

# WestConnex M4-M5 Link Mainline Tunnels

## Operational Environmental Management Plan

<b>Project:</b>	M4-M5 Link Mainline Tunnels – Design and Construct
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# Glossary of terms

Term/acronym	Definition
ANZECC	Australian and New Zealand Environment and Conservation Council
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
AQCCC	Air Quality Community Consultative Committee
Asset	M4-M5 Link Mainline Tunnels between the M4 at Haberfield and the M8 at St Peters.
Blue Book	Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2006)
CoA	Minister's Conditions of Approval
CRP	Community Relations Plan
CRVF	Campbell Road Ventilation Facility
CSSI	Critical State significant infrastructure
CTP	Compliance Tracking Program
D&C	Design and Construct
D&C Contractor	Acciona Samsung Bouygues Joint Venture (ASBJV), which was engaged to design and construct the M4-M5 Link Mainline Tunnels project.
DEC	Department of Environment and Conservation
DECC	Department of Environment and Climate Change
DECW	Department of Environment, Climate Change and Water
DEWHA	Department of the Environment, Water, Heritage and the Arts
DPIE	NSW Department of Planning, Industry & Environment
DPI	NSW Department of Primary Industries
DPI Fisheries	NSW Department of Primary Industries – Fisheries
DPI Water	NSW Department of Primary Industries – Water (formerly NSW Office of Water, NoW)
EIS	Environmental impact statement
EM	Environment Manager
EMP	Environmental Management Plan
EMS	Environmental Management System
Environmental aspect	Element of an organisation's activities, products or services that can interact with the environment
Environmental impact	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPL	Environment protection licence
EWMS	Environmental Work Method Statement – a component of the environmental management system that addresses environmental management issues relevant to a specific site and/or activity
FRNSW	Fire & Rescue New South Wales
I&M	Incident and Maintenance
I&M Contractor	TBC
IIAP2	International Association for Public Participation
IRP	Incident response procedures (IRPs)
MOC	Motorway Operations Complex

Term/acronym	Definition
NRAR	Natural Resource Access Regulator (previously Department of Primary Industries – Water)
NSW	New South Wales
O&M Manual	Operation and Maintenance Manual
OAQMP	Operational Air Quality Management Plan
OEH	NSW Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
ONVR	Operational Noise and Vibration Review
OTMS	Operational Traffic Management Strategy
OSWQP	Operational Surface Water Quality Plan
OSWQMP	Operational Surface Water Quality Monitoring Program
OGMP	Operational Groundwater Management Plan
OGWMP	Operational Groundwater Monitoring Program
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Project Company	M4-M5 Link Group in its capacity as trustee of the WCX M4-M5 Project Trust or its successor in title or assigns
PRVF	Parramatta Road Ventilation Facility
QSE	Quality, safety and environment
REMM	Revised environmental management measure (from the Submissions Report and Preferred Infrastructure Report)
Roads and Maritime, RMS	Roads and Maritime Services (now Transport for New South Wales)
SDS	Safety Data Sheets
Secretary, the	Secretary of the NSW Department of Planning & Environment
SOP	Standard Operating Procedure
SPIR	Submissions and Preferred Infrastructure Report
TfNSW	Transport for New South Wales, the Proponent for the M4-M5 Link Mainline Tunnels. TfNSW has engaged the Project Company to deliver the M4-M5 Link Mainline Tunnels.
WCX	WestConnex
WMCC	WestConnex Motorway Operations Centre

# 1 Introduction

This document forms the Operational Environmental Management Plan (OEMP) for the M4-M5 Link Mainline Tunnels between the M4 at Haberfield and the M8 at St Peters (SSI 7485, 'the Asset'). It has been prepared in accordance with:

- Conditions of Approval (CoA) D1 – D7;
- the *Guideline for the Preparation of Environmental Management Plans*, Department of Infrastructure, Planning and Natural Resources, 2004 (DIPNR, 2004) (refer Annexure A for compliance table);
- Environmental Management System Guidelines 3<sup>rd</sup> Edition (EMS Guidelines, NSW Government, 2013), which helps prepare and implement systematic practices to manage environmental performance and conformance;
- ISO 14001:2016 environmental management standards (Standards International, 2016), which provide a defined system for managing operations to minimise their environmental impacts, ensure legal compliance, and allow for continual improvement over time;
- Other relevant CoA relating to the operation of the WCX M4-M5 Link Mainline Tunnels project ('the approved project'), refer to Section 4.1.1.

This OEMP will be made available on the WestConnex project website (<https://www.westconnex.com.au/>) and provided to the public upon request.

## 1.1 Purpose

This OEMP identifies risks and legal obligations associated with the Asset's day-to-day operations by:

- identifying best environmental management practices for operating the Asset in the future;
- setting-out relevant operational environmental management commitments, safeguards and management measures;
- describing relevant legal and regulatory provisions;
- managing environmental risk.

The OEMP also:

- satisfies and executes relevant operational environmental obligations in the CoA (refer to Section 4.1.1) and revised environmental management measures (REMM) identified in the M4-M5 Link Submissions and Preferred Infrastructure Report (2018) (refer to Section 4.1.2);
- allows environmental performance to be easily reported, audited and monitored;
- allows management plans, standard operating procedures (SOPs) and environmental work method statements (EWMSs) to be developed and implemented.

## 1.2 Objectives

The OEMP's objectives are to:

- provide a reference document that defines and interprets operational environmental commitments;
- identify legislative and regulatory compliance requirements;
- identify the operational CoA and REMMs relevant to operation of the Asset (as detailed in Section 4.1);
- provide a program to facilitate training and awareness for all personnel to undertake activities in an environmentally responsible manner;



- identify key risks and appropriate management measures relevant to the operation of the Asset with aim of preventing, or minimising, environmental harm;
- provide management measures, processes and procedures to help minimise road user disturbance and local community impacts during the operation of the Asset;
- provide key performance indications monitor the Asset's operational environmental impacts in accordance with this document;
- document the environmental monitoring to be undertaken to monitor potential impacts on the environment during the operation of the Asset;
- develop, implement and maintain effective management systems and plans to control and manage activities associated with the operation of the Asset that may have an adverse environmental impact;
- demonstrate environmental protection, pollution prevention control and continual improvement;
- maintain consistency with current ISO 14001 environmental management standards.

### 1.3 OEMP structure

The structure of the OEMP, displayed in Figure 1-1, consists of a main document with issue-specific sub-plans and issue-specific management strategies for key environmental concerns. The OEMP is the overarching document detailing governance and a structured approach to the management of environmental issues during operation and maintenance of the Asset.

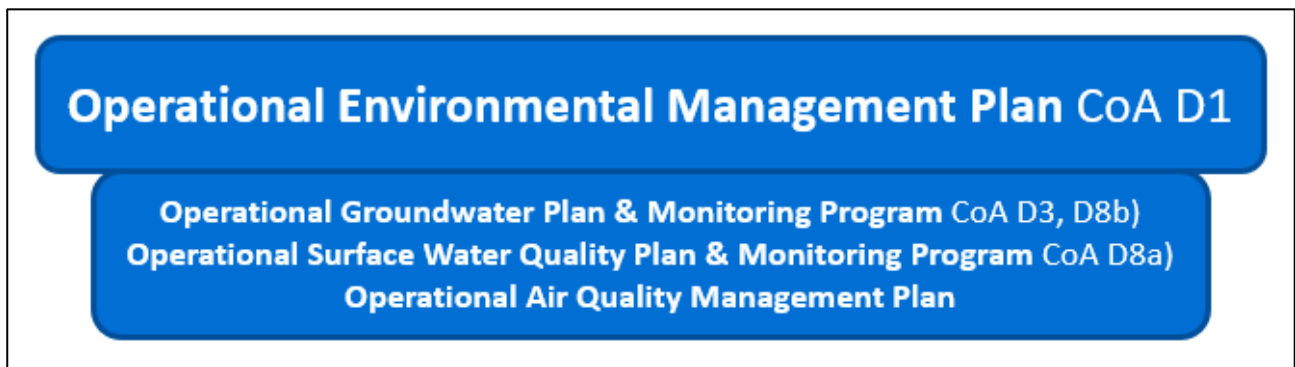


Figure 1-1: OEMP structure

### 1.4 Management, update, and approval

This OEMP must remain a flexible document that provides continual feedback and improvement. Updates to this plan may be required to reflect:

- improvements, observations and non-conformances;
- improvements in mitigation, management and monitoring measures;
- changes in:
  - project implementation and operation;
  - environment resulting in new or amended risks;
  - maintenance methods;
  - organisational structure, roles and responsibilities;
  - legislation, regulation, policy and guidance;
- after the occurrence of an emergency situation or test;

- where requested or required by Department of Planning, Industry & Environment (DPIE) or any other relevant authority.

This OEMP must be submitted for the approval of the Secretary no later than one month prior to the commencement of operation, or as otherwise agreed by the Secretary. Operation must not commence until written approval of the OEMP has been received from the Secretary.

Updates to the plan in response to regular review of the OEMP (refer to Section 10.1) may be approved internally if they are considered minor. Minor changes would typically include those that:

- are editorial in nature (e.g. staff and agency/authority name changes);
- do not increase the magnitude of impacts on the environment when considered individually or cumulatively;
- are in response to audit findings or periodic reviews; or
- do not comprise the ability of the project to meet approval or legislative requirements.

Where necessary, the OEMP will be provided to relevant stakeholders for review and comment if required, and forwarded to the Secretary of DPIE for approval.

## 1.5 OEMP consultation

The OEMP and sub-plans must be prepared in consultation with relevant agencies in accordance with CoA D3 and D8. The stakeholders identified in Table 1-1 were consulted during the preparation of this plan as agreed with DPIE.

Table 1-1: OEMP consultation

	CoA	NRAR	EPA	OEH	AQCCC	Sydney Water	Relevant Council(s)	State Emergency Service	NSW Health
Operation Environmental Management Plan	D1		■				■	■	■
Operational Air Quality Management Plan					■				
Operational Surface Water Quality Plan & Monitoring Program	D8a)	■	■	■		■	■		
Operational Groundwater Plan & Monitoring Program	D3 D8b)	■	■			■	■		

NRAR: Natural Resource Access Regulator (previously Department of Primary Industries – Water); EPA: Environment Protection Authority; OEH: Office of Environment and Heritage; Relevant Councils including City of Sydney and Inner West; AQCCC: Air Quality Community Consultative Committee; TfNSW: Transport for New South (including TMC: Traffic Management Center)

A document titled 'Consultation for the M4-M5 Link Mainline Tunnels OEMP and sub-plans' (Annexure J) has been prepared separately to this plan to provide detail relating to the consultation received and where feedback has been covered or addressed in this OEMP. Subsequent feedback will be documented and used to inform revisions and updates of this OEMP (refer Section 10.1).

## 1.6 Interface with other Projects

The M4-M5 Link Mainline Tunnels is one component of the 33-kilometer WestConnex motorway providing underground connections to the M4 and M8 (as shown in Figure 2-1). Given this, the Asset will be operated in conjunction with the other WestConnex components as one integrated motorway.

Environmental risks and potential impacts will also need to be coordinated to ensure effective management across the entire WestConnex Motorway.

This OEMP should be read and implemented in conjunction with the following documents to ensure environmental risks are appropriately managed during the operation of the entire integrated WestConnex Motorway:

- WestConnex M4 OEMP (M4E-ES-PLN-PWD-06956)
- WestConnex M8 OEMP (M5N-ES-PLN-PWD-0047)
- Rozelle Interchange OEMP (once prepared)

## 2 Asset description

### 2.1 Location

Figure 2-1 shows the location and key features of the Asset.

### 2.2 Asset components

The Asset comprises the M4-M5 Link Mainline Tunnels between the M4 at Haberfield and the M8 at St Peters. A summary of the Asset components is included in Table 2-1. The key facilities are further described in the following sub-sections.

Table 2-1: Key Asset components

Asset	Location
Interchanges (including on and off ramp tunnels)	<p>St Peters interchange:</p> <ul style="list-style-type: none"> <li>• Gardeners Road on-ramp to M4-M5 Link</li> <li>• Euston Road on-ramp to M4-M5 Link</li> <li>• Sydney Gateway on-ramp to M4-M5 Link</li> <li>• M4-M5 Link off ramp to Gardeners Road</li> <li>• M4-M5 Link off ramp to Euston Road</li> <li>• M4-M5 Link off ramp to Sydney Gateway</li> </ul> <p>Wattle Street Interchange:</p> <ul style="list-style-type: none"> <li>• Wattle Street on-ramp to M4-M5 Link</li> <li>• M4-M5 Link off ramp to Wattle Street</li> </ul>
Local Road upgrade	<ul style="list-style-type: none"> <li>• Minor physical integration works with the surface road network at the Wattle Street</li> <li>• Minor physical integration works with the surface road network at the St Peters interchange</li> </ul>
Motorway Operations Complexes	<ul style="list-style-type: none"> <li>• Campbell Road Motorways Operation Complex (MOC)</li> </ul>
Mainline Tunnel	<ul style="list-style-type: none"> <li>• Twin mainline motorway tunnels between the M4 at Haberfield and the M8 at St Peters. Each tunnel is around 7.5 kilometres long and sized to accommodate up to four lanes of traffic in each direction</li> <li>• A tunnel-to-tunnel connection that connects the mainline tunnels with the Rozelle Interchange and the Iron Cove Link</li> </ul>
Tunnel ventilation system	<ul style="list-style-type: none"> <li>• Campbell Road Ventilation Facility (CRVF) within the Campbell Road MOC</li> <li>• Parramatta Road Ventilation Facility (PRVF) at Haberfield</li> </ul>
Tunnel support systems and services	<ul style="list-style-type: none"> <li>• Electricity substations</li> <li>• Fire pump rooms and tanks</li> <li>• Water treatment facilities and pump station</li> <li>• Low point sump for detention of stormwater, groundwater inflows and/or spills in the tunnel</li> <li>• Fire and life safety systems including emergency evacuation infrastructure</li> </ul>
Watercourse bridge	<ul style="list-style-type: none"> <li>• Gardeners Road bridge (Alexandra Canal)</li> <li>• Campbell Road bridge (Alexandra Canal)</li> </ul>

Asset	Location
Intelligent transport systems	<ul style="list-style-type: none"> <li>• Tolling equipment</li> <li>• Gantries</li> <li>• Equipment shelters</li> <li>• Substations</li> <li>• Cameras</li> <li>• Cabling and conduits</li> <li>• Traffic control systems</li> </ul>
Environmental and amenity controls	<ul style="list-style-type: none"> <li>• Noise mitigation installations</li> <li>• Planting and landscape treatments</li> <li>• Water sensitive connections</li> </ul>
Stormwater drainage	<ul style="list-style-type: none"> <li>• Longitudinal drains (pits and pipes)</li> <li>• Cross drains (culverts)</li> <li>• Detention (storage) basins</li> </ul>
Road furniture	<ul style="list-style-type: none"> <li>• Lighting</li> <li>• Signage</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• Power</li> <li>• Communications</li> <li>• Cables and conduits</li> </ul>

## 2.3 Motorway Operational Ancillary Infrastructure

The M4-M5 Mainline Link Tunnels includes the following operational ancillary infrastructure:

- Operational management control systems and incident and emergency response infrastructure
- Tunnel ventilation systems and facilities
- Drainage and water treatment facilities
- Noise attenuation measures
- Utilities
- Roadside furniture and lighting.

A 'single operating entity' would undertake day-to-day 'coordinated operations' for the widened M4 (M4 Widening project), M4, M8 and M4-M5 Link (the 'WestConnex Motorway') projects, as well as the existing M5 East, from a combined traffic control room located at the St Peters interchange WestConnex Motorway Control Centre (WMCC). This WMCC was built as part of the M8 project.

Most operational ancillary infrastructure for the M4-M5 Mainline Link Tunnels is established in the Campbell Road Motorway Operations Complex (MOC). As identified above, coordinated operations of the Asset will be undertaken from the WMCC – captured in the M8 OEMP as the Burrows Road MOC, however integrated day to day operations will also be linked with the St Peters MOC, M4 Motorway Control Centre (MCC) at Homebush Bay Drive and the Parramatta Road Ventilation Facility (PRVF), captured under the M8 and M4 OEMPs respectively. The Incident and Maintenance (I&M) Contractor will operate and maintain the MOCs.

### 2.3.1 Campbell Road Motorway Operations Complex

The Campbell Road MOC is located on the southern extent of the Project, at the St Peters Interchange northern portals.

This Complex includes the Campbell Road Ventilation Facility (CRVF), a water treatment plant that will treat the captured tunnel water and includes a maintenance facility to support maintenance of the Asset during operation.

The operational features of Campbell Road MOC are included in Table 2-2 and shown in Figure 2-2.

Table 2-2: Campbell Road MOC infrastructure and equipment

Aspect	Infrastructure / equipment
Buildings	<ul style="list-style-type: none"> <li>• Distribution substation building</li> <li>• Ventilation building including two ventilation shafts with four exhaust fans arranged horizontally in a two-storey configuration</li> <li>• Workshop and office maintenance facility</li> <li>• Spare parts and equipment storage facility</li> <li>• Water Treatment Plant</li> <li>• Hardstand and site parking</li> </ul>
Access	<ul style="list-style-type: none"> <li>• Access road via Campbell Road</li> <li>• 24 hours per day</li> <li>• I&amp;M Contractor vehicles</li> <li>• At all times a minimum of two people shall attend site. During maintenance activities up to 10 people shall attend the site.</li> </ul>

### 2.3.2 Parramatta Road Ventilation Facility

The PRVF is located on the northern extent of the Project on the corner of Parramatta Road and Wattle Street in Haberfield and was constructed by the M4. Additional mechanical and electrical (M&E) fit out was completed during the construction of the Asset to ensure the required ventilation system performance during the operation of both the M4 and M4-M5 Link Mainline Tunnels.

The operational features of the PRVF are included in Table 2-3 and shown in Figure 2-3.

Table 2-3: PRVF infrastructure and equipment

Aspect	Infrastructure / equipment
Buildings	<ul style="list-style-type: none"> <li>• Ventilation supply and exhaust stations</li> <li>• Air quality monitoring equipment on the outlet</li> <li>• Electrical distribution substation facilities</li> <li>• Fire pumps room</li> <li>• Fire water tanks (shared with the M4)</li> <li>• Ancillary facilities</li> </ul>
Access	<ul style="list-style-type: none"> <li>• General vehicle access is provided via Parramatta Road and emergency vehicle access is provided via Wattle Street</li> <li>• 24 hours per day</li> <li>• I&amp;M Contractor vehicles</li> <li>• At all times a minimum of two people shall attend site. During maintenance activities up to 10 people shall attend the site.</li> </ul>



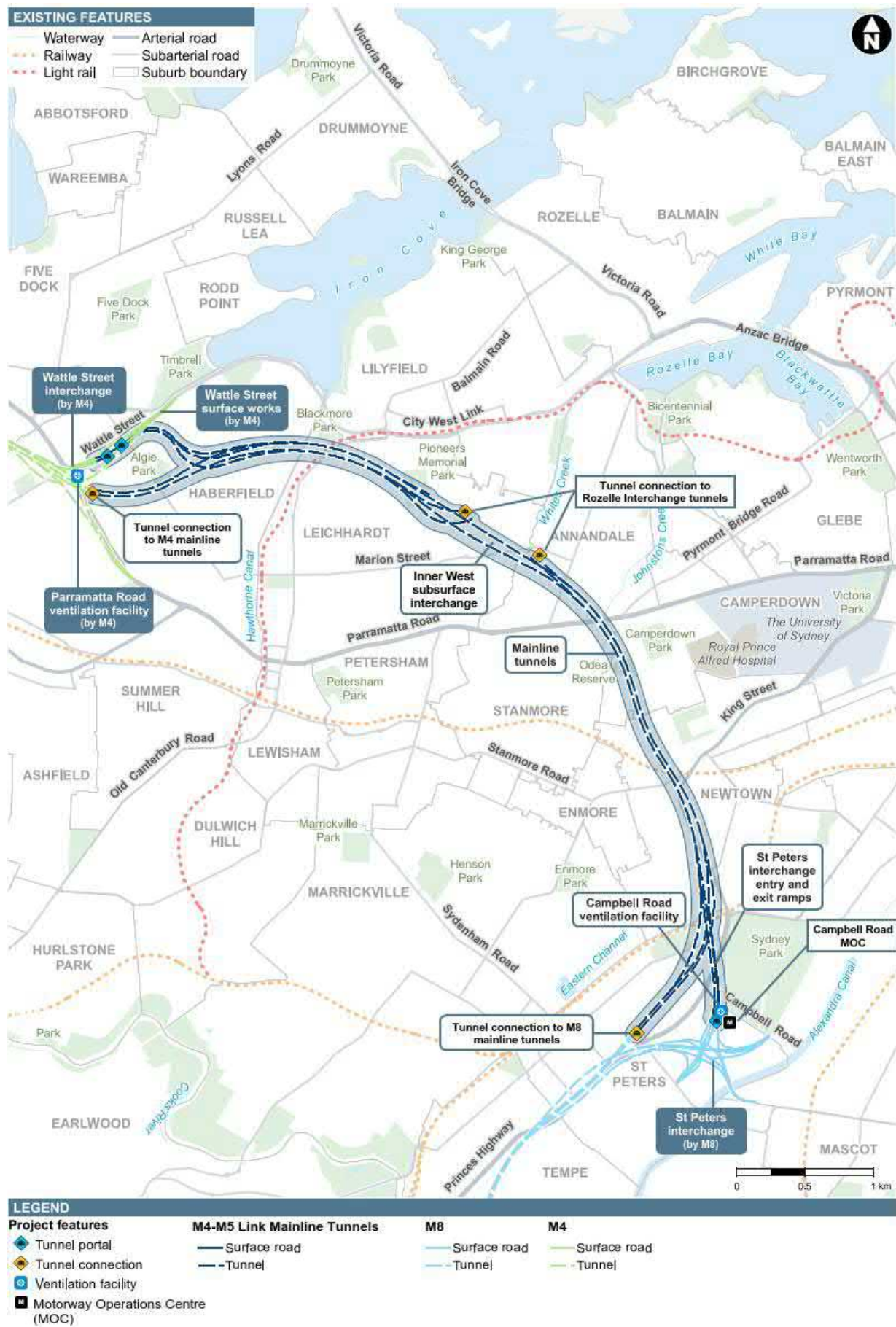





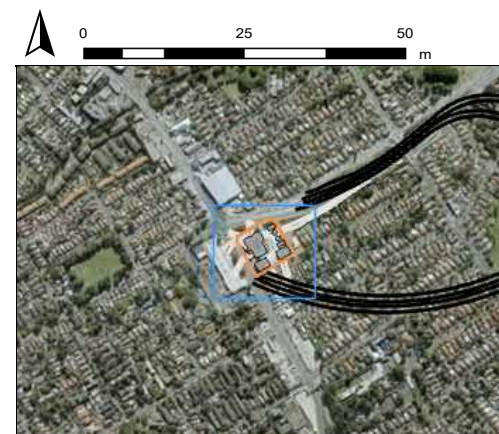
Figure 2-1: Key features of the Asset as upgraded under the approved project



**Figure 2-3: Parramatta Road Ventilation Facility**

**Legend**

-  Tunnel Alignment
-  Ancillary Facility Boundary
-  Operational Ancillary Infrastructure






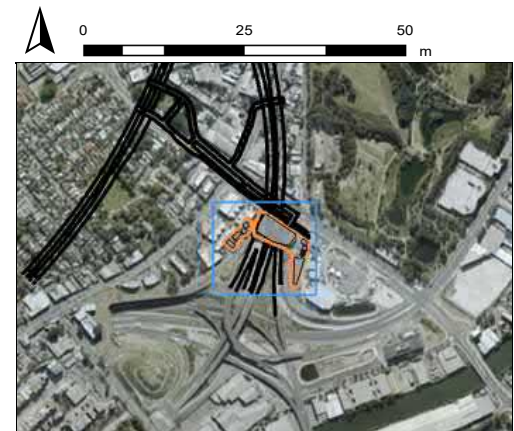
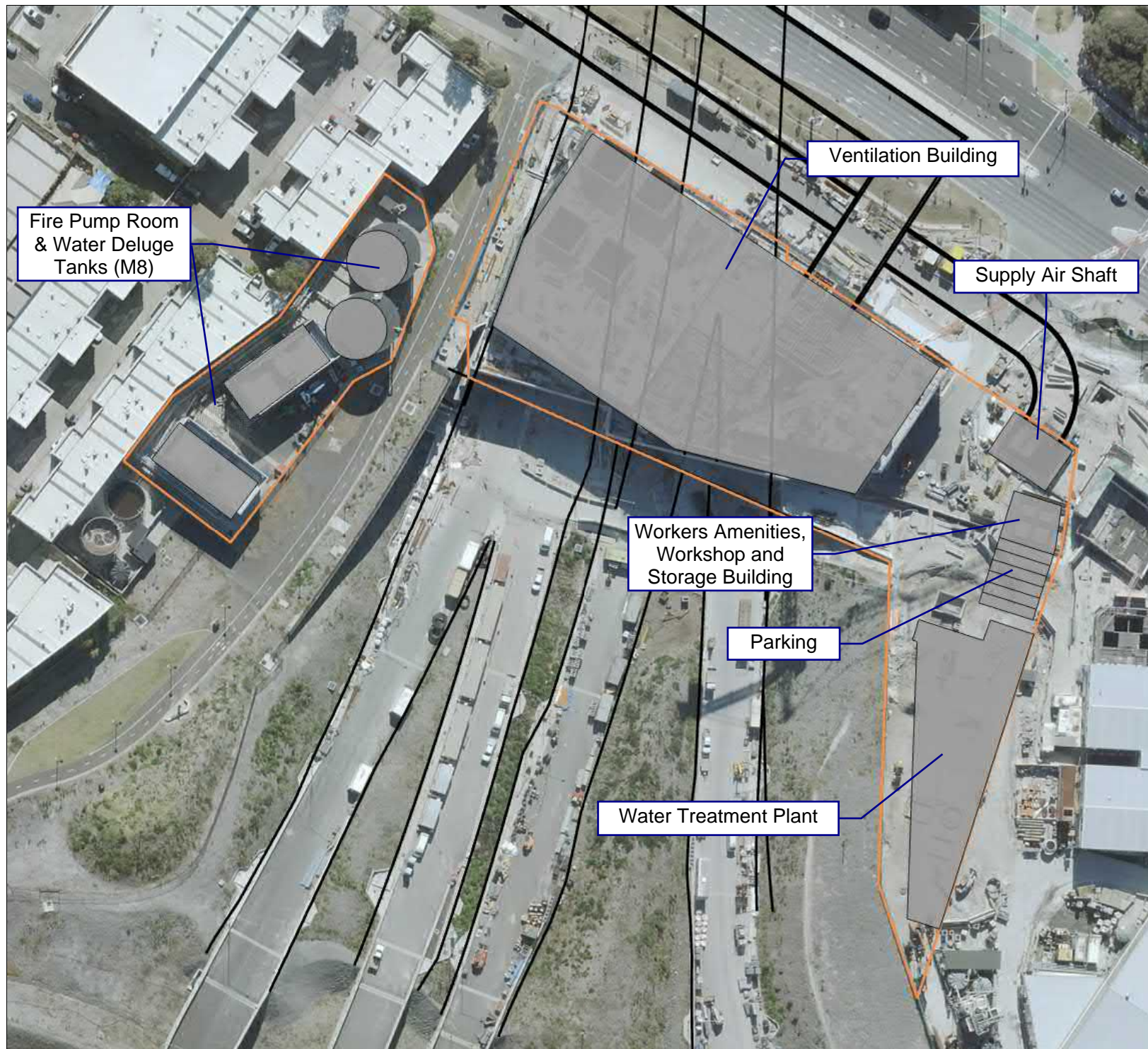
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Figure 2-2: Campbell Road MOC

Legend

-  Tunnel Alignment
-  Ancillary Facility Boundary
-  Operational Ancillary Infrastructure



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### 3 Operation and maintenance activities

#### 3.1 Operation and maintenance activities summary

Table 3-1 includes a list of activities to be undertaken during operation and maintenance of the Asset.

