Have all worker signed on to the clearing and grubbing EWMs?				
Other comments or conditions:				

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FORM	
VEGETATION CLEARING PERMIT	
Doc No.: MR-EF-003	Version: 2.0



LOCATION OF CLEARING

Drawing / Sketch of clearing location

PERMIT APPROVAL			
PERMIT ISSUER: Environmental Representative or delegate	NAME / SIGNATURE	DATE:	__/__/20__
PERMIT HOLDER: (Supervisor or delegate)	NAME / SIGNATURE	DATE:	__/__/20__

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Procedure 8: Soil and Water

Impact: Minimal impact expected due to the small amount of waste generated and spoil to be handled.

Objectives	- Minimise pollution of surface water through appropriate erosion and sediment control. - Maintain existing water quality of surrounding surface watercourses - Source construction water from non-potable sources, where feasible and reasonable			
Targets	- Erosion and sediment controls are to be inspected on the following basis; - Weekly during environmental inspection - Prior to a rainfall of >20mm in a 24-hour period, where forecasted - Following a rainfall event of >20mm in a 24- hour period - Daily - Records of inspections will be maintained by the Principal Contractor. - All water will be tested (and treated if required) prior to discharge from the site in order to determine compliance with the parameters outlined in the Sydney Metro – Water Discharge or Reuse Procedure. - No water will be discharged from the site without written approval of the Contractor's Environmental Manager (or delegate). - No pollution incidents resulting in environmental harm or regulatory action. - Produce a Water Balance Study prior to Construction			
Legal, Contractual and Other Requirements	- Planning consent conditions – SSI 8256, CoA C3(b) - CEMF Section 15 <i>Protection of the Environment Operations Act 1997</i> <i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i> <i>Water Management Act 2000 Water Management (General) Regulation 2018</i> <i>Contaminated Land Management Act 1997</i>			
Site specific planning / approval conditions / licence conditions	CoA – E8, E9, and E38 to E41 REMM – SC1 to SC8, FHW1 to FHW10, and HRS4 Mitigation measures committed in the EIS & SPIR			
Potential impacts and Initial Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Initial Risk Rating		
	Inappropriate soil and water management impacting on environmental receivers	P X	C	Risk
		L3	C5	12

Controls (means and resources)	• Commitments & Mitigation Measures outlined in the EIS / SPIR		
	Mitigation Measure	Applicable to Project Locality	Responsible
	CoA E8 - The location of Construction compounds must not worsen the existing flooding characteristics of the area.	Applicable	- Construction Manager - Site Supervisor
	CoA E9 - Where the CSSI will worsen flooding impacts, the Proponent is responsible for implementing measures to address those impacts.	Applicable	- Environmental Manager - Construction Manager - Site Supervisor
	CoA E38 - All reasonably practicable erosion and sediment controls must be installed and appropriately maintained to minimise water pollution. When implementing such controls, any relevant guidance in the Managing Urban Stormwater series must be considered.	Applicable	- Environmental Manager - Construction Manager - Site Supervisor
	CoA E39 - An Unexpected Contaminated Land Procedure and Asbestos Finds Procedure must be prepared and must be followed should unexpected contaminated land or asbestos be excavated or otherwise discovered during Construction.	Applicable	- Environmental Manager - Construction Manager - Site Supervisor
	CoA E40 - The Unexpected Contaminated Land Procedure and Asbestos Finds Procedure must be implemented throughout Construction.	Applicable	- Environmental Manager - Construction Manager - Site Supervisor

	CoA E41 - Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with: (a) All relevant Australian Standards; (b) For liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and (c) The Environment Protection Manual for Authorised Officers: Bunding and Spill Management technical bulletin (EPA, 1997). In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM SC1 - Erosion and sediment control measures will be implemented in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) and Managing Urban Stormwater: Soils and Construction Volume 2A (DECC, 2008). Measures will be designed as a minimum for the 80th percentile, five day rainfall event.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM SC2 - Prior to ground disturbance in high probability acid sulfate areas, testing will be carried out to determine the presence of acid sulfate soils. If acid sulfate soils are encountered, they will be managed in accordance with the Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998) and the Waste Classification Guidelines - Part 4: Acid Sulfate Soils (EPA, 2014).	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM SC3 - Prior to ground disturbance in areas of potential soil salinity, testing will be carried out to confirm the presence of saline soils. If saline soils are encountered, they will be managed in accordance with Site Investigations for Urban Salinity (DLWC, 2002).	Applicable	• Environmental Manager • Construction Manager • Site Supervisor