Table 3-1: Operational and maintenance services

Services	Facility/ Location	Number of personnel (indicative)	Activities	Considerations	Frequency	Access Hours
<b>Operations services</b>			All things necessary for the use, operation and control of the Motorway including:			
	Motorway	Refer below and to section 2.3	Traffic management including monitoring the operation of traffic signalling devices from the Motorway Control Centre (MCC)		Daily	24 hours / 7 days
	Tunnel		Operation and periodic testing of tunnel ventilation equipment and facilities to maintain acceptable air quality within and outside of tunnel		Daily	24 hours / 7 days
	Motorway		Equipment and systems management including monitoring the operation of tolling systems and tunnel ventilation system		Daily	24 hours / 7 days
	Motorway		Incident management including attending and clearing all breakdowns and other vehicle incidents (including spills) on the M4-M5 Link Mainline Tunnels Motorway		As required	24 hours / 7 days
	Campbell Road MOC		Storage of liquids and chemicals at the workshop and maintenance facilities		Daily	24 hours / 7 days
<b>Maintenance Services</b>	Campbell Road MOC / PRVF	At all times a minimum of two people shall attend site. During maintenance activities up to ten people shall attend the site.	Maintenance of ventilation plant, facilities and monitoring equipment: (e.g. fans, ventilation facilities, monitors) including: <ul style="list-style-type: none"> <li>Testing of the tunnel ventilation system</li> <li>Inspect fan assemblies and airways into fans</li> </ul>	Coordination of activities at the PRVF with M4 O&M Contractor.	Daily	Major activities generally occur during quarterly nightly closures; minor activities generally occur during day hours, providing

Services	Facility/ Location	Number of personnel (indicative)	Activities	Considerations	Frequency	Access Hours
			<ul style="list-style-type: none"> <li>• Diagnosis for out of balance vibration and bearing condition</li> <li>• Measure and record operating current and voltage, and motor winding insulation resistance</li> <li>• Inspect protective coatings and tightness of bolts</li> <li>• Inspect impeller for abrasion, corrosion or dirt deposits</li> <li>• Check the fan, impeller, motor for corrosion and damage</li> </ul> <p>Inspect ventilation facility for structural integrity and soundness of fixtures and fittings</p>			Motorway operations are unaffected and it is safe to do so
			<p>Maintain external areas including:</p> <ul style="list-style-type: none"> <li>• Removing rubbish</li> <li>• Maintain visual appearance</li> </ul>	Routine activities with repairs involving machinery as required	Weekly inspections and monthly routine tasks	Generally during daylight hours as required
			Maintaining landscaped areas including vegetation trimming, grass mowing and replanting using equipment such as tractor slashers, ride on mowers, hand mowers, brush cutters, blower/vacs, small skids steer, augers, water carts, etc.	Routine activities with access to adjacent areas	Weekly inspections and monthly routine tasks	Generally during daylight hours as required
			Cleaning out drains	Routine inspection; cleaning activities may require machinery, with appropriate controls and notification measures in place	Annually and as required	Generally during daylight hours as required
			Water treatment (through Water Treatment Plant) at Campbell Road MOC	Routine activity with dedicated machinery	Daily	Generally during daylight hours as required
			Delivery of chemicals to the WTP involving one chemical tanker	Routine activity with dedicated machinery	Weekly	Generally during daylight hours as required



Services	Facility/ Location	Number of personnel (indicative)	Activities	Considerations	Frequency	Access Hours
			Removal of sludge produced as a by-product of the treatment process utilising one skip bin truck	Routine activity with dedicated machinery	Weekly	Generally during daylight hours as required
			Graffiti removal from the facility using non-hazardous materials and a pressure cleaner after application of removal agent (graffiti treatment may also include re-painting)	Will be completed as identified after inspections or reported through any of the communication mediums.	Maintenance as required following weekly inspection	Generally during daylight hours as required
			Remove unauthorised posters from assets by appropriate means such that the strata from which the items are removed are not damaged and, where possible, minimal damage to the poster occurs. Record details of the poster, sign, location and, where practical, name and address the owner. Once removed, unauthorised posters (including supporting structures) must be stored for one month before disposing.	Activities may involve high pressure water machinery. These shall normally be conducted during day time shifts and appropriate control and notification measures in place.	Maintenance as required following weekly inspection	Generally during daylight hours as required
	All external landscaped areas	At all times a minimum of two people shall attend site. During maintenance activities up to four people shall attend the site.	Maintaining landscaped areas including vegetation trimming, grass mowing and replanting using equipment such as tractor slashers, ride on mowers, hand mowers, brush cutters, blower/vacs, small skids steer, augers, water carts, etc.	Routine activities with access to adjacent areas	Weekly	Generally during daylight hours as required
	Motorway (includes all areas within the operational boundary of the project)	At all times a minimum of two people shall attend site. During maintenance activities up to four people shall attend the site.	Removing material deposited by motorists, such as non-biodegradable litter and food wastes from the Motorway verges using road sweeping equipment and maintenance crew members	As identified, sweeping conducted weekly	Maintenance as required following daily inspection	Generally during daylight hours as required
			Cleaning up any spills from motor vehicles using spill kits containing material to absorb spills, then shovelled/swept up and material disposed at approved waste facilities	As required as part of clean up after incidents	Maintenance as required following daily inspection	As required and safe to do so

Services	Facility/ Location	Number of personnel (indicative)	Activities	Considerations	Frequency	Access Hours
			<p>Graffiti removal from road furnishings, retaining walls, bridges, etc. using non-hazardous materials and a pressure cleaner after application of removal agent (graffiti treatment may also include re-painting). Remove graffiti and clean the surface according to any requirements for anti-graffiti coatings.</p> <p>Remove unauthorised posters from assets by appropriate means such that the strata from which the items are removed are not damaged and, where possible, minimal damage to the poster occurs. Record details of the poster, sign, location and, where practical, name and address the owner. Once removed, unauthorised posters (including supporting structures) must be stored for one month before disposing.</p>	<p>Will be completed as identified after inspections or reported through any of the communication mediums.</p> <p>Activities may involve high pressure water machinery. These shall normally be conducted during day time shifts and appropriate control and notification measures in place.</p>	Maintenance as required following daily inspection	As required and safe to do so
			<p>Stormwater system maintenance and repair including:</p> <ul style="list-style-type: none"> <li>Cleaning out drains (including detention and sedimentation basins)</li> <li>Inspect Pits for structural integrity and flow obstructions (Note: flame trap pits fill with water)</li> <li>Inspect pipes for structural integrity and flow obstructions</li> <li>Inspect sub-surface drains</li> </ul>	<p>Routine inspection with CCTV equipment requiring access to inlet pits.</p> <p>Cleaning activities may require heavy machinery, these shall generally be conducted during day time shifts, with appropriate controls and notification measures in place.</p>	Annually and as required	Night closures and during 24 hour operations as safe to do so.

Services	Facility/ Location	Number of personnel (indicative)	Activities	Considerations	Frequency	Access Hours
			Pavement maintenance and repair including: <ul style="list-style-type: none"> <li>Undertake inspection of assets following heavy rains and storms</li> <li>Undertake asset inspection which is prompted by a public complaint</li> <li>Undertake detailed Inspection</li> <li>Test carriageway and ramps in minimum 100m lengths for roughness</li> </ul>	Periodic repairs of degraded pavement will be conducted by onsite teams with minimal machinery. Significant pavement works as result of reaching end of effective life will require significant machinery and be undertaken as a major project.	Maintenance as required following daily inspections	During permitted night closures
			Maintenance of road furnishings (including noise barriers). Visual inspection for accident damage, vandalism or graffiti.	Routine activities with repairs involving machinery as required	Monthly	Night closures and during 24 hour operations as safe to do so.
			Maintenance of roadside and medians (including fences, retaining walls and landscaping) including removal of graffiti with issues identified through inspections of the structural integrity and stability and public complaint. Inspections will also include ensuring retaining walls are not sloping or falling.	Routine activities with repairs involving machinery as required	Monthly	Night closures and during 24 hour operations as safe to do so.
			Maintenance of mechanical and electrical systems (lighting, hydraulics, instrumentation) including replacement of light globes	Routine activities with repairs involving machine as required	Monthly	Night closures and during 24 hour operations as safe to do so.
			Line marking inspections, both scheduled (alternating day and night) and prompted by public complaints. Maintenance as required by the inspection. Maintenance and repair of intelligent transport systems (traffic lights, traffic signs, safety cameras)	Routine activities with repairs involving machine as required	Quarterly	During permitted night closures.

## WestConnex M4-M5 Link Mainline Tunnels

### Operational Environmental Management Plan

Services	Facility/ Location	Number of personnel (indicative)	Activities	Considerations	Frequency	Access Hours
	Tunnel	At all times a minimum of two people shall attend site. During maintenance activities up to ten people shall attend the site.	Tunnel washing	Routine activity with dedicated machinery under closed or controlled conditions	Quarterly	During permitted night closures.
			Tunnel operation systems including ventilation, fire and life safety, etc.	During scheduled closures operation and testing of systems in accordance with maintenance standards.	Quarterly	Night closures and during 24 hour operations as safe to do so.

## 3.2 Staging and scheduling of operation and maintenance activities

DPIE will be notified of the date of the commencement of the operation of the road in accordance with CoA A34(b), prior to the commencement of operation.

Table 3-2 includes a list of assets that are proposed to be staged as part of the operation of the CSSI.

Table 3-2: Staged Assets

Asset	Location	Timeframe
Bridge 5 and 6	<ul style="list-style-type: none"><li>Twin bridges over the M8 connecting M4-M5 Link Mainline Tunnels to Sydney Gateway</li></ul>	Upon completion of Sydney Gateway Project (2024)
Leichhardt tunnel stubs	<ul style="list-style-type: none"><li>Entry and exit portals connecting the M4-M5 Link Mainline Tunnels to the Rozelle Interchange and Iron Cove Link</li></ul>	Upon completion of the Rozelle Interchange Project (2023)

The Asset will be continuously operated and maintained 24-hours per day, 7-days a week, 365 days a year.

Programmed maintenance works will be undertaken where possible, during daylight hours (including off-motorway works, e.g. landscaping, litter removal, graffiti removal, gantry access etc.). However due to the strategic importance of the motorway, certain motorway, maintenance works will be required to occur during:

- hours of low traffic volumes to ensure maintenance works limits impacts on peak traffic flow
- scheduled maintenance shutdowns.

The Project Company Community & Stakeholder Manager will notify the public and other stakeholders before working at night or out of hours, using the methods described in section 7.3.1. Urgent unplanned maintenance will be undertaken in accordance with the Project Company's Community Relations Plan (refer to section 7.3.1).



## 4 Environmental obligations

### 4.1 Statutory obligations

This section describes the statutory and other obligations covering the operational Asset.

#### 4.1.1 Conditions of Approval

Conditions of Approval (CoA) relevant to the operation of the Asset are included in Table 4-1. Those CoA that are specific to the air quality, surface water quality and groundwater management are contained in the relevant sub-plans and monitoring programs.

Table 4-1: Relevant operational conditions of approval

CoA	Relevant Requirement	Reference
<b>A1</b>	<p>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 WestConnex M4-M5 Link Environmental Impact Statement – Volumes 1A-C and 2A-J (dated August 2017) (the EIS) as amended by:</p> <ul style="list-style-type: none"> <li>(a) the WestConnex M4-M5 Link Submissions and Preferred Infrastructure Report (dated January 2018) (the SPIR);</li> <li>(b) the WestConnex M4-M5 Link Mainline Tunnel Modification Report (dated September 2018) (Modification 1 Report) as amended by the WestConnex M4-M5 Link Mainline Tunnel Modification Response to Submissions (dated November 2018) (Modification 1 RtS);</li> <li>(c) the WestConnex M4-M5 Link Rozelle Interchange Iron Cove Ventilation Underground Modification Report (dated November 2019) as amended by the WestConnex M4-M5 Link Rozelle Interchange Iron Cove Ventilation Underground Modification Response to Submissions Report (dated March 2020); and</li> <li>(d) the WestConnex M4-M5 Link Rozelle Interchange Glebe Island Construction Ancillary Facility Modification Report (dated June 2020).</li> <li>(e) the WestConnex M4-M5 Link Rozelle Interchange The Crescent overpass and active transport links Modification report (dated August 2019) (Modification 2 Report) as amended by the (i) WestConnex M45-M5 Link Rozelle Interchange Modification The Crescent overpass and active transport links Design amendment report (dated April 2020) (Modification 2 Amendment Report), (ii) WestConnex M45-M5 Link Rozelle Interchange Modification The Crescent overpass and active transport links Response to Submissions Report (dated April 2020) (Modification 2 RtS), and (iii) WestConnex M45-M5 Link Rozelle Interchange Modification The Crescent overpass and active transport links Response to Submissions on the Design amendment report (dated June 2020) (Modification 2 Amendment RtS); and</li> <li>(f) the WestConnex M4-M5 Link Rozelle Interchange Modification Request Letter (dated October 2020).</li> </ul>	<p>This OEMP and subs plans have been developed in accordance with the requirements of CoA A1(a-f).</p>
<b>A9</b>	<p>Without limitation, all strategies, plans, programs, reviews, audits, report recommendations, protocols and the like required by the terms of this approval must be implemented by the Proponent in accordance with all requirements issued by the Secretary from time to time in respect of them.</p>	<p>The requirements of the Project approval have been incorporated into this OEMP.</p>

CoA	Relevant Requirement	Reference
A11	The Proponent is responsible for any breaches of the conditions of this approval resulting from the actions of all persons that it invites onto any site, including contractors, sub-contractors and visitors.	Compliance, training and awareness (refer Section 6) for the operation of the Asset, including the compulsory site induction, will provide opportunities to inform I&M personnel of the requirements under the conditions of approval relevant to the operation of the Asset.
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 requires) must be prepared, then endorsed by the ER and then submitted to the Secretary for information. The Staging Report must be submitted to the Secretary no later than one (1) month prior to the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one (1) month prior to the commencement of operation of the first of the proposed stages of operation).	The operation of the M4-M5 Link Project will be staged. Refer to Section 3.2 of this OEMP.
A16	Where changes are proposed to the staging of construction or operation, a revised Staging Report must be prepared and submitted to the Secretary for information no later than one (1) month prior to the proposed change in the staging.	Where changes to the staging of operation are proposed, the Staging Report will be revised and submitted to the Secretary at least one (1) month prior to the proposed change. Refer to Section 9.7.
A27	A Compliance Tracking Program to monitor compliance with the terms of this approval must be prepared, taking into consideration any staging of the CSSI that is proposed in a Staging Report submitted in accordance with Conditions A12 and A13 of this approval.	The Compliance Tracking & Environmental Audit Program (CTEAP) was prepared to satisfy this condition. The CTEAP is discussed in Section 9.5.
A29	The Compliance Tracking Program in the form required under Condition A28 of this approval must be implemented for the duration of works and for a minimum of one (1) year following commencement of operation, or for a longer period as determined by the Secretary based on the outcomes of independent environmental audits, Environmental Representative Monthly 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 Tracking Program must be implemented for the relevant period for each stage or part of the CSSI.	The CTEAP was prepared to satisfy this condition and is discussed in Section 9.5.
A37	The Environmental Audit Program, as submitted to the Secretary, must be implemented and complied with for the duration of construction and operation.	This is captured under the wider CTEAP. Discussed further in Section 9.3.
A38	All independent environmental audits of the CSSI must be conducted by a suitably qualified, experienced and independent team of experts in auditing and be documented in an Environmental Audit Report which: <ul style="list-style-type: none"> <li>(a) assesses the environmental performance of the CSSI, and its effects on the surrounding environment;</li> <li>(b) assesses whether the project is complying with the terms of this approval; and</li> <li>(c) recommends measures or actions to improve the environmental performance of the CSSI.</li> </ul>	This is captured under the wider CTEAP. Discussed further in Section 9.3.
A39	The Proponent must submit a copy of the Environmental Audit Report to the Secretary for information, with a response to any recommendations contained in the audit report within six (6) weeks of completing the audit.	This is captured under the wider CTEAP. Discussed further in Section 9.3.
A40	The Secretary must be notified as soon as possible and in any event within 24 hours of any incident.	Incident management, including notification of the Secretary, is summarised in Section 8.2 and 9.7.

CoA	Relevant Requirement	Reference
A41	Notification of an incident under Condition A40 of this approval must include the time and date of the incident, details of the incident and must identify any consequent non-compliance with this approval.	Incident management, including notification of the Secretary, is summarised in Section 8.2.
A42	All written requirements of the Secretary or relevant public authority, which may be given at any point in time, to address the cause or impact of an incident must be complied with, within any timeframe specified by the Secretary or relevant public authority.	Incident management, including notification of the Secretary, is summarised in Section 8.2.
A43	If statutory notification is given to the EPA as required under the POEO Act in relation to the CSSI, such notification must also be provided to the Secretary within 24 hours after the notification was given to the EPA.	Incident management, including notification of the Secretary, is summarised in Section 8.2.
B5	The Communication Strategy, as approved by the Secretary, must be implemented for the duration of the works and for 12 months following the completion of construction.	Noted. The approved CCS is being implemented to manage stakeholder communications, complaints and engagement throughout construction.
B8	A Complaints Management System must be prepared prior to the commencement of any works in respect of the CSSI and be implemented and maintained for the duration of construction and for a minimum for 12 months following completion of construction of the CSSI.	Project Company established the complaints management system to comply with this condition during the preparation of the Environmental Impact Statement for the Project, fulfilling the requirements of this condition.  This same consultation manager system is being utilised during operation of the Asset to ensure consistency in reporting of enquiries and complaints. This will continue for up to 12 months following the completion of the construction of the SSI  Complaints and enquiries are discussed in Section 7.3.2.
B9	The Complaints Management System must include a Complaints Register to be maintained recording information on all complaints received about the CSSI during the carrying out of any works associated with the CSSI and for a minimum of 12 months following the completion of construction of the CSSI. The Complaints Register must record the:  (a) number of complaints received; (b) number of people affected in relation to a complaint; and (a) (c) nature of the complaint and means by which the complaint was addressed and whether resolution was reached, with or without mediation.	Complaints and enquiries are discussed in Section 7.3.2.
B17	A website providing information in relation to the CSSI must be established before commencement of works and maintained for the duration of works, and for a minimum of 24 months following the completion of construction of the CSSI. The following up-to-date information (excluding confidential, private and commercial information) must be published prior to works commencing and maintained on the website or dedicated pages:  (a) information on the current implementation status of the CSSI; (b) a copy of the documents listed in Condition A1 of this approval, and any documentation relating to any modifications made to the CSSI or the terms of this approval; (c) 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; and	Where required by this approval, documents are uploaded on the project website ( <a href="https://www.westconnex.com.au/">https://www.westconnex.com.au/</a> ) prior to the relevant work/activity being undertaken.

CoA	Relevant Requirement	Reference
	<p>(d) a copy of each licence or permit required and obtained in relation to the CSSI.</p> <p>Where a condition(s) of this approval requires a document(s) be prepared prior to a work or construction or operational activity being undertaken, a current copy of the relevant document(s) must also be published on the website before the work / activity is undertaken.</p>	
D1	<p>An Operational Environmental Management Plan (OEMP) must be prepared in accordance with the Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004) 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 operation. This condition (Condition D1) does not apply if Condition D2 of this approval applies.</p>	<p>This OEMP has been prepared to satisfy this condition. This plan has been developed in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004) as identified in Section 1.</p> <p>The plan has been developed in consultation with relevant stakeholders. Consultation on this plan is summarised in Section 1.5. A separate document 'Consultation for the M4-M5 Link Mainline Tunnels OEMP and sub-plans' has been prepared separately to this plan to describe the OEMP consultation activities to date and how comments received have been addressed or considered.</p>
D3	<p>Where an OEMP is required, the Proponent must include the following OEMP Sub-plans in the OEMP:</p> <p>(a) Groundwater management: DPI Water and Sydney Water</p>	Refer to Annexure H
D6	The OEMP or EMS or equivalent as agreed with the Secretary, must be submitted to the Secretary for information no later than one (1) month prior the commencement of operation.	Noted.
D7	The OEMP or EMS or equivalent as agreed with the Secretary, as submitted to the Secretary and amended from time to time, must be implemented for the duration of operation and the OEMP or EMS must be made publicly available prior to the commencement of operation.	Noted.
D8	<p>The following Operational Monitoring Programs must be prepared in consultation with the relevant authorities identified for each Operational Monitoring Program to compare actual operational performance against predicted performance.</p> <p>(a) Surface Water Quality Plan &amp; Monitoring Program: EPA, DPI Water, Sydney Water, and relevant council(s)</p> <p>(b) Groundwater Monitoring Program: DPI Water, relevant council(s), EPA and Sydney Water</p>	Refer to Annexure G & Annexure H
D18	Where a relevant OEMP Sub-plan exists, the relevant Operational Monitoring Program may be incorporated into that OEMP Sub-plan.	Refer to Annexure G & Annexure H
E1	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.	Noted. Measures to minimise impacts on air quality impacts during operation are summarise in Section 5.4.
E2	Prior to finalising the detailed design of the CSSI and establishing the ambient air quality monitoring stations required under Condition E24, the Proponent must establish an Air Quality Community Consultative Committee (AQCCC) to provide advice prior to and during the operation of the CSSI. The AQCCC must:	Refer to Section 7.5 and Annexure F

CoA	Relevant Requirement	Reference
	<p>(a) be comprised of –</p> <ul style="list-style-type: none"> <li>i. two representatives from the Proponent and tunnel operator,</li> <li>ii. one representative from each of the relevant councils, whose attendance is only required when considering matters relevant to their respective local government area,</li> <li>iii. three representatives from each local community adjacent to each ventilation facility whose attendance is only required when considering matters relevant to their respective local area, and whose appointment has been approved by an expression of interest process conducted by the Proponent in consultation with the Secretary, and</li> <li>iv. a Chair who is an independent from the design and construction of the CSSI put forward by the Proponent and approved by the Secretary;</li> </ul> <p>(b) meet at least four (4) times a year, or as otherwise agreed by the Chair and the Secretary;</p> <p>(c) review and provide advice on the location of the air quality monitoring stations required under Condition E24, operation environmental management plans and other operation stage documents, compliance tracking reporting, audit reports, or complaints as they relate to air quality; and</p> <p>(d) provide advice on the dissemination of monitoring results and other information on air quality issues.</p> <p>The AQCCC may comprise the same members of the AQCCC established under CSSI approvals for the WestConnex M4 East and New M5 projects (SSI 6307 and SSI 6788) in relation to the ventilation outlets located in Haberfield and St Peters.</p> <p>The AQCCC must operate for up to two (2) years after commencement of operation, or as otherwise approved or directed by the Secretary, in consultation with the Chair.</p>	
E7	Conditions E2A, E3, E4, E5, and E6 do not apply in an emergency, as defined in the OEMP required by Condition D1.	Refer to Section 8.2.1
E8	The Proponent must, as soon as reasonably practicable, notify the Secretary and the EPA of any discharge during an emergency.	Refer to Annexure F
E9	The tunnel ventilation systems must be designed, constructed and operated so as to only release emissions from ventilation outlets and not from the portals or the tunnel support facilities as identified in the documents listed in Condition A1, except for emergency smoke management purposes in the event of a fire in a tunnel or periodic testing of the system as defined in the OEMP required by Condition D1.	Refer to Section 8.2.1 and Annexure F
E64	<p>The Proponent must prepare an Operational Road Network Performance Review, <u>within 12 months and five (5) years after the commencement of operation of the full CSSI</u> (of the mainline tunnels and Rozelle Interchange). The Review must address road network performance and review the performance of the CSSI on the adjoining road network. The Review must confirm the adequacy of the mitigation measures identified in the Road Network Performance Plan required under Condition E63.</p> <p>The Review must be undertaken in consultation with Transport for NSW and relevant council(s) and be completed within six (6) months of the review timeframes. The Review must be provided to the Secretary within 60 days of its completion.</p> <p>Further mitigation measures, if required, must be included in the Review. The Proponent is responsible for the implementation of the identified measures.</p>	Refer to Section 9.4 and 9.7



CoA	Relevant Requirement	Reference
	<i>Note: Identified mitigation measures may need to be further assessed under the Environmental Planning and Assessment Act, 1979. Works will need to meet relevant design standards and to subject to independent road safety audits.</i>	
E67	All noise and vibration assessment, management and mitigation required by this approval must consider the cumulative noise impacts of approved CSSI and SSI projects. This includes using ambient and background levels which do not include other WestConnex M4 East and New M5 (SSI 6307 and SSI 6788) projects. This condition applies to all works and operation.	The operational noise assessments contained in the Operational Noise and Vibration Review (ONVR) considered cumulative impacts of the other WestConnex stages and will be verified within 12 months from the commencement of operation. Refer to Section 9.2.  Cumulative impacts will also be considered in noise assessments undertaken for I&M activities during operation. Refer to Section 5.4
E95	<p>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 E92.</p> <p>The Proponent must prepare an Operational Noise Compliance Report to document this monitoring. The Report must include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(a) noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under Condition E92;</li> <li>(b) a review of the operational noise levels in terms of criteria and noise goals established in the NSW Road Noise Policy 2011;</li> <li>(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 sensitive receivers;</li> <li>(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;</li> <li>(e) any required recalibrations of the noise model taking into consideration factors such as noise monitoring and actual traffic numbers and proportions;</li> <li>(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</li> <li>(g) identification of additional measures to those identified in the review of noise mitigation measures required by Condition E92, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy (EPA, 2011) and Industrial Noise Policy (EPA, 2000), when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.</li> </ul> <p>The Operational Noise Report must be submitted to the Secretary and the EPA within 60 days of completing the operational noise monitoring and made publicly available.</p>	<p>Operational performance monitoring is discussed in Section 9.2 and reporting requirements in Section 9.7.</p> <p>A standalone Operational Noise Compliance report will be prepared to satisfy this condition within 12 months of commencement of operation of the Asset.</p>
E122	The Proponent must construct and operate the CSSI with the objective of minimising light spillage to residential properties. All lighting associated with the construction and operation of the CSSI must be consistent with the requirements of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces. Notwithstanding,	The operation-phase lighting design is consistent with the Australian Standard 4282-1997. Light spill to adjacent properties will be minimise during operation through the use of directional lighting, light shields and avoidance of taller element lighting.