	REMM SC4 - WorkCover dangerous goods searches will be carried out for properties that have potential contamination near Belmore Station, to provide additional site characterisation and identify the risk of contamination in these areas	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM SC5 - Prior to ground disturbance, a detailed contamination assessment will be undertaken in areas with a medium to high risk of contamination, to confirm the nature and extent of contamination, specific requirements for further investigation and remediation, and/or management requirements of any contamination.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM SC6 - Hazardous materials surveys will be undertaken during detailed design for all proposed demolition activities, and for utility adjustments as required.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM SC7 - In the event a Remediation Action Plan is required, it will be developed in accordance with Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (Department of Urban Affairs and Planning and Environment Protection Authority, 1998) and a NSW Environment Protection Authority Accredited site auditor would be engaged to audit the works.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	REMM SC8 - In the event that indicators of contamination are encountered during construction (such as odours or visually contaminated materials), work in the area will cease, and the finds will be managed in accordance with the unexpected contamination finds procedure.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor

	FHW1 - Where feasible and reasonable, detailed design will result in no net increase in stormwater runoff rates in all storm events, unless it can be demonstrated that increased runoff rates as a result of the project would not increase downstream flood risk.	Not Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW2 - Detailed design of the project will, as required at Bankstown between Stacy Street and Marion Street, take into account the impact of overland flooding for the full range of flood events up to the Probable Maximum Flood level.	Not Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW3 - The project would be designed in accordance with water quality design criteria based on the Water Sensitive Urban Design Guideline (Roads and Maritime, 2017) to ensure there is minimal potential for water quality impacts, including incorporating water sensitive urban design elements.	Not Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW4 - A construction water quality monitoring program will be developed and will commence prior to construction, to monitor water quality at identified discharge points. The program will include relevant water quality objectives, parameters, and criteria and specific monitoring locations identified in consultation with DPI (Water) and the EPA.	Not Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW5 - Detailed construction planning will consider flood risk for all compounds and work sites. This will include identification of measures to not worsen existing flooding characteristics. Not worsen is defined as: • a maximum increase in flood levels of 50 mm in a one per cent AEP event • a maximum increase in time of inundation of one hour in a one per cent AEP event • no increase in the potential for soil erosion and scouring from any increase in flow velocity in a one per cent AEP flood event.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor

	FHW6 - The site layout and staging of construction activities will: • avoid or minimise obstruction of overland flow paths and limit the extent of flow diversion required • consider how works would affect the existing stormwater network such that alternatives are in place prior to any disconnection or diversion of stormwater infrastructure.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW7 - Works within or near watercourses (including the Cooks River) will be undertaken with consideration given to the NSW Office of Water's guidelines for controlled activities.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW8 - Erosion and sediment mitigation measures will be installed and maintained for the duration of the construction period.	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW9 - The water quality monitoring program will continue during construction, to monitor water quality at identified discharge points.	Not Applicable	• Environmental Manager • Construction Manager • Site Supervisor
	FHW10 - Discharges from construction water treatment devices will be monitored to ensure compliance with the discharge criteria in the environment protection licence.	Not Applicable	• Environmental Manager • Construction Manager • Site Supervisor

	HRS4 - All hazardous substances that may be required for construction and operation will be stored and managed in accordance with the Storage and Handling of Dangerous Goods Code of Practice (WorkCover NSW, 2005) and the Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (Department of Planning, 2011).	Applicable	• Environmental Manager • Construction Manager • Site Supervisor
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Site Specific Mitigation & Control Measures developed as part of this CEMP:

The following are the minimum general control measures to be implemented on the project, however additional control measures may be required following the completion of the Construction process procedure/work method statement for the proposed activity.

Mitigation Measures	Responsible
Establish stabilised access points with rumble grids or wheel washes to prevent mud tracking on roads	• Construction Manager • Site Supervisor
Clearly delineate access points	• Construction Manager • Site Supervisor
Use of street sweepers	• Environmental Manager • Construction Manager • Site Supervisor
Longer term and/or heavily used haul roads will generally be sealed. Sealed haul roads will be regularly cleaned	• Environmental Manager • Construction Manager • Site Supervisor

	Unsealed haul roads will be regularly damped down with fixed or mobile sprinkler systems	• Environmental Manager • Construction Manager • Site Supervisor
	Appropriate site speed limits will be imposed and signed on haul routes	• Construction Manager • Site Supervisor
	Exclusion zones will be designated on construction sites to limit disturbance	• Construction Manager • Site Supervisor
	Stockpile areas are to be established within approved low-hazard areas clear of watercourses, stormwater drainage lines/culverts and not within the dripline of any retained trees where feasible and reasonable	• Environmental Manager • Construction Manager • Site Supervisor
	Diversion drains/bunds are to be installed on the high side of stockpiles if run—off from upslope lands could impact on the stockpile	• Environmental Manager • Construction Manager • Site Supervisor
	As much as is feasible, mulched vegetation, topsoil and subsoil (if applicable) are to be stockpiled separately	• Environmental Manager • Construction Manager • Site Supervisor

	Any contaminated material stockpiles (i.e. asbestos, contaminated soil) will be covered on-site and short-term material stockpiles (>5 days not in use) with potential to generate dust will be wetted down or covered to prevent fugitive dust emissions or run-off during wet weather. Long-term stockpiles (>30 days) will be stabilised and /or covered in accordance with "Blue Book" requirements	• Environmental Manager • Construction Manager • Site Supervisor
	Topsoil and mulch stockpiles will be constructed to no more than 2m in height where possible	• Environmental Manager • Construction Manager • Site Supervisor
	Stockpiles will be battered down to a maximum slope of 2:1 (H:V) where space permits	• Environmental Manager • Construction Manager • Site Supervisor
	Material transport from site to surrounding pavement surfaces will be minimised	• Construction Manager • Site Supervisor
	Dust suppression will be carried out whenever necessary to minimise sediments becoming air borne due to wind erosion	• Environmental Manager • Construction Manager • Site Supervisor
	Wherever possible, water detained onsite will be re-used for dust control	• Environmental Manager • Construction Manager • Site Supervisor

	Undertake progressive stabilisation of ground surfaces as quickly as possible as they are completed rather than at the end of the works program	• Environmental Manager • Construction Manager • Site Supervisor
	Progressively revegetate disturbed areas utilising appropriate species in those areas to be revegetated	• Environmental Manager • Construction Manager • Site Supervisor
	Temporary ground covers such as hydraulic soil stabilisers or geotextile fabric will be used as much as possible to stabilise batters, stockpiles and large surface areas	• Environmental Manager • Construction Manager • Site Supervisor
	Scour protection and energy dissipation will be used around discharge points at local points to reduce erosion where necessary	• Environmental Manager • Construction Manager • Site Supervisor
	Locations of nearest existing drainage channels and stormwater inlets to the works will be displayed on the ESCP	• Environmental Manager • Construction Manager • Site Supervisor

	Sediment controls will be installed around stormwater inlet pits where appropriate and where they will not cause or exacerbate flooding. Traffic management and safety will need to be considered if installing such devices on or near live traffic	• Environmental Manager • Construction Manager • Site Supervisor
	Maximise the diversion of turbid construction runoff into sediment retention devices such as sediment sumps, sediment fences and other sediment traps	• Environmental Manager • Construction Manager • Site Supervisor
	Mulch bunds will not be used in concentrated flow areas or if they have the potential to result in tannin leachate into waterways	• Environmental Manager • Construction Manager • Site Supervisor
	All erosion and sediment controls will be inspected by the Environment Manager (or delegate) at least weekly, before forecast rainfall exceeding 20 mm in 24 hours, after rainfall exceeding 20 mm in 24 hours and before a site closure of two days or more. Maintenance will be carried out as required prior to the next forecast rainfall event	• Environmental Manager • Construction Manager • Site Supervisor
	Site supervisors will undertake daily erosion and sediment control checks and record any issues within site diaries. Site supervisors will ensure controls are maintained and in working order	• Environmental Manager • Construction Manager • Site Supervisor