CoA	Relevant Requirement	Reference
	the Proponent must provide mitigation measures to manage any residual night lighting impacts to protect properties adjoining or adjacent to the CSSI, in consultation with affected landowners.	Refer to the UDLP.
E123	The Proponent must construct and operate the CSSI with the objective of avoiding adverse or distracting lighting configuration, spillage or intensity to aircraft operations. All lighting associated with the construction and operation of the CSSI must adhere to the Lighting in the Vicinity of Aerodromes: Advice to Lighting Designer (CASA, 1999) and National Airports Safeguarding Framework Guideline E: Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports (DIRD, 2012). Notwithstanding, the Proponent must provide mitigation measures to manage any residual night lighting impacts to protect aircraft operations, in consultation with CASA and DIRD.	Given the proximity to Sydney Airport, lighting at the Campbell Road MOC was designed to minimise any adverse impacts to aircraft operations and adhere to the relevant CASA and DIRD guidelines.  Consultation with CASA and DIRD was also completed during the detailed design process.  Refer to the UDLP.
E137	The Urban Design and Landscape Plan(s), as approved by the Secretary, must be implemented during construction, as required, and operation.	The approved UDLP is being implemented with construction of the permanent built surface works commencing in August 2020.
E139	The ongoing maintenance and operation costs of urban design, open space, landscaping and recreational items and works implemented as part of this approval will remain the Proponent's responsibility until satisfactory arrangements have been put in place for the transfer of the asset to the relevant authority. Prior to the transfer of assets, the Proponent will maintain items and works to at least the design standards established in the Urban Design and Landscape Plan, and its sub-plans, required by Condition E133.	Noted.
E144	The Proponent must undertake annual Hazard Reviews of the project for the first five (5) years of operation. The Hazard Review must detail all hazardous incidents that have occurred during the preceding period, identify safety measures required to rectify those incidents, and address any ongoing issues.  The first Hazard Review must be undertaken for the first three (3) months of operation after the opening of the project to traffic. Subsequent Hazard Reviews must be undertaken for the following nine (9) months and thereafter at 12 monthly intervals. FRNSW may also direct the Proponent to undertake a Hazard Review following any major incident in the tunnel.	Refer to Section 9.4
E145	A Hazard Review Report, outlining the results of the Hazard Review, and any proposed additional safety measure(s) to be implemented in response to the findings of the Hazard Review, must be submitted to FRNSW no later than one (1) month after the review period.  The Proponent must respond in writing to any recommendation made by FRNSW in relation to the findings of a Hazard Review, within such time as may be agreed to by FRNSW.	Refer to Section 9.4  Results of these annual reviews will be documented in a Hazard Review Report and provided to FRNSW for review with any feedback received responded to in writing.
E150	Maintenance testing of fire and life safety systems must be undertaken at least annually, or any other interval as required by the design engineer and in consultation of FRNSW.  Results of maintenance testing must be made available to FRNSW for review, and the Proponent must respond in writing to any recommendations from FRNSW to ensure the reliability of the fire and life safety systems.	Refer to Section 9.4.  Results of these annual reviews will be documented in a Maintenance Testing Report and provided to FRNSW within 1 month after the review with any feedback received responded to in writing.
E153	The Proponent must prepare a Flood Review Report(s) after the first defined flood event for any of the following flood magnitudes – the 5 year ARI event, 20 year ARI event, 100 year ARI event and probable maximum flood – to assess the actual flood impact against that predicted in the documents referred to in Condition A1. The Flood Review Report(s) must be prepared within three	Operational reviews and checks are discussed in Section 9.4 and reporting requirements in Section 9.7

CoA	Relevant Requirement	Reference
	<p>(3) months of each flood event. The report(s) must be prepared by an appropriately qualified person(s) and include:</p> <ul style="list-style-type: none"> <li>(a) identification of the properties and infrastructure affected by flooding during the reportable event;</li> <li>(b) a comparison of the actual extent, level, velocity and duration of the flooding event against the impacts predicted in the documents referred to in Condition A1 and the requirements specified in Condition E151; and</li> <li>(c) where the actual extent and level of flooding exceed the predicted level and / or the requirements specified in Condition E151, with the consequent effect of adversely impacting on property(s), structures and infrastructure, identification of the measures to be implemented to reduce future impacts of flooding related to the CSSI works, including the timing and responsibilities for implementation.</li> </ul> <p>Flood mitigation measures must be developed in consultation with the affected property / structure / infrastructure owners and the relevant council(s).</p> <p>A copy of the Flood Review Report(s) must be submitted to the Secretary and relevant council(s) within one (1) months of finalising the report(s).</p>	
<b>E204</b>	<p>All waste generated during construction and operation must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.</p>	Noted.



### 4.1.2 Mitigation and management commitments

Table 4-2 summarises the safeguards and mitigation measures included in the M4-M5 Link Tunnels Submissions and Preferred Infrastructure Report (SPIR) (Section 8 of the document referred to in CoA A1(a)) that relate to operation of the Asset.

Table 4-2: Operational environmental mitigation and management commitments

No.	Relevant requirement	Responsibility	OEMP reference
OpTT1	A review of operational network performance will be undertaken 12 months and five years from the opening of the project to confirm the operational impacts of the project on surrounding arterial roads and major intersections in proximity to the Wattle Street interchange, Rozelle interchange and St Peters interchange. The assessment will be based on updated traffic surveys at the time and the methodology used will be comparable with that used in this assessment. The results of the review will be considered in future operational network performance planning carried out by Roads and Maritime [now TfNSW].	TfNSW	The 12-month and 5-year Operational Road Network Performance Review required by CoA E64 will satisfy this REMM. Refer Section 9.4.
OpTT2	To manage potential performance constraints at the Wattle Street interchange, Roads and Maritime will investigate the implementation of the following in consultation with local councils: <ul style="list-style-type: none"> <li>• Queuing and capacity monitoring and management on the Frederick Street/Milton Street corridor</li> <li>• Managing lane use and utilisation to improve the operation of the corridor.</li> </ul>	TfNSW	Measures to manage performance constraints at Wattle Street Interchange will be reviewed as part of the 12-month Operational Road Network Performance Review required by CoA E64 and REMM OpTT1. Refer Section 9.4.
AQ29	Ambient air quality monitoring will be carried out in the vicinity of the ventilation outlets installed as part of the project. Monitoring will occur at key representative locations, identified in consultation with an independent air quality specialist and an Air Quality Community Consultative Committee (AQCCC) [CoA E2], to allow direct comparison of measured ambient air quality with dispersion model predictions. The monitoring will commence at least 12 months prior to and continue for at least two years following the commencement of operation. Monitoring results and a comparison of monitoring results against dispersion model predictions and relevant ambient air quality criteria will be made publicly available.	I&M Contractor	This is met via compliance with CoA E24 to E26. Refer to OAQMP (Annexure F)

No.	Relevant requirement	Responsibility	OEMP reference
NV14	Within 12 months of the commencement of the operation of the project, actual operational noise performance will be compared to predicted operational noise performance. The need for any additional management measures to address any identified operational performance issues and meet relevant operational noise criteria will be assessed and implemented where reasonable and feasible.	D&C Contractor	This will be met via compliance with CoA E95. Refer Section 9.2
FD17	<p>A Flood Review Report will be prepared after the first defined flood event affecting the project works for any of the following flood magnitudes – the five year ARI event, 20 year ARI event and 100 year ARI event - to assess the actual flood impact against those predicted in the design reports or as otherwise altered by the FMS. The Flood Review Report(s) must be prepared by an appropriately qualified person(s) and include:</p> <ul style="list-style-type: none"> <li>• Identification of the properties and infrastructure affected by flooding during the reportable event</li> <li>• A comparison of the actual extent, level, velocity and duration of the flooding event against the impacts predicted in the design reports or as otherwise altered by the FMS</li> <li>• Where the actual extent and level of flooding exceeds the predicted level with the consequent effect of adversely impacting of property(ies), structures and infrastructure, identification of the measures to be implemented to reduce future impacts of flooding related to the M4-M5 Link project including the timing and responsibilities for implementation.</li> </ul> <p>Flood mitigation measures will be developed in consultation with the affected property, structure and/or infrastructure owners, OEH and the relevant council(s).</p>	D&C Contractor / I&M Contractor	This will be met via compliance with CoA E153. Refer Section 9.4 and 9.7
OpRW2	Waste will be managed and disposed of in accordance with relevant NSW legislation and government policies and the mitigation measures described in this EIS.	I&M Contractor	Waste management will be undertaken in accordance with the relevant legislation and guidelines. Refer to Section 4.1.3 and 4.2.
OpHR12	Aviation hazard lighting (if required), building lighting and surface road lighting will be designed and operated in accordance with the requirements of CASA and the Sydney Airport Master Plan 2033.	D&C Contractor	This is met via compliance with CoA E123.

### 4.1.3 Performance Outcomes

Annexure K summarises the performance outcomes included in EIS (Section 5 of Appendix A) that are relevant to the operation of the Asset.

### 4.1.4 Legislation

The following legislation is relevant to the OEMP and its implementation.

Table 4-3: Relevant key environmental legislation

Legislation	Relevance
General	
Environmental Planning and Assessment Act 1979	Planning and development control
Local Government Act 1993	Pollution control, protection of Aboriginal heritage, and watercourse management
Protection of the Environment Operations Act 1997	Pollution and waste management
Work Health and Safety Act 2011	Worker safety
Noise and vibration	
Protection of the Environment Operations Act 1997	Noise and vibration management
Protection of the Environment (Noise Control) Regulation 2017 (as amended)	
Traffic and transport	
Roads Act 1993	Traffic management and working on public roads
Surface water quality and hydrology	
Protection of the Environment Operations Act 1997	Soil and water management
Soil Conservation Act 1938	Erosion and sediment control
Contaminated Land Management Act 1997	Contaminated land management
National Environmental Protection (Assessment of Site Contamination) Measure 1999 (amended 2013)	Stockpile management Spill management
Water Management Act 2000 Water Management Amendment Act 2014	Watercourse protection Water access and use Water use approval Water management work approval Activity approval (other than aquifer interference)
Sydney Water Act 1994	Requirement to obtain consent to discharge waste water to a sewer
Pesticides Act 1999	Safe use and application of pesticides Public notification requirements before applying pesticides
Dangerous Goods (Road and Rail Transport) Act 2008	Safe and licenced transportation of dangerous goods.
Biodiversity	

Legislation	Relevance
<i>NSW Biosecurity Act 2015</i> <i>Fisheries Management Act 1994</i> <i>Biodiversity Conservation Act 2016</i>	Weed management and control Safe fish passage Protection of threatened (fish) species, populations and communities
<b>Aboriginal heritage</b>	
<i>National Parks and Wildlife Act 1974</i>	Aboriginal heritage protection Management of unexpected finds
<b>Non-Aboriginal heritage</b>	
<i>Heritage Act 1977</i>	Non-Aboriginal heritage protection Management of unexpected finds
<b>Air quality</b>	
<i>Protection of the Environment Operations Act 1997</i> <i>Protection of the Environment (Clean Air) Regulation 2010</i>	Pollution management Prohibition of burning
<b>Greenhouse gas</b>	
<i>National Greenhouse and Energy Reporting Act 2007</i>	Minimisation of greenhouse gas generation
<b>Waste and resource management</b>	
<i>Protection of the Environment Operations (Waste) Regulation 2014</i> <i>Protection of the Environment Operations Act 1997</i> <i>Waste Avoidance and Resource Recovery Act 2001</i>	Waste classification, management, storage, transportation and disposal Waste hierarchy: reduction, in preference to reuse and recycling Littering Reduction of resource consumption Minimisation of transport impacts
<b>Dangerous and hazardous materials</b>	
<i>Work Health and Safety Act 2011</i> <i>Dangerous Goods (Road and Rail Transport) Act 2008 (NSW)</i> <i>Dangerous Goods (Road and Rail Transport) Regulation 2014 (NSW)</i>	Dangerous goods and hazardous materials

#### 4.1.5 Licences, permits and approvals

The Asset does not routinely operate under any additional permits, licences and/or approvals. However, permissions and licences may be needed for maintenance activities as described in Table 4-4.

The need for any permit or licence would be determined by the Project Company Representative on a case-by-case basis depending on the nature of the proposed work.

Table 4-4: Licences, permits and approvals for operation of the Asset

Requirement	Comment
Environment Protection Licence (EPL) under Schedule 1 of the POEO Act	<p>Due to elevated ammonia levels in local groundwaters due to historic landfilling, the operation (activity) of the Water Treatment Plant at Campbell Road (MOC5) is considered to be a scheduled activity (treatment of contaminated groundwater) identified in the <i>Protection of the Environment Operations Act 1997</i> (POEO Act).</p> <p>The Water Treatment Plant will operate under an EPL. A copy of the EPL will be available on the Project Website.</p> <p>Emissions from the ventilation outlet will also be regulated under an EPL.</p>
Section 138: NSW Roads Act 1993: road occupancy	Required when operation of maintenance activities require the occupation of the road carriageway

Requirement	Comment
Aquifer interference approval may be required in accordance with section 91 of the <i>Water Management Act 2000</i>	Section 5.23 (previously 115ZG) of the EP&A Act states that 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 <i>Water Management Act 2000</i> are not required for SSIs.

## 4.2 Environmental guidelines and principles

The policies, guidelines and principles relevant to the OEMP and its implementation are identified in Table 4-5.

Table 4-5: Environmental policies, guidelines and principles

Policy / Guideline / principles	Relevance
<b>General</b>	
G36: Environmental Protection (Roads and Maritime, 2017)	Environmental protection
EIA-PO5-1 Environmental Assessment Procedure for Routine and Minor Works (Roads and Maritime, 2015).	Management of routine and minor work
<ul style="list-style-type: none"> <li>Interim Community Consultation Requirements for Applicants (Department of Environment and Conservation (DEC), 2005)</li> <li>International Association for Public Participation (IAP2): Public Participation Spectrum (IAP2, 2014)</li> </ul>	Community consultation
<b>Air Quality</b>	
<ul style="list-style-type: none"> <li>Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2007)</li> <li>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016)</li> <li>9TP-SD-107/2.0 Air Quality Management Guideline (TfNSW, 2016)</li> <li>Australian Standard: AS3580.8 Methods for sampling and analysis of ambient air (Standards Australia, 2008)</li> <li>Australian Standard: AS/NZS3580.9 Methods for sampling and analysis of ambient air (Standards Australia, 2013)</li> </ul>	Management of air quality and dust
<b>Noise and vibration</b>	
<ul style="list-style-type: none"> <li>Interim Construction Noise Guidelines (Department of Environment and Climate Change (DECC), 2009)</li> <li>Construction Noise and Vibration Guidelines (Roads and Maritime, 2016)</li> <li>Assessing vibration: a technical guideline (DEC, 2006)</li> </ul>	Maintenance and repair noise management
<ul style="list-style-type: none"> <li>Environmental Noise Management Manual (Roads and Maritime, 2001)</li> <li>Noise Mitigation Guideline (Roads and Maritime, 2015)</li> <li>Noise Criteria Guideline (Roads and Maritime, 2015)</li> <li>NSW Road Noise Policy (Department of Environment, Climate Change and Water (DECCW), 2011)</li> </ul>	Operational road traffic noise
<ul style="list-style-type: none"> <li>Noise Policy for Industry (EPA, 2017)</li> </ul>	Operational equipment noise
<ul style="list-style-type: none"> <li>Australian Standard: AS1055 Acoustics (Standards Australia, 1997)</li> </ul>	Description and measurement of environmental noise
<b>Traffic and Transport</b>	
<ul style="list-style-type: none"> <li>Guide to Traffic Management (Austroads, 2014)</li> <li>Guide to Traffic Generating Developments (Roads and Maritime, 2002)</li> <li>Traffic Control at Work Sites (Roads and Maritime, Version 4, 2010)</li> </ul>	Traffic management and working on public roads
<ul style="list-style-type: none"> <li>Sydney CBD to Parramatta Strategic Transport Plan (TfNSW, 2015)</li> </ul>	Public transport management

Policy / Guideline / principles	Relevance
<b>Climate change and energy use</b>	
<ul style="list-style-type: none"> <li>Australian Standard: AS 5334 Climate Change Adaptation for Settlements and Infrastructure (Standards Australia, 2013)</li> <li>Climate Change Impacts and Risk Management: A Guide for Business and Government (Department of the Environment and Heritage, Australian Greenhouse Office, 2006)</li> <li>Environmental Sustainability Strategy 2015-2019 (Roads and Maritime, 2016).</li> </ul>	Climate change adaptation
<b>Visual amenity and landscaping</b>	
<ul style="list-style-type: none"> <li>WestConnex M4-M5 Link Mainline Tunnels Urban Design and Landscaping Plan</li> <li>RMS QA Specification M321 Landscape Maintenance (Roads and Maritime, 2008)</li> <li>Bridge Aesthetic Design Guidelines (Roads and Maritime, 2012)</li> <li>Noise Wall Design Guideline (Roads and Maritime, 2016)</li> <li>Landscape Guideline (Roads and Maritime, 2008)</li> <li>Beyond the Pavement (Roads and Maritime, 2014)</li> <li>G40: Clearing and Grubbing (Roads and Maritime, 2012)</li> <li>GreenWay Species List: Native plants of the Cooks River to Iron Cove GreenWay</li> </ul>	Landscape, urban design and vegetation management
<ul style="list-style-type: none"> <li>Australian Standard: AS4282 Control of the obtrusive effects of outdoor lighting (Standards Australia, 1997)</li> </ul>	Light spill
<b>Groundwater</b>	
<ul style="list-style-type: none"> <li>Australian Groundwater Modelling Guidelines (National Water Commission, 2012)</li> <li>NSW Aquifer Interference Policy (Department of Primary Industries, (DPI), 2012)</li> </ul>	Groundwater modelling
<b>Surface water quality and hydrology</b>	
<ul style="list-style-type: none"> <li>G38: Soil and Water Management (Roads and Maritime, 2015)</li> <li>Code of Practice for Water Management: Road Development and Management (Roads and Maritime, 1999)</li> <li>Guidelines for Controlled Activities on Waterfront land (DPI, 2012)</li> <li>Australian and New Zealand Guidelines for Fresh and Marine Water Quality (Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) and the Australian and New Zealand Environment and Conservation Council (ANZECC), 2000)</li> </ul>	Soil and water quality management
<ul style="list-style-type: none"> <li>Bunding and Spill Management Guidelines (EPA, 2017)</li> <li>Australian Standard: AS1940 The Storage and Handling of Flammables and Combustibles (Standards Australia, 1994)</li> <li>Australian Standard: AS4452 The Storage and Handling of Toxic Substances (Standards Australia, 1997)</li> <li>Storage and Handling Liquids: Environmental Protection: Participant's Manual (DECC, 2007)</li> </ul>	Working with chemical substances near watercourses
<ul style="list-style-type: none"> <li>Code of Practice for Water Management: Road Development and Management (Roads and Maritime, 1999)</li> <li>Guidelines for Treatment of Stormwater Runoff from the Road Infrastructure (AP- R232, Austroads, 2003)</li> <li>Technical Guideline: Temporary Stormwater Drainage for Road Construction (Roads and Maritime, 2011)</li> <li>Managing Urban Stormwater Soils and Construction: Volume 2D Main Road Construction (DECC, 2008)</li> <li>The Blue Book: Managing Urban Stormwater: Soils and Construction, Volume 1 and 2 (Landcom, 2004)</li> </ul>	Stormwater runoff management

Policy / Guideline / principles	Relevance
<ul style="list-style-type: none"> <li>Floodplain Risk Management Guideline: Practical Consideration of Climate Change (DECC, 2007)</li> <li>Guidelines for watercourse crossing on waterfront land (DPI - Water, 2012)</li> </ul>	Working in flood plains and over/close to watercourses
<ul style="list-style-type: none"> <li>Guidelines for Construction Water Monitoring (Roads and Maritime, undated)</li> <li>Australian/New Zealand Standard: AS/NZS5667.1 Water Quality – Sampling, Guidelines on the Design of Sampling Programs, Sampling Techniques and the Preservation and Handling of Samples (Standards Australia, 1998)</li> <li>Australian and New Zealand Guidelines for Fresh and Marine Water Quality: Volume 1 –The Guidelines ('the ANZECC guidelines', ANZECC, 2000)</li> <li>The Blue Book: Managing Urban Stormwater: Soils and Construction, Volume 1 and Volume 2 (Landcom, 2004)</li> </ul>	Water quality sampling
<ul style="list-style-type: none"> <li>Guidelines for the Assessment and Management of Groundwater Contamination (DEC, 2007)</li> <li>Environmental Direction: Management of Tannins from Vegetation Mulch (Roads and Maritime, 2012)</li> <li>Guideline for the Management of Contamination (Roads and Maritime, 2013)</li> <li>Environmental Incident Classification and Reporting Procedure (Road and Maritime, 2017)</li> </ul>	Contaminated waters and leachate management
<ul style="list-style-type: none"> <li>Best Practice Guidelines for Contaminated Water Retention and Treatment Systems (NSW Government, 1994)</li> </ul>	Storage and treatment of firefighting water
<b>Biodiversity</b>	
<ul style="list-style-type: none"> <li>Biodiversity Guidelines – Protecting and managing biodiversity (Roads and Maritime, 2011)</li> <li>Environmental Impact Assessment Practice Note: Biodiversity Assessment (EIA-N06, Roads and Maritime, 2016)</li> <li>Matters of National Environmental Significance: Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999 (Department of the Environment, Water, Heritage and the Arts (DEWHA), 2013)</li> <li>Threatened Biodiversity Survey and Assessment: Guidelines for developments and activities (working draft, NSW DEC, 2004)</li> <li>G40: Clearing and Grubbing (Roads and Maritime, 2016)</li> </ul>	Threatened Species Management
<ul style="list-style-type: none"> <li>NSW Guidelines for Controlled Activities Watercourse Crossings (DPI, 2012)</li> <li>Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge, 2003)</li> <li>Policy and Guidelines for Fish Friendly Waterway Crossings (NSW Fisheries, 2004)</li> <li>Guidelines for Fish Habitat Conservation and Management (DPI Fisheries, 2013)</li> </ul>	Safe fish passage
<b>Soils and Geology</b>	
<ul style="list-style-type: none"> <li>G38: Soil and Water Management: Soil and Water Management Plan (Roads and Maritime, 2016)</li> </ul>	Soil and water management
<ul style="list-style-type: none"> <li>Acid Sulfate Soils Assessment Guidelines (Acid Sulfate Soil Management Advisory Committee, 1998)</li> <li>Acid Sulfate Soil Manual (Acid Sulfate Soil Management Advisory Committee, 1998)</li> <li>Guidelines for the Management of Acid Sulphate materials: Acid Sulphate Soils, Acid Sulphate Rock and Monosulphidic Black Ooze (Roads and Maritime, 2005)</li> <li>Waste Classification Guidelines Part 4: Acid Sulfate Soils (EPA. 2014)</li> </ul>	Acid Sulfate soils



Policy / Guideline / principles	Relevance
<b>Aboriginal Heritage</b>	
<ul style="list-style-type: none"> <li>Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (Office of Environment and Heritage (OEH), 2011)</li> <li>Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DECCW, 2010)</li> <li>Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (NSW DECCW, 2010)</li> <li>Procedure for Aboriginal Heritage Consultation and Investigation (Roads and Maritime, 2011)</li> </ul>	Investigating and managing Aboriginal heritage
<ul style="list-style-type: none"> <li>Standard Management Procedure – Unexpected Heritage Items (Roads and Maritime, 2015)</li> </ul>	Management of unexpected finds
<b>Non-Aboriginal Heritage</b>	
<ul style="list-style-type: none"> <li>Statements of Heritage Impact (Heritage Office and Department of Urban Affairs and Planning, 2002)</li> <li>NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1996)</li> <li>Assessing Heritage Significance (Heritage Office, 2001)</li> <li>Statements of Heritage Impact (Heritage Office and Department of Urban Affairs and Planning, 2002)</li> <li>How to Prepare Archival Records of Heritage Items, (Heritage Office, 1998)</li> </ul>	Investigating and managing non-Aboriginal heritage
<ul style="list-style-type: none"> <li>Standard Management Procedure – Unexpected Heritage Items (Roads and Maritime, 2015)</li> </ul>	Management of unexpected finds
<b>Greenhouse gas</b>	
<ul style="list-style-type: none"> <li>The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (World Council for Sustainable Business Development and World Resources Institute, 2004)</li> <li>Greenhouse Gas Assessment Workbook for Road projects (Transport Authorities Greenhouse Group, 2013)</li> <li>National Greenhouse Accounts Factors (Department of Environment and Energy, 2017)</li> </ul>	Minimisation of greenhouse gas generation
<b>Waste and resource management</b>	
<ul style="list-style-type: none"> <li>Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management (NSW DEC, 2005)</li> <li>Environmental Procedure: Management of Wastes on Roads and Maritime Services Land (Roads and Maritime, 2014)</li> <li>The reclaimed asphalt pavement exemption 2014 (EPA, 2014)</li> <li>The stormwater exemption 2014 (EPA, 2014)</li> <li>Waste Classification Guidelines (EPA, 2014)</li> <li>Excavated Natural Material Exemption 2014 (EPA, 2014)</li> <li>Excavated Public Road Material Exemption 2014 (EPA, 2014)</li> <li>Raw Mulch Exemption 2014 (EPA, 2014)</li> </ul>	Materials handling and storage, and waste management
<ul style="list-style-type: none"> <li>Fact Sheet 1: Virgin Excavated Natural Material (Roads and Maritime, 2015)</li> <li>Fact Sheet 2: Excavated Natural Material (Roads and Maritime, 2015)</li> <li>Fact Sheet 3: Excavated Public Road Materials (Roads and Maritime, 2015)</li> <li>Fact Sheet 4: Reclaimed Asphalt Pavements (Roads and Maritime, 2015)</li> <li>Fact Sheet 5: Asbestos Waste (Roads and Maritime, 2015)</li> <li>Fact Sheet 6: Waste Sampling (Roads and Maritime, 2015).</li> </ul>	TfNSW waste factsheets
<ul style="list-style-type: none"> <li>Waste Avoidance and Resource Recovery Strategy (NSW EPA, 2014)</li> <li>Sustainability Policy: Waste Reduction and Purchasing Policy (WRAPP) (OEH, 2011)</li> </ul>	Waste hierarchy



Policy / Guideline / principles	Relevance
<ul style="list-style-type: none"><li>Waste Reduction and Purchasing Plan (Roads and Maritime, 2010)</li></ul>	Reduction of resource consumption
<b>Dangerous goods and hazardous materials</b>	
<ul style="list-style-type: none"><li>Storage and Handling of Dangerous Goods Code of Practice (WorkCover NSW 2005)</li><li>The Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (EPA, 1997)</li><li>Australian Code for the Transport of Dangerous Goods by Road and Rail (National Transport Commission 2008).</li></ul>	Dangerous goods and hazardous materials

## 5 Implementation

This section describes how the OEMP will be implemented.

### 5.1 Environmental management system

The I&M Contractor will utilise an Integrated Management System for environmental management. The environmental management system (EMS) has been certified as complying with AS/NZS ISO 14001.

The EMS forms the context for this OEMP, which is summarised in Figure 5-1.

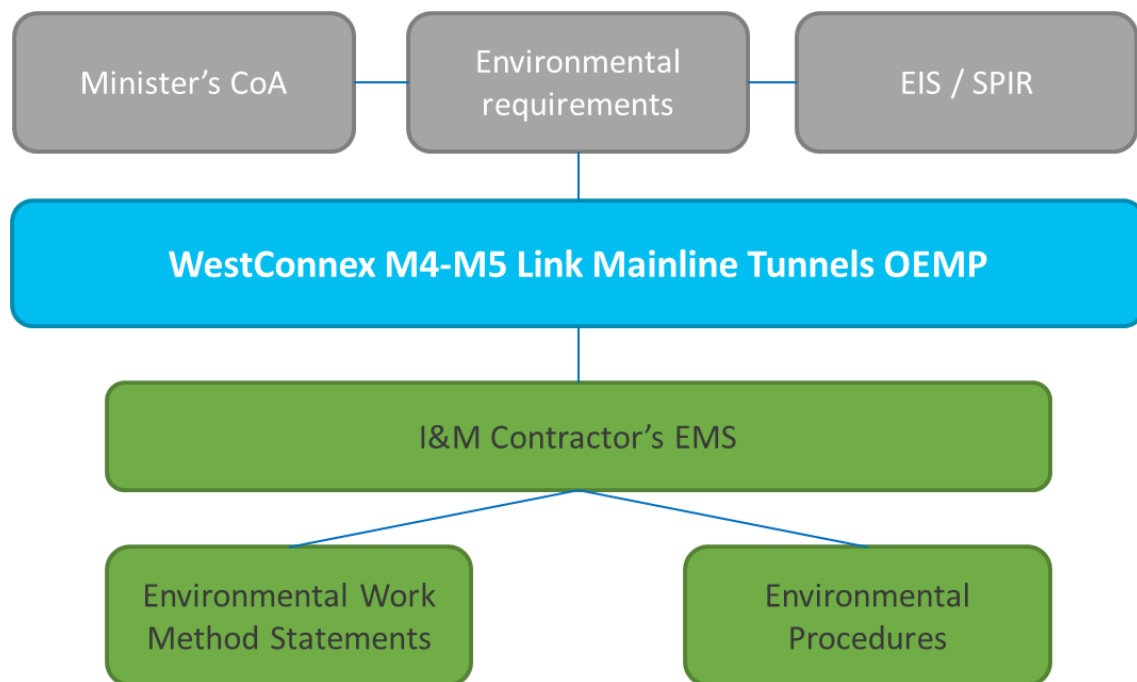


Figure 5-1: OEMP context

### 5.2 Environment policy

The environmental and sustainability performance of the Asset will be guided by the Project Company's Environment and Sustainability Policies (refer Annexure B). These policies will be displayed on the project website and displayed at relevant offices. The I&M Contractor's environment and sustainability policies will be consistent with the Project Company's policies.

### 5.3 Operation environmental management plan

This OEMP outlines the environmental management practices and procedures that are to be followed during the operation and maintenance of the Asset. It provides the overall frameworks for the systems and controls to minimise environmental impacts and meet legislative and other requirements.

## 5.4 Environmental management activities and controls

Site specific operational impacts have been identified and addressed through strategies and sub-plans (refer to Annexure F through I). Each strategy or sub-plan outlines management activities and controls which will be implemented to mitigate potential adverse impacts and assigns responsibility for these control measures.

The following table provides a summary of the environmental aspects which have a moderate to high risk of site-specific impacts, and the mitigation measures which have been identified to lower the risk. Aspects that have low risks have not been included in Table 5-1.

Table 5-1: Impact and mitigation measure summary

Aspect	Mitigation
<b>Noise and vibration</b>	<p>Measures will be implemented to minimise the risk of noise and vibration. These measures may include:</p> <ul style="list-style-type: none"> <li>• Inform residents of planned maintenance works</li> <li>• Implement a complaints hotline and handling procedure</li> <li>• Undertake regular maintenance of equipment to ensure noise emissions do not increase over time</li> <li>• Schedule maintenance works during normal construction hours (if possible)</li> <li>• Consider cumulative noise impacts of other approved CSSI and SSI during noise assessments for I&amp;M activities</li> <li>• Where maintenance works involve vibration generating activities, safe working distances would be complied with where feasible and reasonable to minimise the potential for vibration-induced building damage to nearby properties and heritage items.</li> <li>• Undertake consultation with affected sensitive receivers during maintenance planning</li> <li>• Analyse complaints and report to Project Trustee with recommendations to minimise impact</li> </ul>
<b>Surface water</b>	<p>Measures will be implemented to minimise the risk of adverse surface water quality. These measures may include:</p> <ul style="list-style-type: none"> <li>• Program regular landscape maintenance activities</li> <li>• Routine surface water quality monitoring</li> <li>• Maintenance of drainage and sump pump in tunnels</li> <li>• Manage vegetation stockpiles</li> <li>• All maintenance and incident response vehicles to contain a spill kit</li> <li>• Provision of 24/7 hotline for motorists to advise of any major dumping and or spill</li> <li>• All refuelling to be undertaken out of the Maintenance site at normal approved filling station</li> <li>• Promptly report all spills to the QSE Manager</li> </ul> <p>Refer to the Operational Surface Water Management Plan for further mitigation measures.</p>
<b>Groundwater</b>	<p>Measures will be implemented to minimise the risk of adverse groundwater quality. These measures may include:</p> <ul style="list-style-type: none"> <li>• Maintenance of drainage and sump pump in tunnels</li> <li>• Contain spills in the spill containment chamber of tunnel sump and/or cap outfall points to prevent offsite discharge of polluted water if required and feasible</li> <li>• Ensure that all groundwater monitoring is undertaken in accordance with the Monitoring Program, including if an exceedance is recorded.</li> </ul> <p>Refer to the Operational Groundwater Management for further mitigation measures.</p>
<b>Erosion and sediment</b>	<p>Measures will be implemented to minimise the risk of erosion and sedimentation. These measures may include:</p> <ul style="list-style-type: none"> <li>• Undertake routine post-construction monitoring to ensure successful establishment of landscaping and vegetation</li> <li>• Undertake remedial planting in locations where vegetation cover has not been established</li> <li>• Use mulch bunds or straw bales as alternatives to sediment fencing where appropriate</li> </ul> <p>Refer to the Operational Surface Water Management Plan for further mitigation measures.</p>

Aspect	Mitigation
<b>Contamination</b>	<p>Measures will be implemented to minimise the risk of contamination. These measures may include:</p> <ul style="list-style-type: none"> <li>• Develop a remedial action plan or ASSMP if contamination or acid sulfate soils are found to pose unacceptable risks</li> <li>• Engage reputable subcontractor to remove and dispose of sludge</li> <li>• Undertake storage and transport of liquid and dry chemicals in bunded areas and according to relevant Australian standards</li> <li>• Keep liquid chemicals and fuels in bunded storage areas or sheds that have capacity to contain spills from leaky containers or from an incident</li> <li>• Advise all personnel of the following: <ul style="list-style-type: none"> <li>- Location of bunded storage areas, liquid absorbent materials and other spill containment materials and kits</li> <li>- Storage of large quantities of fuel for I&amp;M vehicles and plant is not permitted</li> <li>- All drums and decanted containers must be labelled and stored within bunded areas whenever not in use</li> </ul> </li> </ul> <p>Refer to the Operational Surface Water Management Plan for further mitigation measures.</p>
<b>Flora and fauna</b>	<p>Measures will be implemented to minimise the risk of adverse effects towards flora and fauna. These measures may include:</p> <ul style="list-style-type: none"> <li>• Maintain landscaping in accordance with the UDLP to ensure local native species are used to stabilise the soil and enhance the area</li> <li>• If EEC/ threatened species is identified, incorporate specific procedures to deal with that species is incorporated into the OEMP</li> <li>• Where fauna is encountered that requires handling or rescue, follow the Fauna Handling Rescue Procedure</li> <li>• Weed management controls will be undertaken in accordance with the Biodiversity Guidelines</li> <li>• Cleaning of maintenance vehicles and equipment regularly to avoid the spread of weeds</li> </ul>
<b>Air quality</b>	<p>Measures will be implemented to minimise the risk of air quality. These measures may include:</p> <ul style="list-style-type: none"> <li>• The tunnel ventilation system is to be automatically controlled using real-time traffic data</li> <li>• Tunnel ventilation is to be regularly tested</li> <li>• Regular Maintenance of ventilations stacks</li> <li>• Put exhaust fans into overdrive to further disperse emissions in the local environment</li> <li>• Cover any mulch stockpiles</li> <li>• Maintain vegetation to eliminate bare land</li> <li>• Only use equipment with appropriate filters</li> <li>• Modify or stop dust creating maintenance activities during periods of strong wind</li> <li>• Cover all loads that enter or leave the Maintenance Site</li> </ul> <p>Refer to the Operational Air Quality Management Plan for further mitigation measures.</p>
<b>Waste and resources</b>	<p>Measures will be implemented to minimise the risk of waste and resources. These measures may include:</p> <ul style="list-style-type: none"> <li>• Calculate precise estimate of materials prior to placing orders</li> <li>• Implement, where possible, agreements with suppliers to return excess packaging for future reuse</li> <li>• Encourage all staff to separate waste types</li> <li>• Purchase low energy equipment with 'standby' mode</li> <li>• Adopt and promote waste hierarchy</li> <li>• Comply with relevant legislation and guidelines as detailed in Table 4-3 and Table 4-5</li> <li>• Establish a list of preferred suppliers for waste management services</li> <li>• Record all waste removed from Maintenance Site in the Waste Register</li> <li>• Monitor fuel consumption and investigate and implement minimisation measures where possible</li> <li>• Reuse waste material generated onsite where possible, particularly mulch</li> </ul>

Aspect	Mitigation
<b>Traffic and Transport</b>	<p>Measures will be implemented to minimise the risk of adverse effects to traffic and transport. These measures may include:</p> <ul style="list-style-type: none"> <li>• Prior to commencement of works, undertake consultation with Transport Management Centre, the Sydney Coordination Office, and/or relevant Council and where required, obtain Road Occupancy Licence (ROL) under section 138 of the NSW Roads Act 1993 and fulfil other required legislative requirements</li> <li>• Undertake works in accordance with Road Occupancy Licences (ROLs)</li> <li>• Develop a specific Traffic Control Plan (TCP) or Traffic Management Plan (TMP), as required, covering controls relevant to the location and I&amp;M activity taking place</li> <li>• Notify road users and the local community two weeks prior to implementing traffic management controls for planned maintenance</li> </ul>
<b>Visual Amenity and Landscape</b>	<p>Measures will be implemented to minimise the risk of adverse effects towards visual amenity and landscaping. These measures may include:</p> <ul style="list-style-type: none"> <li>• Develop and implement relevant environmental procedures and EWMSs for vegetation and landscape management including the provisions and actions of the urban design and landscape plan</li> <li>• Inspect the rehabilitated and revegetated areas within the Campbell Road MOC site that provide screening and amenity and prevent erosion once every month for the first year of operation. If there is evidence of poor establishment (e.g. plants under stress and wilting) replace with suitable plant species. Continue inspections after one-year in locations where there is evidence of poor establishment in the first year until a point in time where the area is established</li> <li>• Maintain landscaping in accordance with the UDLP to ensure local native species are used to stabilise the soil and enhance the area</li> </ul> <p>Refer to the Urban Design and Landscape Plan for further mitigation measures.</p>

## 5.5 Environmental control plans and maps

Environmental control plans and maps are planning documents that clearly show the site layout and location of project specific constraints, including but not limited to:

- environmentally sensitive areas;
- waterways;
- monitoring locations; and
- vegetation.

Refer to Annexure I for the site-specific environmental control maps.

## 5.6 Environmental schedules

The environmental schedules include documents such as site inspection checklists, environmental incident reports and waste registers. These are outlined in the appropriate sub-plans (refer to Annexure F through H).

## 5.7 Responsible parties for the OEMP

The key responsible parties for the OEMP are:

- Transport for NSW (TfNSW);
- Project Company;
- I&M Contractor;
- D&C Contractor.

Table 5-2: Roles and functions for key I&amp;M responsible parties

Organisation	Roles and function
<b>TfNSW:</b> Proponent	<ul style="list-style-type: none"> <li>Act on behalf of the Government as the client and commissioning agency</li> <li>Manage concession arrangements on behalf of the NSW Government</li> <li>Is the proponent for the planning approval</li> <li>Acquired the property needed to build and operate WestConnex</li> <li>Maintain responsibility for tolling policy</li> <li>Provide advice and leadership on environmental policy and regulation</li> </ul>
<b>Project Company:</b> Delivery	<ul style="list-style-type: none"> <li>Project manage delivery of WestConnex</li> <li>Assist with communication and stakeholder activities including Ministerial liaison during operation</li> <li>Contractor management, performance monitoring and auditing.</li> </ul>
<b>I&amp;M Contractor:</b> Operation	<p>Operation Services:</p> <ul style="list-style-type: none"> <li>Procure and manage contracts for the operation and maintenance of WestConnex and any impacts that could result from this</li> <li>Traffic management including monitoring the operation of traffic signalling devices from the WestConnex Motorway Control Centre (WMCC)</li> <li>Equipment and systems management including monitoring the operation of tolling systems</li> <li>Incident management, including attending and clearing all breakdowns and other vehicle incidents (including spills) on the M4-M5 Link Mainline Tunnels Motorway.</li> </ul> <p>Maintenance Services:</p> <ul style="list-style-type: none"> <li>Routine and non-routine preventative maintenance activities required to maintain the safe and continuous operation of the M4-M5 Link Mainline Tunnels Motorway.</li> <li>Corrective maintenance (activities required to repair an unexpected failure of, or defect or damage to the Asset, to restore it to full operational condition)</li> <li>Condition monitoring and reporting (to provide objective assessment of the condition of the Asset)</li> <li>Spare parts management (custody, use and management of spare parts).</li> </ul>
<b>D&amp;C Contractor:</b> Operation	<p>Operational Noise Performance:</p> <ul style="list-style-type: none"> <li>Undertake noise monitoring within 12 months following the commencement of operation to compare actual noise performance of the Asset against the noise levels predicted in the Operational Noise and Vibration Review (ONVR).</li> <li>Prepare an Operational Noise Compliance Report for provision to the DPIE and EPA in accordance with CoA E95</li> </ul> <p>Flood Review Reports:</p> <ul style="list-style-type: none"> <li>Prepare a Flood Review Report(s) following the first defined flood event that occurs within five years following commencement of operation in accordance with CoA E153</li> </ul>



## 5.8 Roles and responsibilities

This section describes the key environmental management roles and responsibilities that will operate for the Asset's lifetime. Figure 5-2 shows the organisational structure.

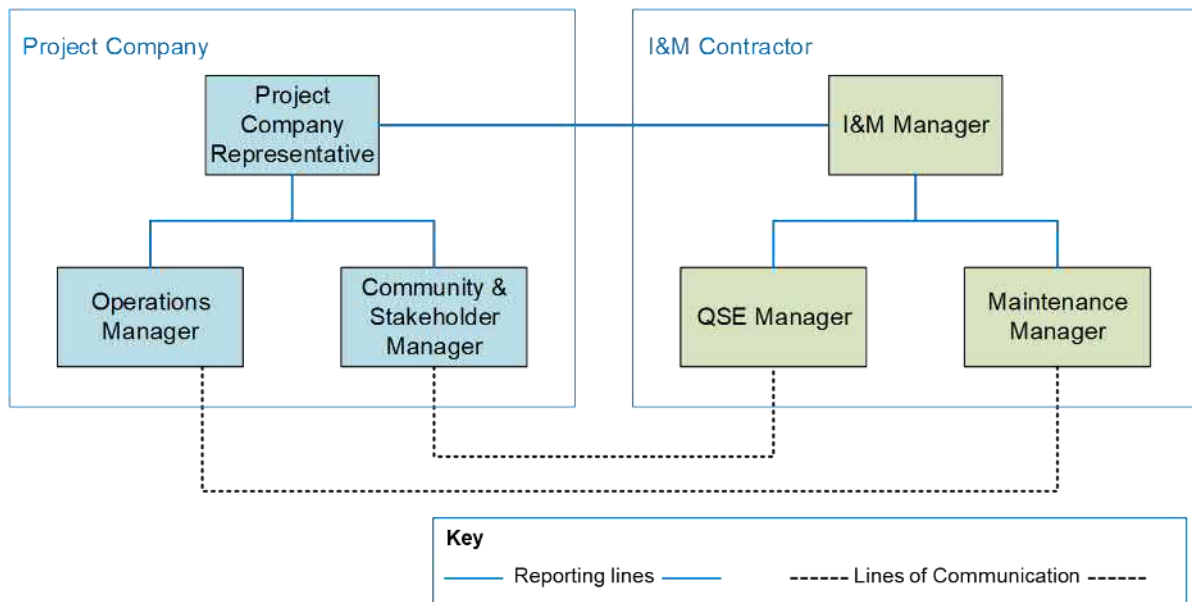


Figure 5-2: OEMP management structure

The environmental responsibilities of key I&M personnel are included in Table 5-3.

Table 5-3: Management responsibilities

Organisation and job title	Names and responsibilities
<b>I&amp;M Manager</b>	<ul style="list-style-type: none"> <li>Ensure all I&amp;M activities comply with relevant regulatory, TfNSW and Project Company requirements</li> <li>Ensure the requirements of the OEMP are fully implemented, and in particular, that environmental requirements are not secondary to other I&amp;M requirements</li> <li>Implement the I&amp;M Contractor's environmental policy</li> <li>Liaise with Project Company and other Government authorities as required</li> <li>Provide adequate resources (personnel, financial and technological) to ensure effective development, implementation and maintenance of the I&amp;M Contractor's EMS</li> <li>Ensure that all maintenance personnel receive appropriate induction training, including details of the environmental and community requirements</li> <li>Ensure that complaints are investigated and issues raised resolved in accordance with the I&amp;M Contractor's Community Relations Plan (CRP)</li> <li>Direct work to stop immediately if there is likely to be an unacceptable environmental impact</li> <li>Report back to the Project Company's Project Director</li> <li>Confirm the need for any specific permissions and licences before work starts</li> <li>Report, as required to Project Company</li> </ul>
<b>Operations Manager</b>	<ul style="list-style-type: none"> <li>Plan operations and incident response services to avoid or minimise environmental impacts</li> <li>Ensure the requirements of the OEMP are fully implemented</li> <li>Ensure I&amp;M Contractor personnel manage operations in accordance with statutory approval requirements</li> </ul>

Organisation and job title	Names and responsibilities
	<ul style="list-style-type: none"> <li>• Ensure environmental management procedures and protection measures are implemented</li> <li>• Ensure all I&amp;M Contractor personnel attend an induction before starting work</li> <li>• Liaise with Project Company and other Government authorities as required</li> <li>• Direct work to stop immediately if there is likely to be an unacceptable environmental impact</li> <li>• Report, as required to the Project Company</li> <li>• Ensure adequate resources are provided to effectively respond to incidents on the motorway</li> <li>• Ensure that regular training is provided to all personnel participating in incident response</li> </ul>
<b>I&amp;M Maintenance Manager</b>	<ul style="list-style-type: none"> <li>• Plan maintenance services in a manner that avoids or minimises impact to environment</li> <li>• Ensure the requirements of this OEMP are fully implemented</li> <li>• Ensure I&amp;M Contractor personnel manage maintenance works in accordance with statutory and approval requirements</li> <li>• Ensure environmental management procedures and protection measures are implemented</li> <li>• Ensure all I&amp;M Contractor personnel attend an induction prior to commencing works</li> <li>• Liaise with Project Company and other government authorities as required</li> <li>• Direct work to stop immediately if there is likely to be an unacceptable environmental impact</li> <li>• Report, as required to Project Company</li> <li>• Providing maintenance staff for incident response and manage rectification of damage following incidents</li> </ul>
<b>I&amp;M Quality, Safety &amp; Environment (QSE) Manager</b>	<ul style="list-style-type: none"> <li>• Manage environmental aspects of the O&amp;M services</li> <li>• Report to I&amp;M Manager and Project Company on the performance and implementation of the EMS and other environmental documentation</li> <li>• Ensure environmental risks are identified and appropriate mitigation is implemented</li> <li>• Identify where environmental measures are not meeting the set targets and where improvement can be achieved</li> <li>• Ensure environmental protocols are in place and managed</li> <li>• Ensure environmental compliance</li> <li>• Liaise with Project Company and approval authorities</li> <li>• Direct work to stop immediately if there is likely to be an unacceptable environmental impact or to prevent an environmental non-conformance and advise the I&amp;M Manager, Operations Manager and I&amp;M Maintenance Manager</li> <li>• Assist the Community &amp; Stakeholder Manager to resolve environment-related complaints</li> <li>• Report to the Project Company as required</li> <li>• Responsible for all environmental records and information relating to this OEMP</li> </ul>
<b>Community &amp; Stakeholder Manager</b>	<ul style="list-style-type: none"> <li>• Ensure all community consultation activities and notifications are carried out in accordance with the CoA</li> <li>• Report environmental issues raised by stakeholders or members of the community to the I&amp;M QSE Manager</li> <li>• Communicate environment-related I&amp;M services, performance, mitigation measures and issues to stakeholders and the community</li> <li>• Maintain the 24 hour complaints hotline</li> </ul>
<b>All I&amp;M Contractor personnel</b>	<ul style="list-style-type: none"> <li>• Participate in the I&amp;M services induction program</li> <li>• Implement activities in accordance with this OEMP</li> <li>• Work under the requirements of this OEMP, SOPs, EWMSs</li> <li>• Minimise the potential for environmental impacts</li> <li>• Feedback to the Operations Manager and I&amp;M Contractor's QSE Manager on the effectiveness and practicality of maintenance methods and environmental controls</li> </ul>

Organisation and job title	Names and responsibilities
	<ul style="list-style-type: none"> <li>• Immediately report environmental incidents to the supervisor, or as soon as practicable if reasonable steps can be adopted to control the incident</li> <li>• Undertake remedial action as required to ensure environmental controls are maintained in good working order</li> <li>• Stop work immediately if there is likely to be an unacceptable environmental impact</li> </ul>
<b>Project Company Representative</b>	<ul style="list-style-type: none"> <li>• Receive a copy of this OEMP</li> <li>• Review documentation provided by the I&amp;M Contractor, where required</li> <li>• Liaise with relevant stakeholders</li> <li>• Attend site inspections and relevant project meetings as required</li> <li>• Monitor I&amp;M Contractor's environmental performance and compliance</li> <li>• Review and determine Consistency Assessments and Review of Environmental Factors, as required</li> </ul>

## 5.9 Subcontractor environmental management

All I&M Contractor personnel are required to undertake work in accordance with this OEMP and sub-plans. Sub-contractors are required to provide their own environmental management system (EMS) relating to the activities they are contracted to perform. Sub-contractors' EMS must be consistent with this OEMP and sub-plans.