	Concrete washout will be confined to designated concrete washout locations or using a Concrete Waste Separation Unit (CWSU), which allows for recycling of concrete waste	• Environmental Manager • Construction Manager • Site Supervisor
	Clean water diversions will be constructed and stabilised around work areas	• Environmental Manager • Construction Manager • Site Supervisor
	No stockpiles of materials or storage of fuels or chemicals will be located adjacent to the existing culverts	• Environmental Manager • Construction Manager • Site Supervisor
	Construction compounds and work sites are laid out such that flows are not significantly impeded	• Construction Manager • Site Supervisor
	The use of water during Construction is minimised.	• Environmental Manager • Construction Manager • Site Supervisor
	Any soil waste is assessed, classified, managed, and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014)	• Environmental Manager • Construction Manager • Site Supervisor

	Site-specific soil characteristics are taken into consideration during detailed design and construction	• Environmental Manager • Construction Manager • Site Supervisor		
	Erosion and sediment controls during Construction are implemented in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) and Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008a)	• Environmental Manager • Construction Manager • Site Supervisor		
Responsibilities	• The Site Manager to implement the requirements of this procedure. • Site Manager and Environmental Manager (or delegate) are to inspect the works at regular intervals.			
Timeframe	• Duration of Construction until all soil and water obligations are met			
Monitoring and Reporting	• Soil and water monitored visually by the Site Manager on a daily basis • Weekly inspections. • Incidents or complaints to be recorded on form Environmental Incident and Complaint Report • Records of all testing, treatment and monitoring to be kept by Principal Contractor			
Potential impacts and Residual Risk Rating Refer to Appendix C for Risk Matrix	Potential impact	Residual Risk Rating		
		P X	C	Risk
	Inappropriate soil and water management impacting on environmental receivers	L4	C5	7

APPENDIX F – Martinus Environmental Incident and Non-compliance Reporting Procedure

AWARENESS	
INCIDENT REPORTING	
Doc No.: MR-WA-025	Version: 1.0



INCIDENT REPORTING

DID YOU KNOW:

Did you know in the event of the death of a person, a serious injury or illness or a dangerous event Martinus is responsible for establishing measures to preserve the incident site and protect any evidence until an inspector arrives or directs otherwise. The only time a PCBU/Rail Transport Operator is permitted to alter the site of an incident is where it is necessary to:

- ☐ Protect the health or safety of a person
- ☐ Aid an injured person involved in the incident
- ☐ Take essential action to make the Site safe or to prevent a further occurrence of an incident; or
- ☐ Allow emergency services to manage the emergency

Moving plant, equipment or tools, or otherwise interfering with or tampering with an incident site, regardless of whether the practice is intentional or not, may result in legal and/or insurance repercussions.

It is important to understand that all incidents provide an opportunity to learn, improve and prevent the potential for more serious consequences.

WORKER RESPONSIBILITIES:

Workers are responsible for:

- ☐ Immediately notifying their Supervisor in the event of an Incident (this includes injuries) or the event of a Near Miss
- ☐ Preserving the incident site and any plant, tools, equipment involved in the incident until the authorisation to release the scene has been given by the Project Lead or the Health and Safety Resource for the project

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AWARENESS	
INCIDENT REPORTING	
Doc No.: MR-WA-025	Version: 1.0



EXTERNAL REPORTING REQUIREMENTS - NOTIFIABLE INCIDENTS

Persons conducting a business or undertaking (PCBU/s) must notify their WHS regulator when serious injuries, illnesses and dangerous incidents happen at work. These are referred to as 'notifiable incidents'.

A 'notifiable incident' is:

- ☐ The death of a person
- ☐ A 'serious injury or illness', or
- ☐ A 'dangerous incident' that exposes someone to a serious risk, even if no one is injured.

Martinus also holds obligations to notify other parties in particular circumstances for certain types of incidents, for example:

The Office of the Federal Safety Commissioner (Australia), in the event of:

- ☐ A Fatality, or
- ☐ An injury resulting in Medical Treatment or Lost Time, or
- ☐ In the event of a Dangerous Occurrence.