Sub-contractors to the I&M Contractor will be evaluated, selected and effectively monitored by the I&M Contractor to ensure their activities do not adversely affect the conforming deliverables. Additional detail is included in the I&M Contractor's Quality Plan.

## 6 Compliance, training and awareness

This section describes the processes and tools to inform the I&M personnel of their environmental obligations in undertaking their roles and responsibilities as discussed in Section 5.8. Relevant training and induction must be provided by the I&M Contractor to inform personnel of their environmental and compliance obligations under the conditions of approval.

Training requirements will be regularly reviewed and may form part of staff performance reviews, compliance tracking and ISO14001 audits. The I&M QSE Manager may also determine additional training requirements relevant to any I&M personnel's environmental responsibilities based on his/her education, training and/or experience.

### 6.1 Environmental induction

The I&M Contractor will implement a compulsory site induction that includes an environmental component for all I&M personnel attending the site.

I&M personnel must be aware of the requirements of this OEMP and be familiar with implementing the associated management measures. Visitors will be required to be accompanied by inducted personnel at all times.

The environmental component of the site induction will include, but not be limited to an overview of:

- relevant details of this OEMP;
- key environmental issues;
- conditions of environmental licences, permits and approvals;
- specific environmental management requirements and responsibilities;
- mitigation measures for the control of environmental issues;
- incident response and reporting requirements, including near misses;
- spills, leaks, emissions, and contamination treatment;
- emergency response procedures, communications and equipment;
- localised health, safety and environment meetings;
- site and job-specific environmental impacts and aspects;
- environmental management system obligations;
- the media protocol summarised in Section 7.4.4;
- information relating to the location of environmental constraints; and
- community awareness..

### 6.2 Toolbox talks

Toolbox talks will be one method of awareness training and educating for I&M personnel on issues related to all operational related aspects including environmental issues. The toolbox talks will be used to maintain environmental awareness throughout the Asset's lifetime. They will also be tailored to specific issues relevant to upcoming work, and include such as:

- environmental hazards and risks;
- SOPs, EWMSs and incident response procedures (IRPs);
- legislation changes;

- inspection findings;
- audit results;
- incident or near-miss investigations;
- I&M personnel and community suggestions for improvements; and
- community feedback and actions.

## 6.3 Environmental awareness training

Targeted environmental awareness training will be provided to I&M personnel with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact.

Awareness notes will also be developed by the I&M Contractor and distributed to inform I&M personnel. These will typically take the form of a poster, booklet, or similar and will be distributed to those responsible for managing specific work locations or activities. Training may include:

- ISO 14000 awareness, obligations and requirements;
- Project Company's and I&M Contractor's environmental policies, procedures, standards and guidelines;
- SOPs and EWMSs;
- auditing (including spot and formal auditing) and workplace inspections;
- incident reporting and investigation;
- continuous improvement policies;
- environment protection and sustainability;
- spill, leaks, emissions and contamination management; and
- the waste hierarchy.

Awareness training may be delivered through:

- distance and online training in the form of memoranda and instructions; and
- training sessions prepared and delivered by the I&M QSE Manager.

## 6.4 Emergency response training

I&M personnel who are required to participate in an incident and/or emergency response will be trained under a program that focuses on implementing effective environmental management controls. The training will address:

- stop work procedures and follow-on actions;
- oil, fuel, chemical spill response;
- containment;
- clean up;
- waste management including removal, classification, storage, transport and disposal;
- liaison with Fire Brigade, NSW EPA and other emergency response services; and
- environmental management controls (e.g. water quality basins).

### Operational Environmental Management Plan

The I&M Contractor will be suitably trained in emergency response procedures identified in the Emergency Response Plan (refer Section 8.2.3), including initiating the correct and most-appropriate response and reporting incidents to the correct authority, as required.



## 7 Communication

This section covers the requirements to implement internal and external communication procedures in operating, maintaining and repairing the Asset.

### 7.1 Internal communication

The I&M QSE Manager, I&M Maintenance Manager and Operations Manager will meet regularly to discuss on-site environmental management, amendments to plans, changes to I&M activities, environmental monitoring results and other relevant aspects of the I&M Services.

Regular meetings may also be scheduled with Project Company Representative to communicate ongoing environmental performance and to discuss issues to be addressed.

The I&M QSE Manager will participate in toolbox talks (Section 6.2) and other environmental awareness training (Section 6.3) to communicate to I&M personnel on environmental performance including sensitive environmental matters for future work areas, and to receive feedback from on-site personnel.

### 7.2 External and Government consultation

The I&M QSE Manager will be the main point of contact regarding specific environmental issues for external and Government stakeholders.

Relevant Government agencies will be notified as required by this OEMP following an incident and/or emergency. Routine meetings will be used to discuss environmental performance, upcoming work, and high-risk activities. The meetings will include inspections of the Asset as needed.

### 7.3 Community communication

#### 7.3.1 Community engagement strategy

The Project Company has developed a Community Relations Plan to provide an approach to stakeholder and community engagement. The Community and Stakeholder Manager will be responsible for engaging with the community members impacted by the operation and maintenance.

The Community Relations Plan identifies opportunities for providing information and consulting with the community and stakeholders throughout the Asset's life. The plan defines:

- engagement groups (e.g. community, other road stakeholders);
- key messages; and
- tools that will be used to interact with community and stakeholders. These tools are detailed below in Section 7.4.

Consultation with stakeholders (e.g. relevant Councils, local community, other road stakeholder groups) will be undertaken throughout I&M of the Asset in accordance with the Project Company's Community Relations Plan.

#### 7.3.2 Complaints and enquiries procedure

A Complaints Management System, consistent with *AS/NZS 10002:2014 Guidelines for Compliant management in Organisations* will be implemented by the Project Company during the operational life of the Asset.

There are several pathways to make a complaint or enquiry. These include the following:

- 24 hour phone number (1800 660 248) answered by the Stakeholder and Community Manager or delegated on-site supervisor during out of hours works
- postal address (Locked Bag 3905 GPO Sydney NSW 2001)
- email address ([info@westconnex.com.au](mailto:info@westconnex.com.au)).

Community members can access the above resources, as required, to address any complaints or enquires they have.

All enquiries, feedback and complaints received through the above pathways or received by personnel working on the project will be forwarded to the Stakeholder and Community Manager, and to the I&M Contractor's QSE Manager (where appropriate) for issues relating to management of the environment.

Information on all complaints received, including the means by which they were addressed, whether resolution was reached, and whether mediation was required, will be included in a Complaints Register by the Stakeholder and Community Manager. The information contained within the register will be made available to DPIE on request.

The Community Relations Plan provides the framework to manage and resolve complaints that arise from a number of communication methods, with this framework summarised in Table 7-1, Figure 7-1 and Figure 7-2.

All complaints should be closed off in the Complaints Register. The stakeholder(s) will also be kept informed of when they will receive a response.

The Stakeholder and Community Manager (and/or delegate) will manage, record and respond to all complaints. Complaints will be reported to Project Company through regular Asset reporting.

Table 7-1: Response processes for complaints, enquiries and feedback

Item	Response Process
Enquiries from Federal, State and local government representatives via email, telephone or written correspondence	<ul style="list-style-type: none"> <li>• Stakeholder and Community Manager notifies the Project Company Representative immediately of all enquiries from Federal, State and local government representatives relating to the I&amp;M Services.</li> <li>• Stakeholder and Community Manager acknowledges the correspondence / contact within 48 hours of its receipt. A draft response (if required) is provided to Project Company for approval within 5 working days of the correspondence/contact.</li> <li>• Any briefings for these representatives will be arranged by the Project Company Representative</li> </ul>
Calls (complaints/enquiries/feedback)	<ul style="list-style-type: none"> <li>• All calls or enquiries will be responded to immediately or within two working hours. Calls will be answered by the Stakeholder and Community Manager or a delegated on-site supervisor at the WMCC during out of hours works.</li> <li>• When a complaint or enquiry cannot be responded to immediately a follow up verbal response on what action is proposed will be provided to the complainant / enquirer within 24 hours of the complaint or enquiry being received.</li> <li>• A written response to the complainant / enquirer will be made within 10 business days if the complaint or enquiry cannot be resolved by the initial or follow up verbal response.</li> <li>• A draft response will be provided to the Project Company (if required) before responding to the contact.</li> </ul>
Written correspondence or representation	<ul style="list-style-type: none"> <li>• Any representation is acknowledged within 5 business days of receipt by the Stakeholder and Community Manager.</li> <li>• Draft responses to be approved by Project Company.</li> <li>• The written response will be issued within 15 business days of receipt by Stakeholder and Community Manager.</li> </ul>

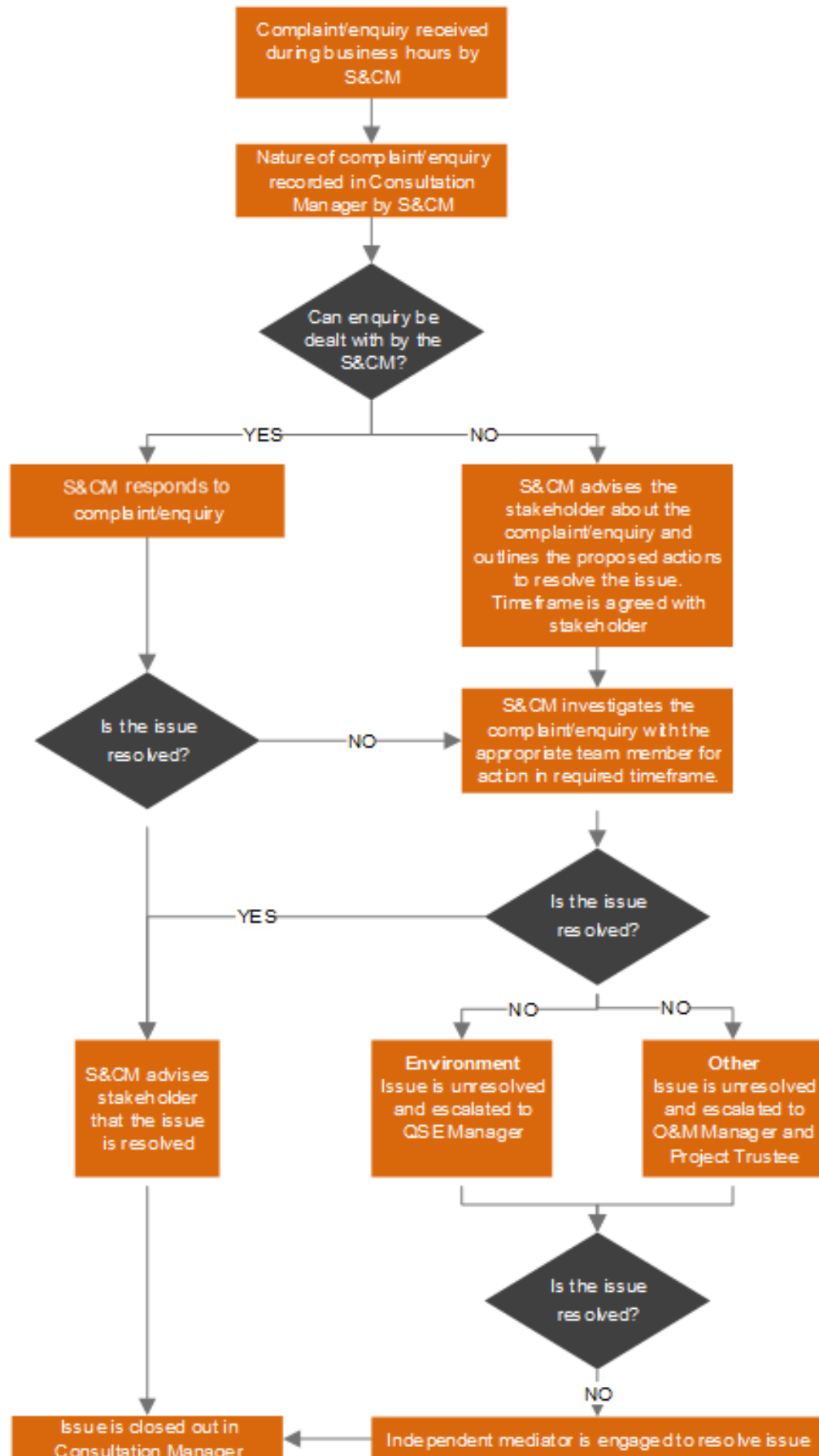


Figure 7-1: Process for enquiries and complaints received during business hours.

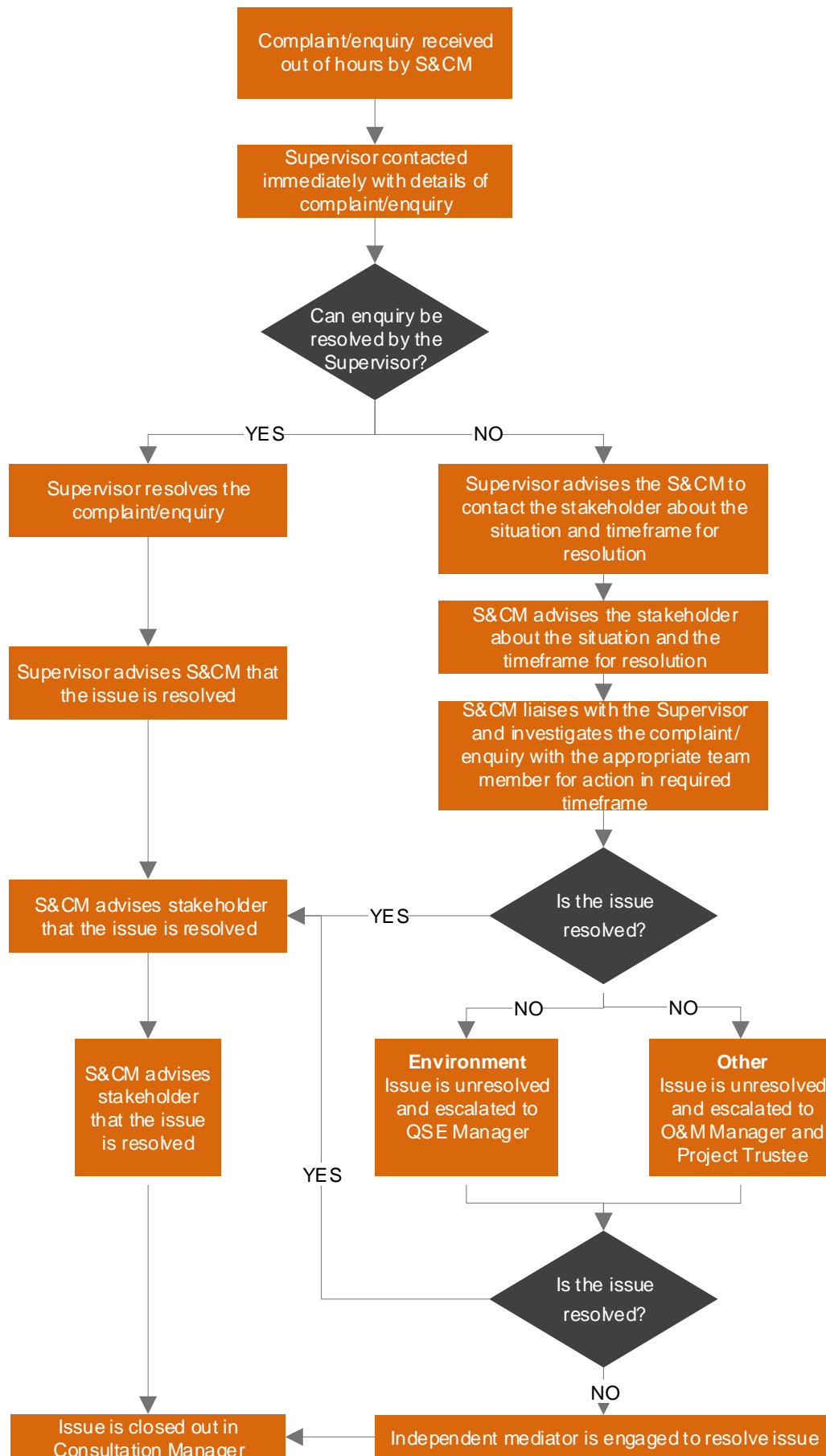


Figure 7-2: Process for enquiries and complaints received outside of business hours

## 7.4 Communication tools

Communication tools defined in the Community Relations Plan include:

- leaflets / letterbox notifications;
- advertisements;
- door knocking;
- signage;
- website updates;
- meetings; and
- 24-hour contact telephone number and email address.

### 7.4.1 Advertising routine operations and maintenance activities

Expected traffic delays and restrictions due to planned major operation and maintenance work will be publicly advertised through various media streams. The information to be advertised includes:

- the nature of the work;
- areas where the work is proposed;
- hours of work;
- contact information;
- changes to traffic and transport arrangements;
- how to register complaints;
- details of how to obtain further information.

The I&M Contractor must comply with the format of all written information and standard formats provided by the Project Company where appropriate.

Motorists will be informed of upcoming work and disruptions through:

- Variable message signs (VMS);
- WestConnex website;
- Livetraffic.com (<http://www.livetraffic.com>);
- Advertisements in newspapers and online; and / or
- Radio advertisements.

### 7.4.2 WestConnex website

Information relevant to the Asset is available to the public on the WestConnex website (<https://www.westconnex.com.au/>) including:

- information on the current implementation status of the SSI;
- the relevant approval documentation including the Project environmental impact statement (EIS), Submissions Report and modifications;
- the SSI 7485 approval;
- each relevant environmental approval, licence or permit required and obtained in relation to SSI 7485;

- each current report, plan or other document required under SSI 7485;
- outcomes of compliance tracking in accordance with CoA A27 & A28;
- details of contact point(s) to which community complaints and enquires may be directed, including a telephone number, a postal address and an email address; and
- how to receive important information in the common community languages of the area.

Further to this, air quality monitoring results will be made publicly available each month in hard copy format in an easy to interpret format in accordance with CoA E28. Further detail on air quality monitoring results, including the type of information available and where it can be obtained, is outlined in the OAQMP (refer to Annexure F).

### 7.4.3 Contact information

The relevant contact information for community complaints and enquiries is included in Table 7-2.

Table 7-2: Community contact information

Method	Information
24-hour telephone number	A permanent 24-hour contact number (1800 660 248) will be maintained, publicised and advertised on the WestConnex website, mail outs and in all publications.
Postal address	Locked Bag 3905 GPO Sydney NSW 2001
Email address	<a href="mailto:info@westconnex.com.au">info@westconnex.com.au</a>
Website	<p>Project Company manages the Asset website (<a href="https://www.westconnex.com.au/">https://www.westconnex.com.au/</a>). The website will be routinely and regularly updated to include:</p> <ul style="list-style-type: none"> <li>• The latest OEMP and sub-plans</li> <li>• EIS, SPIR and Modification reports</li> <li>• Information on the current implementation status</li> <li>• Environmental approval, licences or permits required</li> <li>• Conditions of Approval and any future modifications</li> <li>• Tolling queries</li> <li>• Scheduled operations and maintenance activities</li> <li>• The outcome of compliance tracking</li> <li>• Complaints handling details</li> <li>• Contact details</li> <li>• Traffic management and patronage</li> <li>• Other relevant community information</li> </ul>

### 7.4.4 Media protocol

I&M personnel will adhere to the following media communication protocol:

- Media enquiries will be directed to the Project Company Representative;
- No I&M personnel will be authorised to make a public statement without consulting with the Project Company Representative;
- Media will not be permitted onsite without Project Company approval;
- All I&M personnel will be made aware the media protocol in their induction training.



## 7.5 Air Quality Community Consultative Committee

The Air Quality Community Consultative Committee (AQCCC) has been established in accordance with CoA E2. The AQCCC consists of representatives from TfNSW, the Project Company, relevant councils and the local community.

The AQCCC reviews and provides advice on the following, as they relate to air quality:

- Location of the air quality monitoring stations required under CoA E24, and the length of time during which monitoring is required;
- Operational sub-plans relevant to air quality;
- Other operation stage documents relevant to air quality;
- Compliance tracking reports relevant to air quality;
- The proposed air quality auditor(s) for the Asset, air quality audit reports; and
- Complaints received relating to air quality.

The AQCCC may also provide advice on the dissemination of monitoring results and other information on air quality issues. This OEMP will be updated, if required, in accordance with Section 1.3 of this plan to consider AQCCC advice on the availability of monitoring results or other air quality related information.

## 8 Risks, incidents and emergencies

This section covers the processes used to identify, monitor and manage risks, incidents and emergencies.

### 8.1 Environmental risk analysis

The typical inherent environmental risks associated with the Asset's operational key environmental performance issues are identified in Annexure C. The environmental risk analysis adopts the methods included in Australian Standard AS ISO 31000:2009 Risk Management, Principles and Guidelines (Standards Australia, 2009) and ISO 14001:2016 Environmental Management Systems. It includes:

- Routine operational risks;
- Non-routine operational risks.

The analysis then describes the measures that serve to manage these risks and consequently the residual outcome. The OEMP and supporting sub-plans serve to introduce risk mitigation controls to reduce:

- Likelihood, such as training and awareness, as well as the assignment of roles and responsibilities;
- Magnitude, such as water quality detention basin maintenance.

The potential consequence, likelihood and risk level were assessed using the ratings in Table 8-1, Table 8-2 and Table 8-3.

Table 8-1: Potential environmental consequence

	Insignificant	Minor	Significant	Major	Catastrophic
<b>Environmental Consequence</b>	No impact on or off site	On-site impact requiring routing internal remediation	Off-site impact requiring internal remediation OR on-site impact requiring substantial internal remediation	Impact on- or off-site requiring specialist external remediation	Impact on- or off-site with long term effect OR requiring immediate external response

Table 8-2: Potential environmental likelihood level

	Almost certain	Likely	Possible	Unlikely	Rare
<b>Potential Likelihood Level</b>	The potential consequence is expected to occur in most circumstances	The potential consequence will probably occur in most circumstances	The potential consequence is expected to occur at some time	The potential consequence could occur at some time	The potential consequence may occur in exceptional circumstances

Table 8-3: Environmental risk rating

		Potential Consequence level				
		Insignificant	Minor	Significant	Major	Catastrophic
Potential likelihood level	Almost certain	Medium 11	High 16	High 20	Extreme 23	Extreme 25
	Likely	Medium 7	Medium 12	High 17	High 21	Extreme 24
	Possible	Low 4	Medium 8	Medium 13	High 18	High 22
	Unlikely	Low 2	Low 5	Medium 9	Medium 14	High 19
	Rare	Low 1	Low 3	Low 6	Medium 10	Medium 15

### 8.1.1 Continual improvement

The environmental risk register will be reviewed, and upgraded if required following an incident, emergency, change in legislation, change in operating and maintenance procedures/activities, audit findings, non-compliance, continual improvement measures or otherwise annually. New, atypical, non-routine or major environmental risks will be included and assessed under environmental risk analysis.

Where additional key environmental impacts are identified through this process, an appropriately detailed assessment of key environmental impact will be undertaken.

The I&M Contractor's QSE Manager will be responsible for maintaining and reviewing the environmental risk analysis process and environmental risk register, with input from Project Company.

### 8.1.2 Risk identification

Environmental risks may be identified through:

- Site audits;
- Reporting checks and audits;
- On-the-job observations;
- Site meetings;
- Toolbox talks;
- Investigations into an actual or potential breaches of the CoA and/or this OEMP;
- Corrective actions;
- Regular reviews of the I&M Contractor's environmental management system;
- Continuous improvement measures.

## 8.2 Incident and emergency management

### 8.2.1 Definition of emergency

An 'emergency' is required to be defined in this OEMP as it applies to conditions B4, E22 and E44. Relevant conditions are listed in Table 8-4.

Table 8-4: CoA relevant to the definition of an 'emergency'

CoA	Requirement
E7	Conditions E2A, E3, E4, E5, and E6 do not apply in an emergency, as defined in the OEMP required by Condition D1.
E9	The tunnel ventilation systems must be designed, constructed and operated so as to only release emissions from ventilation outlets and not from the portals or the tunnel support facilities as identified in the documents listed in Condition A1, except for emergency smoke management purposes in the event of a fire in a tunnel or periodic testing of the system as defined in the OEMP required by Condition D1.
E142	<p>Prior to operation, the Proponent must prepare an Emergency Response Plan, in consultation with FRNSW and NSW Police Force.</p> <p>The Emergency Response Plan must include, but not be limited to:</p> <ul style="list-style-type: none"> <li>(a) protocols and procedures to be followed during emergency situations associated with the operation of the project (including fires, explosions and, for the purposes of this condition, vehicle collisions). The protocols and procedures are to take into account the needs of people with a disability or who may experience access problems in emergency situations;</li> <li>(b) details of traffic management measures to be implemented during emergencies, where appropriate, to minimise the potential for escalation of the emergency;</li> <li>(c) design and management measures for containment of contaminated fire-fighting water, fuel spills and gaseous combustion products;</li> <li>(d) details of a training and testing program to ensure that – <ul style="list-style-type: none"> <li>(i) all operational staff familiar with the Emergency Response Plan, and</li> <li>(ii) coordination with FRNSW and NSW Police is regularly exercised; and</li> </ul> </li> <li>(e) provision for a simulated emergency response exercise, including the Proponent, FRNSW and NSW Police, to be conducted in accordance with the approved Emergency Response Plan on at least one occasion prior to the opening of the tunnel to traffic. The time for the exercise is to be agreed by the participants.</li> </ul>

The definition of an emergency for each of the above CoA is included in Table 8-5.