The Office of the National Rail Safety Regulator (ONRSR) Australia

- ☐ **Category A notifiable occurrences** must be reported to ONRSR by phone immediately on becoming aware of the occurrence. All required details of the occurrence must be supplied to ONRSR (via the ONRSR Portal) within 7 days.
- ☐ **Category B notifiable occurrences** must be reported to ONRSR (via the ONRSR Portal) within 72 hours of becoming aware of the occurrence. All further required details of the occurrence must be submitted to ONRSR (via the ONRSR Portal) within 14 days (Note: the initial report and data submission information can be completed at the same time).
- ☐ **Category C notifiable occurrences** do not need to be reported to the Regulator at the time of occurrence, however, must be submitted to ONRSR (via the ONRSR Portal) prior to the due date for the operator's Safety Performance Report (30 June)

The National Rail System (NRS) New Zealand

For rail incidents occurring on the National Rail System (NRS) the KiwiRail network Control Manager must be notified.

- ☐ The NCM is contactable 24 hours/7 days on 021 440 112.
- ☐ The NCM will enter in the incident in the ORA notification system and ensure NZTA is notified.
- ☐ For class 1 and 2 incidents on the NRS the site must be frozen and the NCM will direct what actions are to be taken. This may include the appointment of a Rail Incident Controller (RIC) who will manage the incident recovery and initial emergency response.

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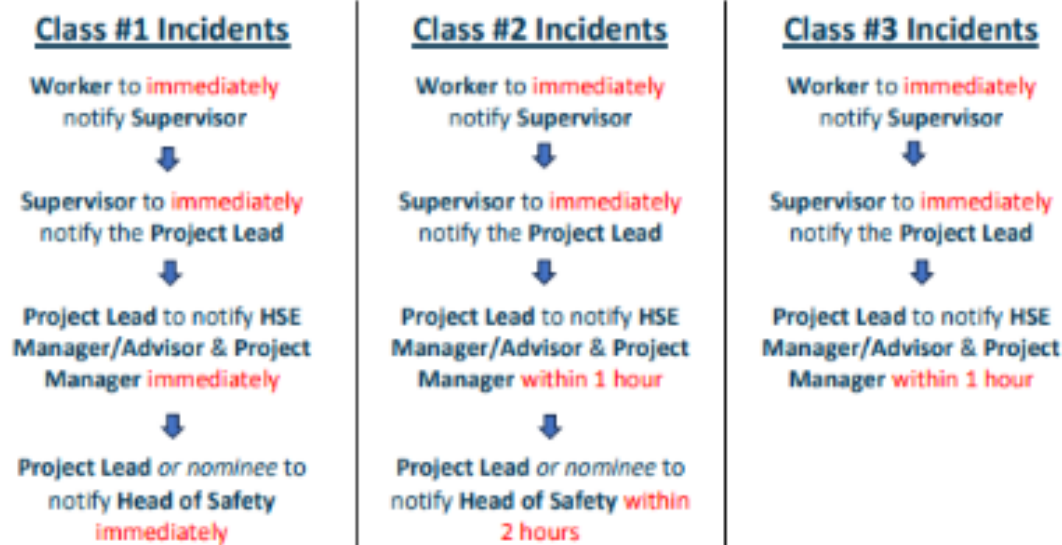
AWARENESS	
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INTERNAL REPORTING REQUIREMENTS

To ensure that Martinus meet their reporting obligations the following internal reporting requirements have been established.

All incidents MUST be reported to your Supervisor immediately!



The above reporting timeframes have been taken and summarised from MR-WP-015 - Incident Management Flowchart, Martinus Incident Reporting and Investigation Procedure MR-WP-002 provides further detail on reporting requirements.

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APPENDIX G – Noise and Vibration Management Sub-plan

Refer to Document No: SMCSWSW7-MRL-1NL-EM-PLN-000038

APPENDIX H – Heritage Management Sub-plan

Refer to Document No: SMCSWSW7-MRL-1NL-HE-PLN-000417

APPENDIX I – Waste Management and Recycling Sub-Plan

Refer to Document Number: SMCSWSW7-MRL-1NL-EM-PLN-000039

APPENDIX J – Landscape and Visual Amenities Sub-plan

Refer to Document No: SMCSWSW7-MRL-1NL-EM-PLN-000416