Table 8-5: Definition of 'emergency' by relevant CoA

CoA	Requirement
E7	<p>An emergency discharge is an emission from the ventilation system that is caused by an incident or set of circumstances which does not ordinarily occur in the everyday use of the tunnel and is beyond:</p> <ul style="list-style-type: none"> <li>• Merely heavy traffic or congestion, or</li> <li>• The capacity of the tunnel operator to control or to have prevented by taking steps which a prudent, experience and competent operator would have taken.</li> </ul> <p>Conditions E2A, E3, E4, E5, and E6 do not apply in the event of this emergency.</p>

CoA	Requirement
E9	<p>An emergency smoke management purpose is what is reasonably necessary to manage smoke in response to a fire occurring in the tunnel, including in accordance with instructions given by NSW Emergency Services. An emergency smoke management purpose may also occur during a simulated emergency response exercise as referred to in the Emergency Response Plan required under condition E142 (e) of the approval.</p> <p>Periodic testing may include, but not be limited to testing during commissioning; replacement, repair and testing of faulty ventilation equipment; and routine testing and maintenance periods of:</p> <ul style="list-style-type: none"> <li>tunnel ventilation equipment, <ul style="list-style-type: none"> <li>where one or both carriageways are closed to traffic including maintenance of jet fans in the tunnel</li> <li>in the ventilation facilities including axial fans, dampers and sound attenuators, and within the internal outlet</li> </ul> </li> <li>tunnel ventilation support systems (e.g. substations)</li> <li>fire and life safety systems.</li> </ul>
E142	<p>An emergency to which the Plan applies is an out-of-the-ordinary event, such as bushfires, flood and dust storms, or set of circumstances that causes or threatens to cause harm to the safety or well-being of the community, employees, or users of the Motorway or associated assets. It requires a coordinated response from NSW Emergency Services and the Tunnel Operator.</p>

An emergency may require a coordinated response from relevant authorities, Emergency Services, I&M Contractor and Project Company.

Upon declaration of an emergency, the Operator will implement the relevant emergency or incident management plans and key I&M Contractor staff will form an emergency management team (EMT). The EMT will coordinate the I&M Contractor's response to best assist the Project Company's Crisis Management Team and Emergency Services in managing the event.

In relation to condition E9, all reasonable attempts have been made to avoid portal emissions during normal operations and during foreseeable incident conditions. The ventilation system has significant capacity to manage a broad range of Asset emergencies (as defined in Table 8-5), however, there may be emergency cases whereby portal emissions will be necessary to protect occupants inside of the tunnel. It is considered that based on the capacity of the ventilation system, that these emergency cases will be infrequent.

## 8.2.2 Directing and stopping work

All management roles in the organisation charts provided in Section 5.8 have the responsibility to stop works in instances where there is likely to be an unacceptable environmental impact. The Project Company Representative and I&M Contractor roles are the key contacts with full authority over the works.

The Project Company's Operation Manager will be available 24 hours a day, 7 days a week and has authority to stop or direct works.

## 8.2.3 Emergency Response Plan

An Emergency Response Plan has been prepared in consultation with Fire & Rescue NSW and NSW Police Force. The Emergency Response Plan consists of a number of I&M Contractor documents including an Incident Response Plan, safety plans, and emergency and evacuation plans.

These documents contain:

- protocols and procedures to be followed during emergency situations associated with the operation of the Asset (including fires, explosions and, for the purposes of this condition, vehicle collisions). The protocols and procedures are to take into account the needs of people with a disability or who may experience access problems in emergency situations;
- details of traffic management measures to be implemented during emergencies, where appropriate, to minimise the potential for escalation of the emergency;

- design and management measures to address the potential environmental impacts of an emergency situation, including measures for containment of contaminated fire-fighting water, fuel spills and gaseous combustion products;
- training and testing programs for all operational staff;
- details of simulated emergency response exercises including the I&M Contractor, Project Company, NSW Police and NSW Fire & Rescue.

In the event of a flooding emergency, which causes or is expected to cause major road closures which potentially impacting on the ability of Emergency Services to respond and to evacuate people, the project will notify the NSW State Emergency Service, along with our emergency services (refer to Annexure E for contact details).

## 8.2.4 Environmental incidents, notifications and reporting

The I&M Contractor operates under an environmental incident management procedure (refer to Annexure D) that will apply to the operational Asset. The I&M Contractor must include elements of this environmental incident procedure into its EMS.

### **Notification to EPA and other agencies**

The Project Company Representative will notify the Environment Protection Authority (EPA) in relation to any pollution incident in accordance with the Protection of the Environment Operations Act 1997 (POEO Act). The Secretary shall be provided with a record of any such pollution incident notification within 24 hours in accordance with CoA A43.

### **Notification to the Secretary, DPIE**

In accordance with CoA A40, the Project Company Representative, must notify the Secretary as soon as possible and in any event within 24 hours of any incident that causes, or threatens to cause, material harm (as defined by SSI 7485) to the environment, community or any member of the community, being actual or potential harm to the health or safety of human beings or to threatened species, endangered ecological communities or ecosystems that is not trivial. This notification will include the time and date of the incident, details of the incident and any non-compliances against the CoA that occur as a result of the incident in accordance with CoA A41.

Full written details of the incident will be provided to the Secretary by the Project Company Representative within seven days of the date on which the incident occurred.

### **Incident reporting**

The Project Company and I&M Contractor will meet the requirements of the Secretary or relevant public authority (as determined by the Secretary), to address the cause of impact of any incident associated with the operation and maintenance of the Asset, in accordance with CoA A41.



## 9 Managing and monitoring performance

This section addresses ongoing inspection and monitoring requirements, reporting obligations, non-conformance reporting, subcontractor requirements and operational audits of the OEMP. Project Company will remain responsible for managing and monitoring performance against the OEMP. The I&M Contractor will implement monitoring activities including inspections and will provide feedback to Project Company.

### 9.1 Environmental inspections

Environmental inspections of the operational Asset will be conducted in accordance with the requirements of the I&M Contractor's EMS to evaluate the effectiveness of environmental controls. Inspections will be scheduled in the EMS and will consider high risk activities. Inspections may include:

- works in environmentally sensitive areas
- issues such as spills, graffiti, vandalism and dust generation
- waste management, including illegal dumping, litter, contamination of waste streams, system capacity
- plant and equipment operations
- evaluation of sub-contractor management controls.

### 9.2 Operational performance monitoring

Monitoring will be undertaken to validate and confirm the operational impact of the Asset on the environment. This monitoring will extend to the effectiveness of the installed environmental mitigation controls, such as the water quality basins.

Monitoring to be undertaken during operations of the Asset is identified in Table 9-1. Monitoring requirements are addressed within specific programs or plans as identified in the final column.

Table 9-1: Operational performance monitoring

CoA	Monitoring	Implementation	Where addressed
D8	Surface water and groundwater monitoring required at specific locations and frequency that are representative of the potential extent of impacts from the project.	Monitoring will occur for both surface water and groundwater.	Operational Surface Water Quality Plan and Monitoring Program (Annexure G) Operational Groundwater Plan and Monitoring Program (Annexure H)
E2A, E19A	Monitor pollutants from the ventilation outlets.	Pollutants from the ventilation outlets are measured at differing times such as continuous, quarterly and annual. This is dependent on the parameter being monitored.	Operational Air Quality Management Plan (Annexure F)
E3 – E5, E20	Monitor pollutants within the tunnel	In-tunnel monitoring will be continuous, with monitoring undertaken on CO, NO <sub>2</sub> and visibility.	Operational Air Quality Management Plan (Annexure F)
E6, E24	Monitor pollutants associated with ambient air quality.	Ambient air quality monitoring will be continuous. Monitoring will be undertaken for the following: <ul style="list-style-type: none"> <li>• NO</li> <li>• NO<sub>2</sub></li> <li>• NO<sub>x</sub></li> <li>• PM<sub>10</sub></li> </ul>	Operational Air Quality Management Plan (Annexure F)

CoA	Monitoring	Implementation	Where addressed
		<ul style="list-style-type: none"> <li>PM<sub>2.5</sub></li> <li>CO</li> <li>Wind speed @ 10m</li> <li>Wind direction @ 10m</li> <li>Sigma Theta @ 10m</li> <li>Temperature @ 2m</li> <li>Temperature @ 10m</li> </ul>	
E95	Monitor operational noise to compare actual noise performance of the project against the noise performance predicted in the Operational Noise and Vibration Review.	Noise modelling to be undertaken to compare against predictions of the operational noise impacts. During operation, monitoring will occur at similar locations, where possible, to compare outputs. The need for additional management measures will also be assessed and implemented where reasonable and feasible.	Operational Noise Compliance Report
E134(x)	Monitoring and maintenance procedures for built elements, rehabilitated vegetation and landscaping	Periodic site inspections will be used to review environmental performance and determine the need for any maintenance.	Urban Design and Landscape Plan

## 9.3 Operational audits

### 9.3.1 Routine audit schedule

Environmental audits will be conducted at regular intervals during the operation of the Asset to evaluate compliance and identify opportunities for improvement. An audit schedule is included in Table 9-2.

Table 9-2: Audit schedule

Audit	Details	Timing	Responsibility	Recipient of the audit report
Internal audit	Compliance with approval and legal requirements, TfNSW specifications, OEMP	6 monthly, or in accordance with the EMS schedule	I&M Contractor: suitably qualified and experienced internal member not directly associated with the I&M Services	I&M Contractor Project Company
External audit	Compliance with EMS (ISO 14001) in accordance with environmental management system requirements	6 monthly, or in accordance with the EMS schedule*	I&M Contractor to engage independent external auditor	I&M Contractor Project Company
External Independent Audit	Independent environmental audit (CoA A36)	Annually	I&M Contractor to engage a suitably qualified, experienced and independent team of experts (including experts in air quality, biodiversity, noise and vibration, hydrology and any other fields nominated by the Secretary) whose appointment has been	Project Company, Secretary, relevant public authorities

Audit	Details	Timing	Responsibility	Recipient of the audit report
			approved by the Secretary	

\* Independent environmental audit (CoA E51) may satisfy an external audit.

Additional audit requirements identified in the CoA are summarised in Table 9-3. The document in which the requirement is addressed is included in the final column.

Table 9-3: Additional audit requirements identified in the CoA

CoA	Audit details	Recipient of the audit report	Implementation
E22	All sampling points and visibility monitoring points must be audited prior to commencing monitoring, for compliance with the requirements set out in Conditions E3, E4, E5 and E20. Verification and compliance auditing is to be undertaken by an independent person(s) or organisation(s) whose appointment has been approved by the Secretary. The independent person(s) must be a Chartered Professional Engineer (either Mechanical, Chemical or Control Systems engineer).	DPIE	Operational Air Quality Management Plan (Annexure F)
E37	The Proponent must engage a person independent from the design and construction of the CSSI, to audit the air quality monitoring (in-tunnel and ambient) for the CSSI at six (6) monthly intervals following commencement of operation of the CSSI, or at any longer interval if approved by the Secretary.	DPIE	Operational Air Quality Management Plan (Annexure F)
E40	The Proponent must document the results of the audit and make available all audit data for inspection by the Secretary upon request. A copy of the audit report must also be issued to the Proponent and AQCCC.	DPIE	Air Quality Community Consultative Committee
E148	Prior to the opening of the project to traffic, a full audit of the fire and life safety system as defined by the Fire Engineering Study required by Condition E147 must be undertaken by an Accredited Fire Engineer. The objective of the audit must be to ensure that all design and operational measures outlined in the fire engineering study has been installed, are operational, and achieve the required design criteria.  The results of the audit must be submitted to FRNSW prior to opening of the project to traffic. The Proponent must respond in writing to any recommendations resulting from the FRNSW review of the audit.	DPIE; Fire and Rescue NSW	Project Quality Plan

## 9.4 Operational reviews and checks

Operational reviews and other maintenance / checks or tests will be conducted as required during the operation of the Asset. Reviews identified in the CoA are summarised in Table 9-4. The document in which the requirement is addressed is included in the final column.

Table 9-4: Review requirements identified in the CoA

CoA	Audit details	Frequency / Timing	Recipient of the review report	Implementation
E64	An Operational Road Network Performance Review prepared in consultation with TfNSW and relevant councils to review road network performance and manage performance impacts of the Asset on the adjoining road	12 months and 5 years after the commencement of the full CSSI (this Asset and Rozelle Interchange).	Secretary	Operational Road Network Performance Review

CoA	Audit details	Frequency / Timing	Recipient of the review report	Implementation
	network. It will be based on updated traffic surveys and the assessment methodology consistent with the EIS.  The Review will confirm the adequacy of the mitigation measures identified in the Road Network Performance Plan required by CoA E63, and whether additional measures are required. The results will also be considered in future operational network performance planning by TfNSW.	The Review will be completed within 6 months of the above timeframes.		
E144 E145	Hazard Reviews detailing all hazardous incidents that have occurred during the preceding review period, identify safety measures required to rectify those incidents, and address any ongoing issues.	For the first 5 years of operation: <ul style="list-style-type: none"> <li>first 3 months of operation</li> <li>subsequent 9 months</li> </ul> Thereafter 12-month intervals, or as directed by FRNSW	FRNSW	Operation and Maintenance (O&M) Manual Hazard Review Report(s)
E150	Annual maintenance testing of fire and life safety systems	Annual, or any other interval as required by the design engineer and to the satisfaction of FRNSW	FRNSW	O&M Manual Maintenance Testing Report(s)
E153	Flood Review Report(s) prepared to assess the actual flood impact against those predicted by the Project Flood Model and the need for additional flood mitigation measures.  If required, additional mitigation measures will be developed in consultation with affected property, structure and/or infrastructure owners, OEH and the relevant council(s).	Within 3 months of the first defined flood event for any of the following flood magnitudes - 5 year ARI event, 20 year ARI event, 100 year ARI event and probable maximum flood	Secretary and relevant council(s)	Flood Review Report(s)

## 9.5 Periodic Testing

In accordance with CoA E9, the operation of the tunnel ventilation system is to avoid emissions of tunnel air from the portals and/ or the tunnel support facilities. Portal emissions are prohibited, except for the following circumstances:

- Emergency smoke management purposes in the event of a fire in the tunnel;
- Period testing.

Periodic testing may include, but not be limited to testing during commissioning; replacement, repair and testing of faulty ventilation equipment; and routine testing and maintenance periods. Further detail on periodic testing is outlined in the OQMMP (refer to Annexure F).

## 9.6 Compliance tracking

The Compliance Tracking and Environmental Audit Program (CTEAP) prepared to support design and construction was approved on 18 October 2018. It described how A27, A29, A36 and A37 of the Infrastructure Approval (SSI 7485) will be met. It also identifies the frequency for the compliance reporting and independent auditing. The Project Company will use this CTEAP during this Asset's operation. The CTEAP contains:

- Provisions for:
  - Notifying DPIE before the Asset is operational;
  - Periodic compliance reviews against the CoA and REMMs;
  - Periodic reporting to DPIE including a Pre-Operation Compliance Report;
  - All employees, contractors and sub-contractors to be aware and comply with the relevant CoA relating to their respective roles and responsibilities;
- An independent environmental auditing program;
- Procedures for rectifying any non-compliance identified during environmental auditing.

The CTEAP will be implemented for at least one year following the commencement of operation, unless otherwise determined by the Secretary.

## 9.7 Reporting to DPIE

Table 9-5 lists the DPIE reporting requirements relevant to the operation of the Asset and this OEMP.

Table 9-5: DPIE reporting requirements

Document (CoA ref)	Details / timing
Revised Staging Report (CoA A16)	One month prior to proposed change in the staging during operation.
Compliance tracking program (CoA A27/A28): notification	Notification to the Secretary prior to the commencement of operation and operate for a minimum of 12 months.
Independent environmental audit report (CoA A39): submission	Independent Environmental Audit report (and responses to recommendations) to be provided to the Secretary within six (6) weeks of completing the audit.
Incident notification (CoA A40): notification and submission	Notification as soon as possible and in any event within 24 hours of any incident, as detailed in Section 8.2.4.
EPA notification (CoA A43): notification	Following any EPA notification, provide DPIE with record of such notification within 24 hours.
OEMP (CoA D1): submission	The OEMP must be submitted to DPIE no later than one month prior to commencement of operation
Groundwater monitoring review (CoA D12)	At least one (1) month prior to the end of the five (5) year monitoring period. The Proponent must notify the Secretary within two (2) weeks of the review as to the outcomes of the review and any requirements for future monitoring.
Operational monitoring programs (CoA D14): submission	The Operational Monitoring Programs must be submitted to the Secretary for approval at least one (1) month prior to the commencement of operation
Operational monitoring programs (CoA D17): submission	Annual summary report of water monitoring data to be provided to DPIE, DPI (Water) and relevant councils.
Operational Road Network Performance Review (CoA E64): submission	At both 12 months and 5 years after commencement of operation the review must be completed within 6 months. Within 60 days of its completion, the plan must be submitted to the Secretary, Transport for NSW and to relevant councils, and made publicly available.
Operational Noise Compliance Report (CoA E95): submission	The Operational Noise Compliance Report will be submitted to the Secretary and the EPA within 60 days of completing the operational noise monitoring (undertaken within 12 months of commencement of operation). The report will be made publicly available on the Project website.
Flood Review Report(s) (CoA E151): submission	The Flood Review Report(s) will be submitted to the Secretary and the relevant council(s) within one (1) month of finalising the report(s).

## 9.8 Non-conformity, correction and preventative actions

A non-conformance is a failure to comply with a requirement, standard or procedure such as the Conditions of Approval, this OEMP or associated documents. Environmental non-conformances may be identified through regular inspections, monitoring, audits, complaints, observations or through incident management. They may be identified by the I&M Contractor, the Project Company and/or a public authority.

Environmental incident reports will be used to record non-conformances.



### Operational Environmental Management Plan

Following the identification of a non-conformance, corrective actions will be identified and determined by the relevant manager and will reflect the nature and scale of the incident and whether it presents a material risk to human health, the environment or property.

Corrective actions will be preventative-based, where possible. They will be implemented, monitored, checked and reviewed. The corrective action process is summarised as:

- I&M Contractor's QSE Manager to be made aware of the non-conformance;
- I&M Contractor's QSE Manager to prepare an environmental incident report and/or environmental improvement notice;
- I&M Contractor's QSE Manager (or relevant manager) to assign corrective actions and responsibility to specific I&M personnel(s) including timeframes, follow-up dates, and close-out expectations;
- Close-out the action, following monitoring, and follow-up observation that the non-conformance and associated risks have been removed or appropriately managed to limit the potential for material harm as far as is reasonably feasible and reasonable.

# 10 OEMP review and records management

## 10.1 OEMP review

The OEMP and sub plans will be checked, reviewed and updated annually or as required if there is a significant change in operations, maintenance, organisational structure, reporting lines or legislation. The review will ensure that identified issues and corrective actions are being appropriately managed and reported. The review will be conducted by the I&M QSE Manager and will include relevant personnel who may include:

- I&M Contractor's I&M Manager;
- I&M Contractor's Maintenance Manager;
- Project Company Representative;
- Project Company's Operations Manager;
- Project Company's Community & Stakeholder Manager.

As a minimum, the review will consider:

- Changes to the environment or generally accepted environmental management practices;
- Opportunities to improve environmental management processes and practices;
- Feedback, comments, actions and communications provided by Government agencies, regulators, and independent specialists;
- Audit findings;
- Environmental monitoring outcomes;
- Incidents and non-conformances;
- Environmental risks, including any new or additional (type or volume) of hazardous substances or contamination;
- Community feedback, including trends and persistent issues;
- Organisational structure changes;
- Role and responsibility changes;
- Operations and maintenance responsibility changes;
- Legislative and regulatory changes.

A summary of the OEMP management review will be provided to the Project Company. Any required updates to the OEMP will be undertaken in accordance with Section 1.3 of this OEMP. Changes to the OEMP will be communicated by the Project Company Representative using either management meetings for non-critical updates or through formal communication (e.g. email, other transmittal) for critical and essential updates.

## 10.2 Records management

The I&M Contractor's QSE Manager will be responsible for all environmental records and information relating to this OEMP, including the resources and training needed to maintain:

- |   |  |
|---|--|
| • The OEMP and sub plans                              | • Environmental incident reports and notifications |
| • Monitoring data, inspections and corrective actions | • Internal and external communications             |
| • Audit reports and corrective actions                | • Training and induction records                   |
|   | • Operations and maintenance activities            |

## Operational Environmental Management Plan

- Complaints Compliance tracking
- Subcontractor monitoring and performance
- Waste management records
- Greenhouse gas emissions
- Meeting minutes
- Monitoring environmental planning obligations
- Agency, regulatory, Governmental and TfNSW correspondence.
- Climate change and energy use records

All environmental management documents will be subject to ongoing review, revision and continual improvement. This includes changes to scheduled activities and legislative and licencing requirements.

Records will be held for 10 years. TfNSW, the DPIE and key Government agencies will have access to all records upon request. Records will be managed in accordance with Project Company's record management system.

### 10.3 Document control

OEMP and sub plan preparation, distribution and review will be led by the I&M Contractor's QSE Manager. During the Asset's operation, the environmental documentation will be stored in the I&M Contractor's integrated management system.

A document control procedure will manage the flow of information between internal and external parties in line with the communication requirements in Section 7. This procedure will identify measures to ensure that documents are:

- Developed, reviewed and approved before being issued;
- Issued for use;
- Controlled and stored for 10 years, or the current prevailing legal requirements;
- Removed when superseded or updated.

A distribution list will identify the current version of each document, report and/or data.

# Annexure A Compliance table for DIPNR, 2004

Guidelines for the preparation of Environmental Management Plans (DIPNR, 2004)

EMP guideline section		Document reference
<b>Background</b>	Introduction	Section 1
	Location	Section 2.1, Figure 2-1
	Operation and maintenance activities	Section 3.1
	Timing and schedule	Section 3.2
	Project description	Section 2
	EMP context	Section 1.2, Section 5.1
	EMP objectives	Section 1.2
	Environmental Policy	Section 5.2, Annexure B
<b>Environmental Management</b>	Environmental management structure and responsibility	Sections 5.4 to 5.9
	Approval and licensing requirements	Section 4
	Reporting	Sections 9.2 to 0
	Environmental training	Section 6
	Emergency contacts and responses	Section 8.2; Annexure E
<b>Implementation</b>	Risk assessment	Section 8.1, Annexure C
	Environmental management activities and controls	Issue-specific strategies and sub-plans
	Environmental control plans or maps	Section 5.5, Annexure I
	Environmental schedules	Environmental schedules (e.g. site inspection checklists, environmental incident reports, waste register) will be included in issue-specific sub-plans, where appropriate, or will be retained on the project's document management system.
<b>Monitor and review</b>	Environmental monitoring	Section 9.2; issue-specific environmental strategies and sub-plans
	Environmental auditing	Section 9.3
	Corrective actions	Section 9.8
	EMP review	Section 10.1

# Annexure B Environment and sustainability policy





# Annexure C   Environmental risk register

Insert environmental risk register (I&M Contractor to provide)

## Annexure D Environmental incident procedure

INSERT TfNSW PROCEDURE

# Environmental Incident Classification and Reporting Procedure

Roads and Maritime Services | November 2018

Document No. | RMS 17.374 | Version 5.1





## About this release

<b>Title</b>	Environmental Incident Classification and Reporting Procedure
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Approval		
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Acronyms and definitions	
Acronym	Definition
DE	(Roads and Maritime Services) Director Environment
DES	(Roads and Maritime Services) Director Environment Sydney
DPE	Department of Planning and Environment
Environmental harm	Any act that degrades or pollutes the environment
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1997</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
REF	Review of Environmental Factors
Roads and Maritime	NSW Roads and Maritime Services
SEQC	(Roads and Maritime Services) Safety Environment and Quality Co-ordinator
SEQO	(Roads and Maritime Services) Safety Environment and Quality Officer
WHS	Work Health and Safety

# 1. Introduction

## 1.1 Aim

The Environmental Incident Classification and Reporting Procedure (the Procedure) aims to ensure Roads and Maritime Services workers and contractors understand how to classify, respond to and report environmental incidents that occur as a result of Roads and Maritime managed activities.

## 1.2 Objectives

The objectives of the Procedure are to:

- Ensure all relevant Roads and Maritime workers, managers and contractors are made aware of environmental incidents promptly and can respond accordingly
- Ensure site workers understand the immediate environmental incident reporting requirements
- Ensure all workers understand reporting timeframes, including statutory requirements
- Ensure incidents are reported to enable monitoring, sharing of lessons learnt and response to emerging environmental incident trends
- Comply with statutory obligations to report certain environmental incidents to regulators and other relevant government agencies (see [section 5.1](#)).

## 1.3 Scope and coverage

This Procedure is applicable to all Roads and Maritime activities where environmental incidents may occur. This includes (but is not limited to):

- Temporary activities, such as preliminary investigations (e.g. geotechnical and environmental surveys) and the construction and maintenance of Roads and Maritime assets
- Activities at Roads and Maritime properties and facilities
- Vessels operated by Maritime division
- Activities undertaken by contractors on behalf of Roads and Maritime.

The requirements of this Procedure must be communicated to all Roads and Maritime workers and contractors (e.g. during inductions) who are undertaking activities where incidents may occur.

The Procedure is for internal reporting processes, except where incidents are identified that need to be notified to regulators, and other relevant authorities (see [section 5.1](#)).

The procedure does NOT cover environmental incidents caused by:

- Operational road and traffic activities of the general public (e.g. vehicle accidents, fires caused by discarded cigarette butts)
- Boating accidents (except those involving Roads and Maritime vessels)
- Dumping of materials by members of the public on Roads and Maritime roadsides or land (except where hazardous materials are unexpectedly found during road construction or maintenance activities). Illegal dumping should be reported to the [NSW Environment Protection Authority \(EPA\)](#)
- Marine oil and chemical spills covered by the [National Plan for Maritime Environmental Emergencies](#) (Australian Maritime Safety Authority, 2014).

## 2. Environmental incident classification

There are three categories of environmental incidents, as detailed in Table 2.

Table 2: Environmental incident classification			
Category	Description	Examples	
Category 1	<p>Potential breaches of legislation or failures of process that result in actual off-site environmental harm, or residual on-site environmental harm or</p> <p>Works undertaken outside approved areas, without required approval or without environmental assessment or</p> <p>Any Material Harm pollution incident as defined by <u>Part 5.7 of the <i>Protection of the Environment Operations Act 1997</i> (POEO Act)</u>.</p>	Pollution Incidents	Discharge of waters from site not in accordance with any approval requirements (e.g. discharge criteria in an Review of Environmental Factors (REF) safeguard or Environment Protection Licence (EPL) condition)
			Pollution, or potential pollution, of waters
			Unmanaged vehicle tracking of materials or emissions of dust, offensive odours or noise beyond the site boundary that are not managed in accordance with approval requirements and/or might impact on nearby land users
			Pollution incidents that threaten harm to the health or safety of people (e.g. uncontrolled releases of hazardous substances)
			Unauthorised or illegal disposal or transport of waste
			A spill or other incident that causes pollution to land
		Conservation Breaches	Unauthorised harm or damage to native flora and fauna (terrestrial or aquatic/marine)
			Unauthorised dredging or reclamation works within a watercourse
			A fire caused by Roads and Maritime activities that travels beyond the boundary causing or potentially causing harm to the environment or community
		Heritage Breaches	Unauthorised harm to Aboriginal objects and Aboriginal places
			Unauthorised damage to any State or locally significant relic or Heritage item, or item listed on the <u>Roads and Maritime Section 170 register</u>

Table 2: Environmental incident classification

Category	Description	Examples	
		Planning and compliance breaches	<p>Failure to comply with the requirements of:</p> <ul style="list-style-type: none"> <li>The <i>Environmental Planning and Assessment Act 1997</i> (EP&amp;A Act), including exempt activities, Part 5 determinations and Part 5.1 approvals</li> <li>An <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) approval</li> <li>An EPL</li> <li>A CEMP or environmental work method statement</li> <li>A permit from a regulator (e.g. under the <i>Fisheries Management Act 1994</i>)</li> </ul>
Category 2	Failures of process or events that do not result in off-site environmental harm, or residual on-site environmental harm. These incidents may result in temporary on-site environmental harm that can be rectified to pre-existing conditions.	<p>A procedural, administrative or technical breach of environmental requirements, including:</p> <ul style="list-style-type: none"> <li>Failure to prepare or submit required documents, reports or other correspondence</li> <li>Failure to comply with the requirements of: <ul style="list-style-type: none"> <li>The <i>Environmental Planning and Assessment Act 1997</i> (EP&amp;A Act), including exempt activities, Part 5 determinations and Part 5.1 approvals</li> <li>An <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) approval</li> <li>An EPL</li> <li>A CEMP or environmental work method statement</li> <li>A permit from a regulator (e.g. under the <i>Fisheries Management Act 1994</i>).</li> </ul> </li> </ul>	
		Spills and discharges that do not leave a site boundary and are cleaned up without residual on-site environmental harm, and the area of temporary impact can be restored to pre-existing conditions	
		A fire that is contained on site and does not cause or potentially cause adverse impact to the environment or community	
Reportable Event	An event or unexpected find that occurs outside the scope of reasonable environmental controls and mitigation measures	<p>Sediment or site water travelling beyond a site boundary, and where it can be demonstrated that:</p> <ul style="list-style-type: none"> <li>Erosion and sediment controls were installed and maintained in accordance with an erosion and sediment control plan, and</li> <li>The cause of the incident was reasonably unforeseen or the weather (rain, wind etc) event exceeded the design capacity of controls.</li> </ul>	



Table 2: Environmental incident classification

Category	Description	Examples
		Note these events are considered to have occurred (and the response should commence in accordance with <a href="#">Section 3</a> ) when sediment or site water first travels beyond the site boundary (e.g. when an appropriately sized and maintained sediment basin commences overtopping)
		An unexpected archaeological find that is being managed in accordance with the "Roads and Maritime Standard Management Procedure - Unexpected Archaeological Finds"
		An unexpected threatened species find that is being managed in accordance with the "Roads and Maritime Biodiversity Guidelines – unexpected threatened species finds procedure"
		An unexpected find of contaminated soils, asbestos or other potentially hazardous substances during construction or maintenance works. Note that once a particular contaminant is identified or found for the first time (either during project planning or construction phases) it is then reasonably expected to be found, so additional finds need not be reported in this category.
Regulatory Action	Formal regulatory action from an environmental regulator (that has not already been reported in conjunction with another incident)	<p>Formal regulatory action from an environmental regulator includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>• Penalty infringement notices (PINs)</li> <li>• Clean up notices</li> <li>• Prevention notices</li> <li>• Official cautions / warnings</li> <li>• EPA show cause notifications.</li> </ul>

**Note:** For any incident where there is associated formal regulatory action from an environmental regulator, copies of this correspondence must be forwarded to [envops@rms.nsw.gov.au](mailto:envops@rms.nsw.gov.au) in addition to the Environmental Incident Report (see [section 4](#)).

## 3. Environmental incident response

### 3.1 Considerations and steps for environmental incident response

The step-by-step response for Category 1 incidents, Category 2 incidents and Reportable Events is detailed in Table 3.1a (activities undertaken by contractors) and Table 3.1b (activities undertaken by Roads and Maritime Regional Maintenance). However, some key points apply throughout all stages of the response to any environmental incident:

- If in doubt, treat all incidents as Category 1 to ensure reporting timeframes can be met
- Project teams should also undertake the following notifications as appropriate:
  - Roads and Maritime Corporate Communications for any incidents that have potential for community or media attention (see [section 4.4](#))
  - Roads and Maritime Work Health and Safety (WHS) Branch for any incidents that involve actual or potential risks to worker health and safety (see [section 4.4](#)).
- The person responsible for operational management of the site/activity shall assume responsibility for the response to the incident and direct actions as necessary and in accordance with this Procedure
- The Director Environment Sydney (DES) may reclassify the category of an incident where appropriate, in consultation with the relevant Roads and Maritime Environment Manager.

Any Regulatory Action received (that has not already been reported in conjunction with another incident) should be immediately forwarded to the [envops@rms.nsw.gov.au](mailto:envops@rms.nsw.gov.au) mailbox, and followed by an immediate phone call to the relevant Roads and Maritime Environment Manager, who will immediately advise the DES. Consideration should then be given as to whether an environmental incident has occurred (see [section 2](#)) that should be reported in accordance with this section.

**Table 3.1a: Environmental incident response – activities undertaken by contractors**

Step	Action	Responsibility for completing action	Timeframe	
			Category 1 Incidents	Category 2 Incidents / Reportable Events
1	Stop work in relevant area (if necessary) and take actions to prevent adverse impact to human health or the environment. Note human health and safety is the primary concern, and no action should be taken if it is not safe to do so - in these instances emergency services should be contacted (phone triple zero).	Person who identifies incident	Immediate	Immediate
2	Advise the contractor site management team (and Roads and Maritime Corporate Communications and/or WHS Branch as appropriate)	Person who identifies incident	Immediate	Immediate
3	Advise the Roads and Maritime project management team and the relevant Roads and Maritime Environment Manager.	Contractor	Immediate	Day of the incident
4	Consider if the incident is a pollution incident that constitutes Material Harm in accordance with Part 5.7 of the POEO Act. For Material Harm pollution incidents, notify relevant agencies (see <a href="#">section 5.2</a> ). Sites with an EPL should implement their Pollution Incident Response Management Plan.	Contractor	Immediate	Immediate
5	Advise DES by phone. The DES may request photographs and a brief summary of known information via email. The following Roads and Maritime managers should also be notified by phone as relevant: <ul style="list-style-type: none"> <li>Director Environment (Regions)</li> <li>Director Environment (Motorways).</li> </ul>	Roads and Maritime Environment Manager	Immediately following advice of the incident	N/A
6	Where relevant, notify incident to appropriate regulatory agency (see <a href="#">section 5.1</a> ). Note this does not refer to the requirement to notify Material Harm pollutions incidents (see Step 4).	Contractor	As required by legislation	As required by legislation
7	Complete the incident report form (see <a href="#">section 4.2</a> ), including sign-off from Roads and Maritime Project Manager, and submit to Roads and Maritime Environment Manager* (see sections <a href="#">4.3</a> and <a href="#">4.4</a> ).	Contractor	Within 3 business days of the incident	Within 3 business days of the incident
8	Sign and submit incident report form to <a href="mailto:envops@rms.nsw.gov.au">envops@rms.nsw.gov.au</a> .	Roads and Maritime Environment Manager	On the day of receipt of the form	On the day of receipt of the form
9	For Material Harm pollution incidents, provide a written report to each relevant authority (see <a href="#">section 5.2</a> ).	Contractor	Within 7 days of the incident	N/A
10	Undertake incident investigation (level of investigation to be appropriate to the severity of the incident) to determine root cause and any necessary corrective actions. Summarise findings in 'Incident Lessons Learnt' template and submit to Environment Manager for review.	Contractor	Within 1 month of incident	N/A
11	Submit final Incident Lessons Learnt to <a href="mailto:envops@rms.nsw.gov.au">envops@rms.nsw.gov.au</a> .	Roads and Maritime Environment Manager	Within 1 week of receipt	N/A
12	Consider the need for any required corrective actions to be addressed through a management system (e.g. corrective action request), and any required updates to a risk register.	Roads and Maritime Environment Manager and project team	As appropriate	As appropriate

\*Alternate workflow / signatory arrangements may be required for projects where a third party is involved (e.g. a delivery authority). These arrangements can be confirmed with the relevant Roads and Maritime Environment Manager.

**Table 3.1b: Environmental incident response – activities undertaken by Regional Maintenance** (including contractors or RMCC on behalf of Regional Maintenance)

Step	Action	Responsibility for completing action	Timeframe	
			Category 1 Incidents	Category 2 Incidents / Reportable Events
1	Stop work in relevant area (if necessary) and take actions to prevent adverse impact to human health or the environment. Note human health and safety is the primary concern, and no action should be taken if it is not safe to do so - in these instances emergency services should be contacted (phone triple zero).	Person who identifies incident	Immediate	Immediate
2	Advise the Roads and Maritime site management team and the relevant Roads and Maritime Environment Manager and Safety Environment Quality Officer (SEQO) / Safety Environment Quality Co-ordinator (SEQC) (and Corporate Communications and/or WHS Branch as appropriate)	Person who identifies incident	Immediate	Immediate
3	Advise DES by phone. The DES may request photographs and a brief summary of known information via email. The relevant Regional Maintenance Manager must also be notified.	Environment Manager	Immediate	N/A
4	Consider if the incident is a pollution incident that constitutes Material Harm in accordance with Part 5.7 of the POEO Act. For Material Harm pollution incidents, notify relevant agencies (see <a href="#">section 5.2</a> ). Sites with an EPL should implement their Pollution Incident Response Management Plan.	DES	Immediately following advice of the incident	N/A
5	Where relevant, notify incident to appropriate regulatory agency (see <a href="#">section 5.1</a> ). Note this does not refer to the requirement to notify Material Harm pollutions incidents (see Step 4).	Environment Manager	As required by legislation	As required by legislation
6	Complete the incident report form (see <a href="#">section 4.2</a> ), including sign-off from Roads and Maritime Project Manager, and submit to SEQC (see <a href="#">section 4.3</a> ).	Relevant Roads and Maritime site representative	Within 3 business days of the incident	Within 3 business days of the incident
7	SEQC to sign and submit incident report form to relevant Environment Manager (see <a href="#">section 4.4</a> ).	SEQC	On the day of receipt of the form	On the day of receipt of the form
8	Sign and submit incident report form to <a href="mailto:envops@rms.nsw.gov.au">envops@rms.nsw.gov.au</a> .	Environment Manager	On the day of receipt of the form	On the day of receipt of the form
9	For Material Harm pollution incidents, provide a written report to each relevant authority (see <a href="#">section 5.2</a> ).	DES	Within 7 days of the incident	N/A
10	Undertake incident investigation (level of investigation to be appropriate to the severity of the incident) to determine root cause and any necessary corrective actions. Summarise findings in 'Incident Lessons Learnt' template and submit both to Environment Manager for review. Consider the need for any required corrective actions to be addressed through a management system (e.g. corrective action request), , and any required updates to a risk register.	SEQC	Within 1 month of incident	N/A
11	Submit final Incident Lessons Learnt to <a href="mailto:envops@rms.nsw.gov.au">envops@rms.nsw.gov.au</a> .	Roads and Maritime Environment Manager	Within 1 week of receipt	N/A

Copies of formal regulatory action from an environmental regulator (that has not already been reported in conjunction with another incident) must be forwarded to the relevant Roads and Maritime Environment Manager (and SEQC/SEQO for Regional Maintenance projects) and [envops@rms.nsw.gov.au](mailto:envops@rms.nsw.gov.au) immediately upon receipt.

### 3.2 Critical incidents

Some Category 1 incidents require escalation so relevant members of the Roads and Maritime Executive are aware of the incident and ready to respond as necessary. Category 1 incidents will be deemed 'Critical Incidents' for escalation to the Executive when they have the potential for:

- Regulatory action (e.g. EPA Penalty Infringement Notice) and/or
- Reputational damage (e.g. media coverage) and/or
- Significant environmental harm.

Guiding factors that will be considered when determining whether there has been 'significant' environmental harm include:

- When there has been actual or potential harm to the health or safety of people or to the environment that is not trivial
- Actions required to prevent, mitigate or make good the actual or potential environmental harm are likely to exceed \$10,000

When a potential 'Critical Incident' is reported, the DES will immediately brief the Director Environment (DE) who will make a determination on whether it will be considered a 'Critical Incident'. The DE will then brief the Roads and Maritime Chief Executive and relevant Executive Director, as well as any other members of the Executive as appropriate. When the DE cannot be contacted, the DES will make the determination and make the relevant Executive briefings.

## 4. Environmental incident reporting

### 4.1 Environmental incident report form

The Environmental Incident Report Form should be completed for Category 1 incidents, Category 2 incidents and Reportable Events, and is available on the [Roads and Maritime website](#).

### 4.2 Completing the incident report form

All parts of the Incident Report Form must be completed in accordance with this procedure and following the instructions within the form. The Form (and any subsequent reports) must only include factual information. Speculation about the causes and outcomes of incidents are not to be included.

The Form must be signed by the following:

Signatory	Reason
The person making the report	The person witnessed the incident or has the most knowledge of the incident, and can provide sufficient factual information.
The Roads and Maritime Project Manager	To ensure all relevant Roads and Maritime parties can be made aware of the incident, and appropriate resources can be allocated and/or approved to respond to the incident. This also ensures the project management team are aware of any environmental performance trends if multiple incidents occur.
Safety Environment and Quality Co-ordinator (Roads and Maritime Regional Maintenance only)	To ensure Regional Maintenance management system staff are aware of the incident, and any necessary management system changes can be made once corrective actions and lessons learnt are finalised.
The relevant Roads and Maritime Environment Manager	Concurrence that the incident is adequately described, and the immediate actions and corrective actions are appropriate.

As noted in [Table 3.1a](#), alternate signatory arrangements may be required for projects where a third party is involved (e.g. a delivery authority). These arrangements can be confirmed with the relevant Roads and Maritime Environment Manager.

### 4.3 Submitting the incident report form

All Incident Report Forms must be populated, signed and submitted electronically (never printed / signed / scanned etc.) to enable Roads and Maritime to electronically capture the information entered in the form.

Completed Incident Report Forms should be submitted by the Roads and Maritime Environment Manager to the Environment Operations mailbox:

- [envops@rms.nsw.gov.au](mailto:envops@rms.nsw.gov.au)

It is essential that a clear and consistent subject line convention is used to allow tracking of correspondence about each incident. All emails about an incident between all parties should structure the subject line as follows:

- Category X - project name / incident location - date
- For example, Category 1 – Main Road Upgrade – dd/mm/yy.

Where information cannot be gathered within the timeframes set out in this Procedure, the incident form should be submitted to the mailbox as a 'draft', whether or not the information contained is fully completed.

- For example, Category 1 – Main Road Upgrade – dd/mm/yy (DRAFT).

The Environment Manager should then request further information from the person making the report, and the final report should be submitted within the next 24 hours.

## 4.4 Roads and Maritime contacts

The relevant Environment Manager for each region and Project Office is the first point of contact for enquiries relating to environmental incidents. Current contacts for all Roads and Maritime Environment Managers can be found on the [Roads and Maritime website](#).

Environment Managers can also provide contact details for other relevant contacts during an incident, such as Communications or Work, Health and Safety. Hazards and occurrences that occur during Roads and Maritime activities should be reported through the Roads and Maritime WHS reporting line on 1300 131 469.

The DES oversees the application of this Procedure, and can be contacted in the absence of the relevant Environment Manager for Category 1 incidents:

- Phone - (02) 0428 608 758

## 5. Regulatory agency notification

### 5.1 Notification of Material Harm pollution incidents

#### 5.1.1 Definition of Material Harm pollution incidents

Under Part 5.7 of the POEO Act, there is a duty to immediately notify (i.e. promptly and without delay) each relevant authority (see [section 5.1.3](#)) of a pollution incident where material harm to the environment is caused or threatened.

The POEO Act states that a pollution incident should be considered Material Harm if:

*“(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or*

*(ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000”*

Material Harm only relates to pollution incidents. Other environmental incidents, such as conservation, heritage and planning breaches, are not included in the definition of a pollution incident.

#### 5.1.2 Determining if an incident should be considered Material Harm

As soon as a person becomes aware of a pollution incident that has the potential to cause Material Harm, the Category 1 incident response should be followed (see [Table 3.1a](#) and [Table 3.1b](#) above). The determination on whether a pollution incident should be considered Material Harm should be made in accordance with [Table 5.1.2](#).

**Table 5.1.2: Determination of Material Harm pollution incidents**

Project delivery	Material Harm determination
Activities undertaken by Regional Maintenance	<p>The DES should make the determination (and any associated notifications) on whether a pollution incident should be considered Material Harm.</p> <p>If the DES is not available, the relevant Environment Manager should seek advice from other Roads and Maritime Environment Branch Directors, or make the material harm determination themselves.</p> <p>If no assistance can be obtained and it is suspected that a pollution incident should be considered Material Harm, the project should notify the relevant authorities in accordance with <a href="#">Table 5.1.3a</a> or <a href="#">Table 5.1.3b</a> (as relevant).</p>
Activities undertaken by contractors	<p>The contractor project team should make the determination (and any associated notifications) on whether a pollution incident should be considered Material Harm.</p> <p>The relevant Roads and Maritime Environment Manager or Environment Branch Director may contact the DES to assist in making an assessment of the incident, to aid the contractor in determining if the pollution incident should be considered Material Harm.</p> <p>Where Roads and Maritime believes a pollution incident should be considered Material Harm but the contractor disagrees, Roads and Maritime is required by law to notify EPA and other relevant authorities. In this instance the DES or DE would make a determination on whether the incident should be notified by Roads and Maritime as Material Harm. Roads and Maritime would provide details of any notifications made to the contractor.</p>



Even if only limited information is available for a pollution incident being considered Material Harm, each relevant authority must be immediately notified with the information available and updates provided as soon as further relevant information becomes available.

In circumstances where there is doubt about the need to notify a pollution incident as Material Harm, Roads and Maritime and its contractors should always err on the side of notification.

### **When in doubt, communicate!**

Note: Roads and Maritime is not responsible for notifying a Material Harm pollution incident caused by a traffic or vehicle accident where notification has already occurred by someone at the scene. However, if it is believed notification has not been undertaken, Roads and Maritime should undertake notification in accordance with [section 5.1.3](#). Environment Branch can provide advice in this instance (see [section 4.4](#)).

### **5.1.3 Relevant authorities to notify**

The relevant authorities that must be notified for a Material Harm pollution incident are listed in tables [5.1.3a](#) and [5.1.3b](#) below. It is important to note the order of notification and phone numbers to use can vary depending on the nature of the pollution incident, as detailed in the two tables.

All of the authorities listed (whether considered relevant or not) must be contacted for each Material Harm pollution incident to satisfy POEO Act requirements. Serious penalties apply to both individuals and corporations for failing to notify Material Harm pollution incidents:

- Maximum penalty for individuals - \$500,000
- Maximum penalty for corporations - \$2,000,000.

**Table 5.1.3a: Authorities to notify for Material Harm pollution incidents that present an immediate threat to human health or property**

Order	Authority	Contact Number
1	Fire and Rescue NSW	000
2	NSW EPA environment line	131 555
3	Ministry of Health (via the local Public Health Unit)*	Contact 1300 066 055 to be directed to the local Public Health Unit, or visit the <a href="#">NSW Health Website</a>
4	SafeWork NSW	131 050
5	The Appropriate Regulatory Authority*, being either: <ul style="list-style-type: none"> <li>• Local council</li> <li>• Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council).</li> </ul>	Local council - contact Office of Local Government on 4428 4100, or visit the <a href="#">Office of Local Government website</a> Western Lands Commissioner – phone 6883 5400

**Table 5.1.3b: Authorities to notify for Material Harm pollution incidents that do NOT present an immediate threat to human health or property**

Order	Authority	Contact Number
1	NSW EPA environment line	131 555
2	The Appropriate Regulatory Authority*, being either: <ul style="list-style-type: none"> <li>• Local council</li> <li>• Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council).</li> </ul>	Local council - contact Office of Local Government on 4428 4100, or visit the <a href="#">Office of Local Government website</a> Western Lands Commissioner – phone 6883 5400

3	Ministry of Health (via the local Public Health Unit)*	Contact 1300 066 055 to be directed to the local Public Health Unit, or visit the <a href="#">NSW Health Website</a>
4	SafeWork NSW	131 050
5	Fire and Rescue NSW	1300 729 579

\* The appropriate contact for the Appropriate Regulatory Authority and Public Health Unit will vary according to the geographic location of the activity. These contact numbers should be found in advance and stored for immediate access (e.g. in a project's Construction Environmental Management Plan and/or on site notice boards) should a pollution incident need to be notified.

#### 5.1.4 The relevant information to provide

It is important to avoid speculation on origin, causes or outcomes of a pollution incident in discussions with the authorities. Section 150 of the POEO Act provides the information that needs to be notified, being:

- 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, if known
- 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, if known
- Other information prescribed by the regulations.

Only known information should be provided when notifying of a Material Harm pollution incident. If further information becomes known after the initial notification, that information must immediately be notified to all authorities in accordance with Section 150 (see above). The immediate verbal notification is to be followed by written notification to each relevant authority within seven days of the date on which the incident occurred.

Complying with these notification requirements does not remove the need to comply with any other legislative requirements for incident notification (e.g. requirements under EPL conditions or the Work Health and Safety Act 2011).

## 5.2 Summary of other regulatory agency notification requirements

Specific statutory requirements relating to the notification of environmental incidents to relevant regulatory agencies are summarised in Table 5.2. Additional requirements adopted by Roads and Maritime are indicated in *italics*. Any notification to regulatory agencies should be indicated in the Environmental Incident Report Form to confirm that any required notifications have been initiated.

**Table 5.2: Regulatory agency notification requirements**

Legislation / issue	Regulating authority	Section / requirement
<i>Commonwealth Aboriginal and Torres Strait Islanders Heritage Protection Act 1984</i>	<a href="#">Department of the Environment and Energy</a>	Section 20 – requirement to notify the Minister of the discovery of Aboriginal remains.
<i>Contaminated Land Management Act 1997</i>	<a href="#">EPA</a>	Section 60 – requirement to notify if Roads and Maritime activities have contaminated land or if Roads and Maritime owns land that has been contaminated.
<i>Heritage Act 1977</i>	<a href="#">Office of Environment and Heritage</a>	Section 146 – requirement to notify the Heritage Council of the location of the relic once a relic has been discovered or located.
<i>National Parks and Wildlife Act 1974</i>	<a href="#">Office of Environment and Heritage</a>	Section 89A – requirement to notify the location of an Aboriginal object that is the property of the Crown.

<i>Protection of the Environment Operations Act 1997</i>	<u>EPA</u> and other relevant authorities	Section 148 – requirement to immediately notify pollution incidents that cause or threaten Material Harm to the environment (see <u>Section 5.1</u> )
	<u>EPA</u>	<i>Pro-active reporting to the local EPA officer of offsite pollution incidents that occur as a result of Roads and Maritime activities is encouraged as soon as practicable after the pollution incident occurs.</i>
<i>Rural Fires Act 1997</i>	<u>NSW Rural Fire Service</u>	Section 64 – requirement to notify an appropriate fire officer of the inability to extinguish any fire burning during a bush fire danger period applicable to the land.
Breach of Conditions of Approval (projects approved under Part 5.1 of the EP&A Act)	<u>Department of Planning and Environment</u> (DPE)	DPE should be notified by the project proponent when there has been a breach of a Condition of Approval (CoA). There may also be other notification requirements included in the CoA.
<i>Water supply catchment areas</i>	<i>Local water supply authority</i>	<i>If an environmental incident has the potential for unapproved impacts on a drinking water supply, the relevant water supply authority must be advised.</i>

### 5.3 Requests for written reports from regulatory authorities (activities delivered internally by Roads and Maritime)

Should Roads and Maritime directly receive a request from a regulatory authority for a written report regarding an environmental incident, Environment Branch and Legal Branch must be immediately contacted for advice. No further correspondence (including email) about the incident should be distributed either internally or externally until advice is received. Environment Branch will coordinate with Legal Branch to:

- Assist in the investigation of the incident
- Provide legal advice to the project
- Co-ordinate the preparation of the written response to the regulatory authority.

## Annexure E Environmental contacts

Emergency contacts will be available to be contacted by the EPA and Project Company on a 24 hour basis.

Title	Name	Phone number
<b>I&amp;M Contractor project representatives</b>		
Maintenance Manager	To be provided prior to commencement of operation	To be provided prior to commencement of operation
QSE/ICMS Manager	To be provided prior to commencement of operation	To be provided prior to commencement of operation
Motorway Control Centre	Motorway Controller on duty	To be provided prior to commencement of operation
<b>Project Company representatives</b>		
Project Company Project Representative	TBC	
Operations Manager	TBC	
Community & Stakeholder Manager	TBC	
<b>External parties</b>		
Fire and Rescue NSW	N/A	000 (emergency) 1300 729 579 (non-emergency)
EPA	N/A	(02) 9995 5000 131 555
Ministry of Health / Camperdown Public Health Unit	N/A	Business hours: (02) 9515 9420 After hours: (02) 9515 6111 (ask for Public Health Officer on call)
SafeWork NSW	N/A	131 050
City of Sydney	N/A	(02) 9265 9333
Inner West Council	N/A	(02) 9392 5000
Transport Management Centre	Operations Controller	131 700
NSW State Emergency Services	N/A	132 500

# Annexure F      Operational      Air      Quality Management Plan

The Operational Air Quality Management Plan will be provided for review separate to this OEMP.

# Annexure G    Operational Surface Water Quality Management Plan and Monitoring Program

The Operational Surface Water Quality Management Plan and Monitoring Program will be provided for review separate to this OEMP.

# Annexure H      Operational      Groundwater Management Plan and Monitoring Program

The Operational Groundwater Management Plan and Monitoring Program will be provided for review separate to this OEMP.







# Annexure I      Environmental Control Plan




## Environmental Control Map 1 of 8





### Legend





-  Tunnel Alignment
-  Ancillary Facility Boundary
-  Operational Ancillary Infrastructure
-  NCA Boundary

#### Sensitive Receivers:

-  Aged Care
-  Child Care
-  Educational
-  Medical
-  Place of Worship
-  Other

#### LEP Heritage:

-  Conservation Area - General
-  Item - Archaeological
-  Item - General
-  Item - Landscape





-  S170 Heritage
-  State Heritage
-  Waterbody
-  Augmented M8 Basin





## Environmental Control Map 2 of 8





### Legend





-  Tunnel Alignment
-  Ancillary Facility Boundary
-  Operational Ancillary Infrastructure
-  NCA Boundary

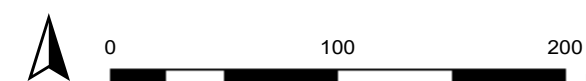
#### Sensitive Receivers:

-  Aged Care
-  Child Care
-  Educational
-  Medical
-  Place of Worship
-  Other

#### LEP Heritage:

-  Conservation Area - General
-  Item - Archaeological
-  Item - General
-  Item - Landscape

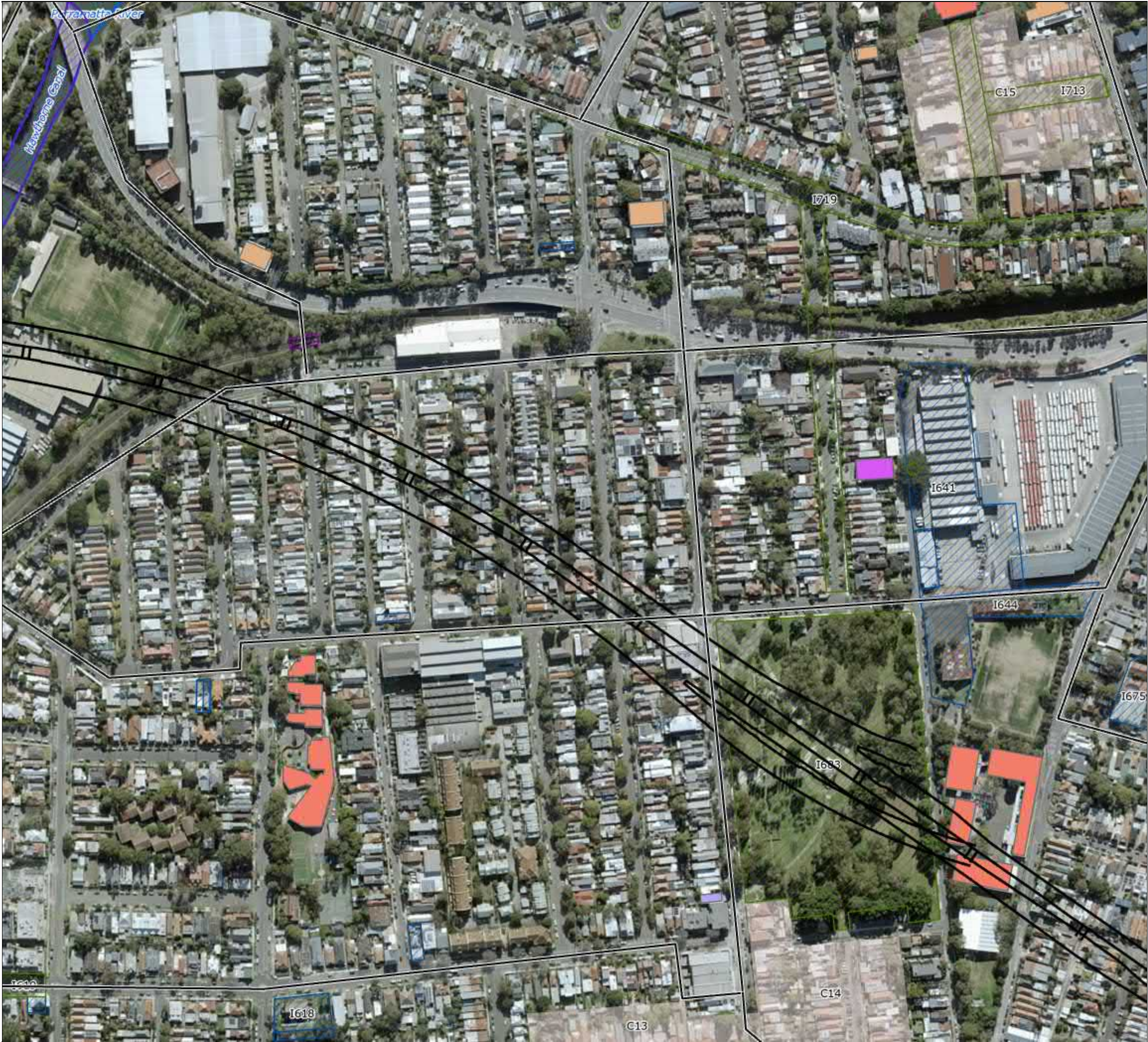
-  S170 Heritage
-  State Heritage
-  Waterbody
-  Augmented M8 Basin



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WestConnex M4-M5 Link Mainline Tunnels

Environmental Control Map 3 of 8

Legend

- Tunnel Alignment
- Ancillary Facility Boundary
- Operational Ancillary Infrastructure
- NCA Boundary

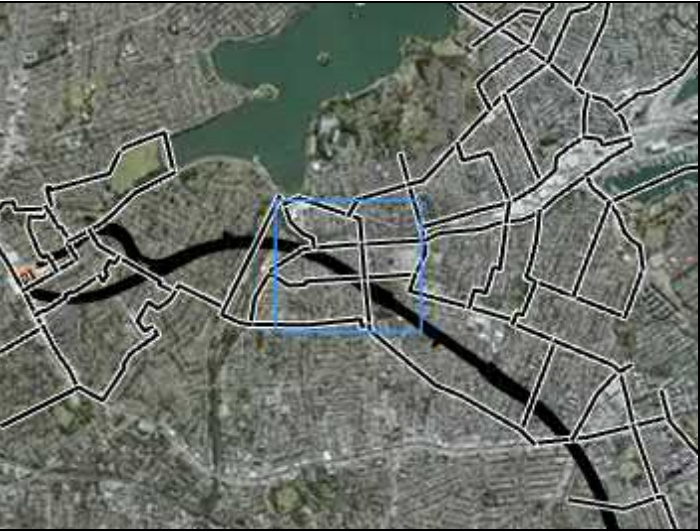
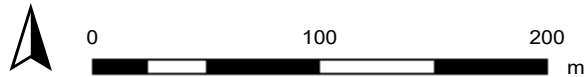
Sensitive Receivers:

- Aged Care
- Child Care
- Educational
- Medical
- Place of Worship
- Other

LEP Heritage:

- Conservation Area - General
- Item - Archaeological
- Item - General
- Item - Landscape

- S170 Heritage
- State Heritage
- Waterbody
- Augmented M8 Basin



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## WestConnex M4-M5 Link Mainline Tunnels

## Environmental Control Map 4 of 8





### Legend





- Tunnel Alignment
- Ancillary Facility Boundary
- Operational Ancillary Infrastructure
- NCA Boundary

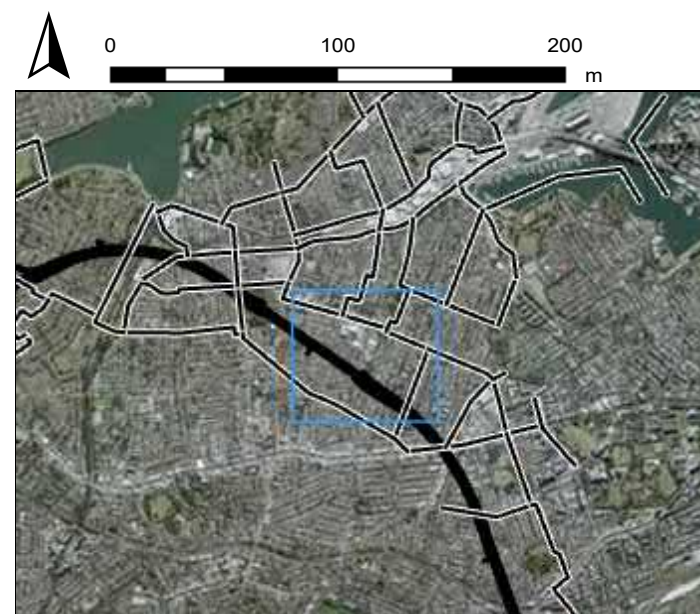
Sensitive Receivers:

-  Aged Care  
 Child Care  
 Educational  
 Medical  
 Place of Worship  
 Other

LEP Heritage:

-  Conservation Area - General  
 Item - Archaeological  
 Item - General  
 Item - Landscape

-  S170 Heritage  
 State Heritage  
 Waterbody  
 Augmented M8 Basin







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## Environmental Control Map 5 of 8





### Legend





-  Tunnel Alignment
-  Ancillary Facility Boundary
-  Operational Ancillary Infrastructure
-  NCA Boundary

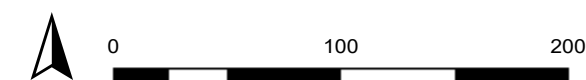
### Sensitive Receivers:

-  Aged Care
-  Child Care
-  Educational
-  Medical
-  Place of Worship
-  Other

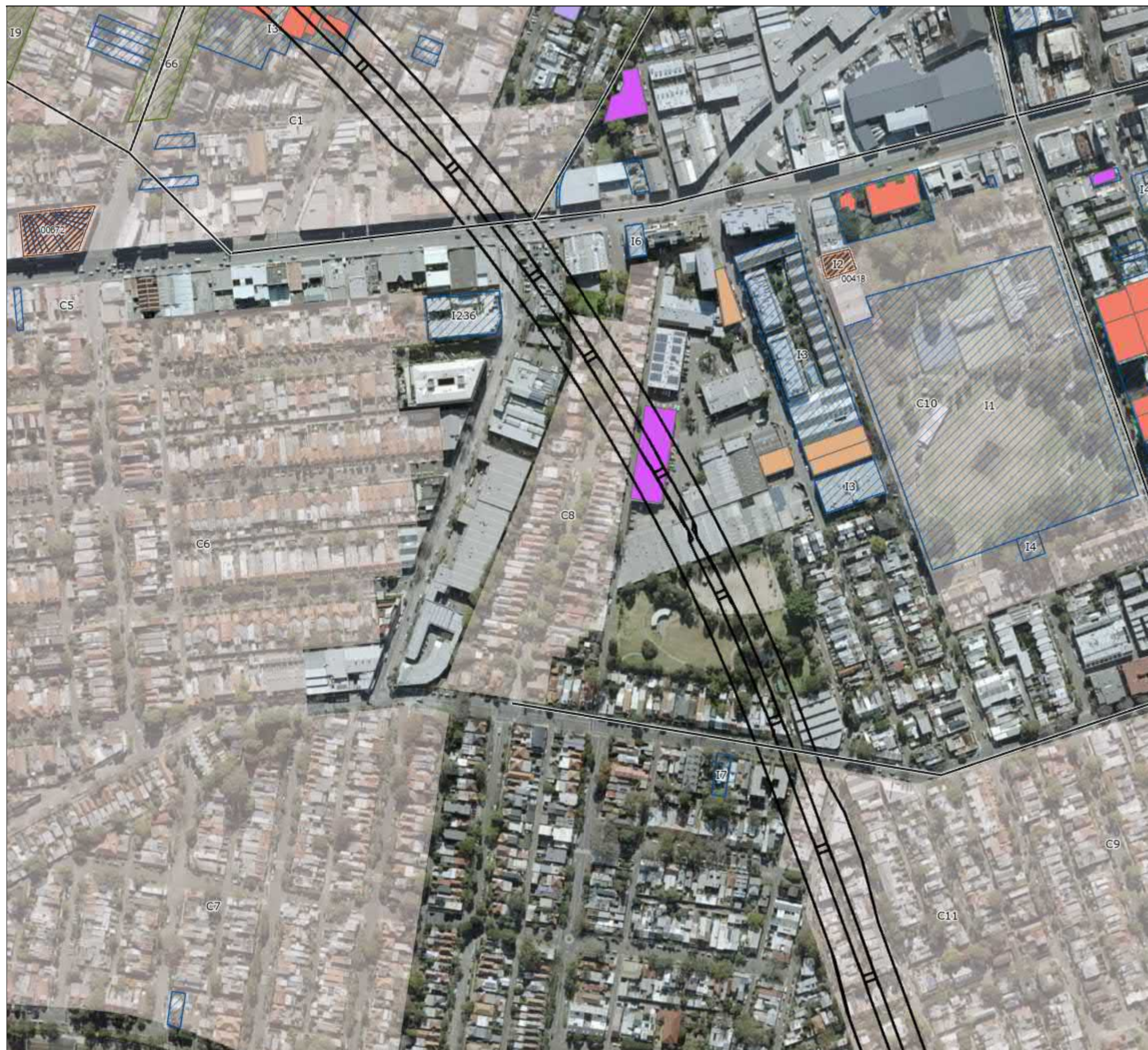
### LEP Heritage:

-  Conservation Area - General
-  Item - Archaeological
-  Item - General
-  Item - Landscape

-  S170 Heritage
-  State Heritage
-  Waterbody
-  Augmented M8 Basin



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Environmental Control Map 6 of 8

Legend

- Tunnel Alignment
- Ancillary Facility Boundary
- Operational Ancillary Infrastructure
- NCA Boundary

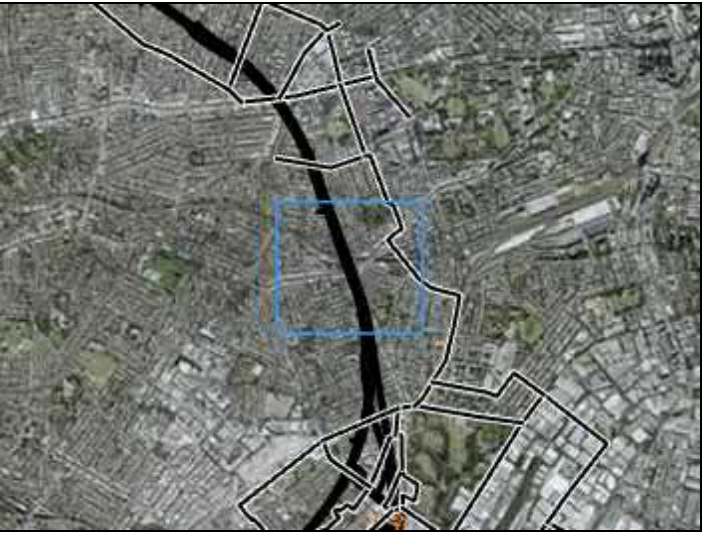
Sensitive Receivers:

- Aged Care
- Child Care
- Educational
- Medical
- Place of Worship
- Other

LEP Heritage:

- Conservation Area - General
- Item - Archaeological
- Item - General
- Item - Landscape

- S170 Heritage
- State Heritage
- Waterbody
- Augmented M8 Basin







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## Environmental Control Map 7 of 8





### Legend





-  Tunnel Alignment
-  Ancillary Facility Boundary
-  Operational Ancillary Infrastructure
-  NCA Boundary

### Sensitive Receivers:

-  Aged Care
-  Child Care
-  Educational
-  Medical
-  Place of Worship
-  Other

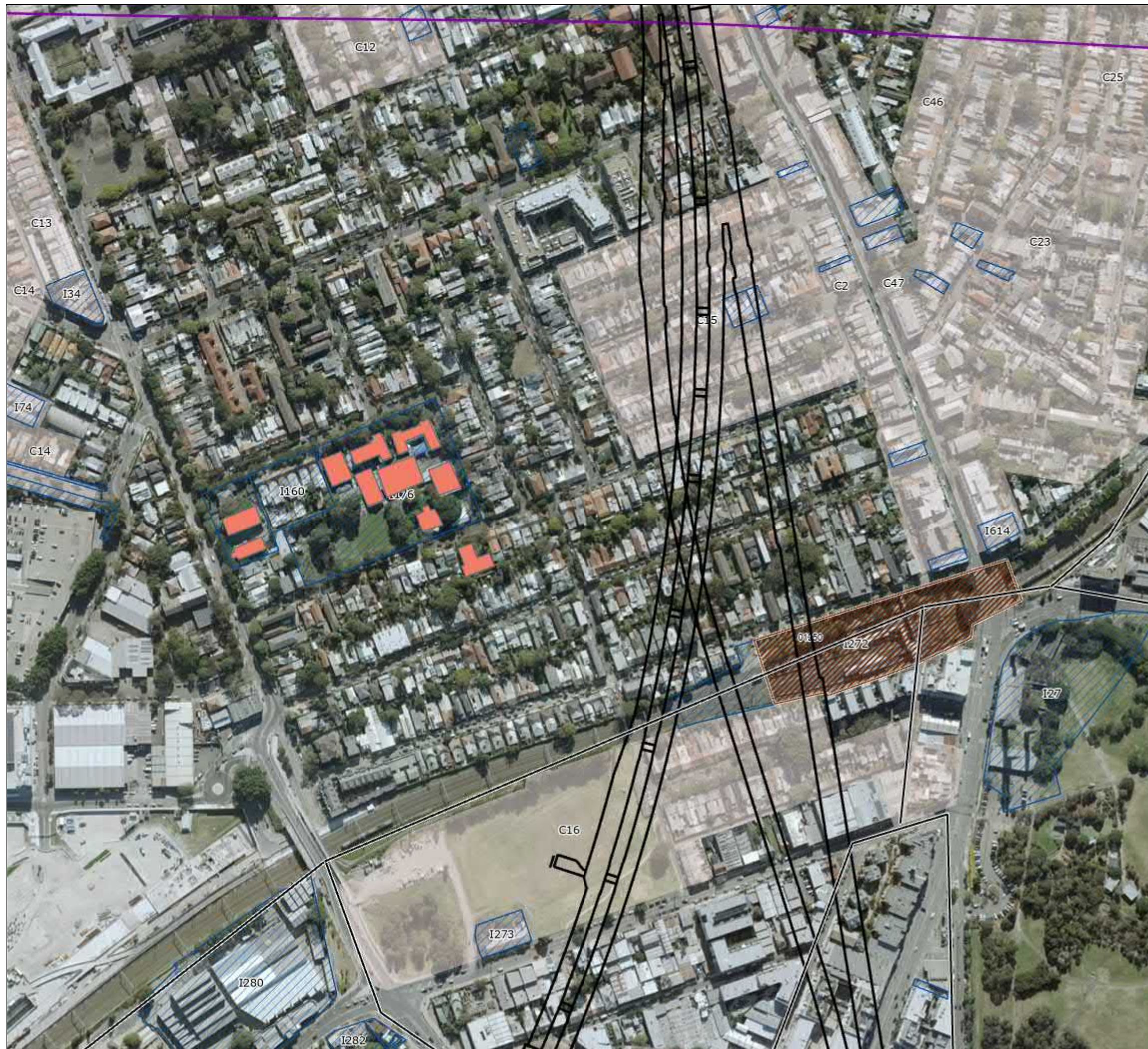
### LEP Heritage:

-  Conservation Area - General
-  Item - Archaeological
-  Item - General
-  Item - Landscape

-  S170 Heritage
-  State Heritage
-  Waterbody
-  Augmented M8 Basin







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## Environmental Control Map 8 of 8





### Legend





-  Tunnel Alignment
-  Ancillary Facility Boundary
-  Operational Ancillary Infrastructure
-  NCA Boundary

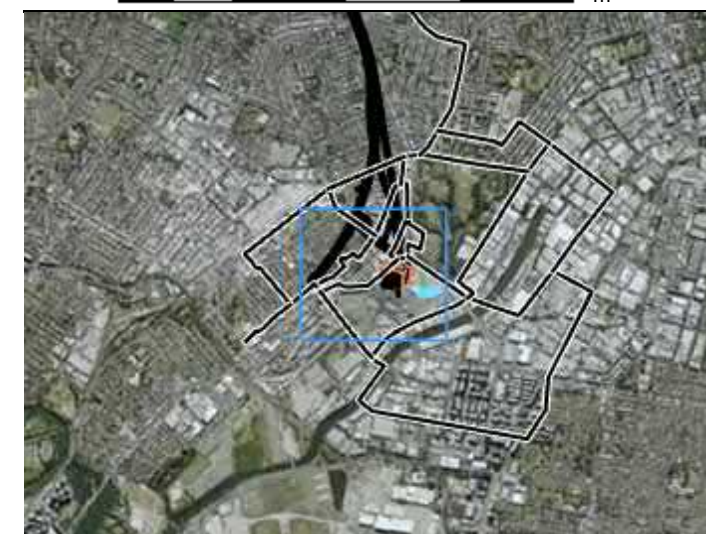
### Sensitive Receivers:

-  Aged Care
-  Child Care
-  Educational
-  Medical
-  Place of Worship
-  Other

### LEP Heritage:

-  Conservation Area - General
-  Item - Archaeological
-  Item - General
-  Item - Landscape

-  S170 Heritage
-  State Heritage
-  Waterbody
-  Augmented M8 Basin



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# Annexure J      Consultation for the M4-M5 Link Mainline Tunnels OEMP and sub- plans

# Annexure K Asset Performance Outcomes

Desired performance outcomes (PO) from Appendix A of the EIS relevant to operation of the Asset.

Desired performance outcome		Reference
<b>Air Quality</b>	The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent practicable.	Air quality impacts during operation will be managed through the implementation of the OAQMP. Refer to Annexure F.
<b>Noise and Vibration – Amenity</b>	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.	Operational noise impacts and required mitigation measures were assessed in the ONVR required by CoA E92. Within 12 months of the commencement of operation, monitoring will be undertaken to compare actual noise performance of the Asset against the ONVR noise predictions and assess whether additional mitigation is required. This monitoring and assessment will be documented in an Operational Noise Compliance Report. Refer to Section 9.2 and 9.7.  Mitigation measures relevant to noise and vibration are detailed in Section 5.4.
<b>Noise and Vibration – Structural</b>	Increases in noise emissions and vibration affecting environmental heritage as defined in the Heritage Act 1977 during operation of the project are effectively managed	Mitigation measures relevant to vibration-induced damage to heritage features are detailed in Section 5.4.
<b>Water – Hydrology and Quality</b>	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 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).	Surface water and groundwater impacts during operation will be managed through the implementation of the OSWQP and OGMP which include Operational Monitoring Programs. Refer to Annexure G and H.  The Asset has been designed to incorporate features which will reduce the consumption of potable water throughout operation and promote the reuse of non-potable water. These reuse options were assessed in the Operational Water Reuse Strategy which was prepared to address CoA E198.

Desired performance outcome	Reference
<p><b>Flooding</b></p> <p>The project minimises adverse impacts on existing flooding characteristics.</p> <p>Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.</p>	<p>The design of the Asset's drainage and water treatment systems were informed by flooding modelling to ensure adverse impacts were minimised. Refer to the OSWQP (Annexure G).</p> <p>In accordance with CoA E153, a Flood Review Report will be prepared after the first defined flood event. This review will assess the actual flood impact against that predicted by the flood modelling completed during detailed design. This review will also assess whether additional mitigation measures are required to minimise adverse impacts on nearby properties, structures and infrastructure. Refer to Section 9.4 and 9.7.</p>
<p><b>Heritage</b></p> <p>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.</p> <p>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.</p>	<p>Heritage will be managed in accordance with the relevant legislation and guidelines detailed in Section 4.1 and 4.2.</p> <p>As detailed in Section 5.4, heritage has not been identified as a moderate or high risk for the operation of the Asset.</p>
<p><b>Waste</b></p> <p>All wastes generated during the construction and operation of the project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.</p>	<p>Waste generated during operation will be managed in accordance with the relevant legislation and guidelines detailed in Section 4.1 and 4.2.</p> <p>Mitigation measures relevant to waste management are detailed in Section 5.4.</p>