Sydney Metro City and Southwest, Central Station Main Works Project

Pollution Incident Response Management Plan

Central Station Main Works Project
Pollution Incident Response Management Plan

Project name	Central Station Main Works
Client	Sydney Metro City & South West – Sydney Metro)
Client contract number	CSMW
Laing O'Rourke contract number	K51

Revision history

Rev	Date	Description	Reviewed	INT/Date	Authorised
1	21/06/2018	Issued for review	CD		CM
2	21/10/2019	Annual review	LD		CM
3	15/04/2020	Reviewed in response to Incident 07/02/20 and 16/03/2020	HN		CM
4	19/07/2021	Environmental Risk Management as a result of COVID related "Construction Pause"	LD		LD

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Terms and Abbreviations

The following terms and abbreviations are used in this plan.

Terms	Explanation
Assurance Application	Laing O'Rourke's Online Tool to manage Non-Conformances
AQMP	Air Quality Management Plan
CBD	Central Business District
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSSI	Critical State Significance Infrastructure
CNVMP	Construction Noise and Vibration Management Plan
CSMW	Central Station Main Works
CSMP	Construction Spoil Management Plan
CSWMP	Construction Soil and Water Management Plan
CTMP	Construction Traffic Management Plan
CWMP	Construction Waste Management Plan
DPIE	Department of Planning, Industry& Environment
ECM	Environmental Control Map
EIC	Environmental Incident Classification
EIS	Environmental Impact Statement (Sydney Metro City and Southwest Chatswood to Sydenham) Determined on 09 January 2017 under the EP&A Act)
EPL	Environment Protection Licence
ER	Environmental Representative
ERP	Emergency Response Plan
ISO	International Standardization Organisation
Laing O'Rourke	Laing O'Rourke Australia Construction Pty Limited
Minister	NSW Minister for Planning
MOD 2	Modification 2 – Central Walk Environmental Impact Statement (Sydney Metro City and Southwest Chatswood to Sydenham determined 21 December 2017) under the EP&A Act to modify SSI15_7400.
PEM	Project Environmental Manager
PIRMP	Pollution Incident Response Management Plan
REMM	Revised Environmental Mitigation Measures
SM	Sydney Metro (Transport for NSW)

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CSMW Emergency Contacts

Agency	Contact Details
Police	000
Fire Brigade	000
Local Fire Brigade (Sydney CBD Castlereagh St)	02 9265 2799
Ambulance	000
Hazchem	000
24 HR Emergency Spills Response (Transpacific)	1800 774 557
State Emergency Service (SES)	132 500
NSW Fire and Rescue	02 9319 7000
Sydney Metro (Transport for New South Wales)	1800 684 490
Gas – AGL	13 10 03
Gas - Jemena	131909
Electricity - Energy Australia	13 13 88
Electricity - Integral Energy	13 19 09
Water - Sydney Water	13 20 90
Telstra	1800 653 935
Dial Before You Dig	1100
Poisons Information Centre	13 11 26
Lifeline	13 11 14
SafeWork NSW	131 050
EPA	131 555 or 9995 5555
WIRES (NSW Wildlife, Information, Rescue and Education Service)	1300 094 737
WorkCover	131 050
Sydney City Council	02 9265 9333
Sydney Hospital - 8 Macquarie St, Sydney NSW 2000 – Open 24/7	(02) 9382 7111
Sydney Central Medical Centre	(02) 9212 3953

1. Introduction

1.1 Purpose

This Pollution Incident Response Management Plan (PIRMP) has been developed for the Construction phase of the Central Station Main Works (CSMW) Project (the Project) to comply with legislative requirements under the Protection of the Environment Operations Act 1997(POEO Act), the Protection of the Environment Operations (General) Regulation 2009 and the Protection of the Environment Legislation Amendment Act 2011(POELA Act). The PIRMP has been developed in accordance with the Environmental Protection Authority's Environmental Guidelines: Preparation of pollutant incident response management plans (2012). This plan is a mandatory document on all NSW projects issued with an Environmental Protection Licence (EPL) 21148.

1.2 Application to COVID times

In the event the Project must shut down or pause for any period of time due to COVID, a shutdown plan will be created specific to the response. This shutdown plan does not replace the need for Crisis Management, where practicable, and guidance must be sought first to understand the scenario and appropriate response required.

In accordance with the CSM CEMP, an extensive pre-shutdown environmental inspection will be undertaken by the Environmental Manager to ensure the site is secure and environmental risk has been appropriately managed.

Should any incidents occur during the Shutdown Period that may impact the CSM Project, employees and workers on site will follow the standard LORAC Procedures and CSM Management Plans, including, but not limited to:

- CSM Pollution Incident Response Management Plan
- CSM Incident and Emergency Management Plan
-CSM Crisis Management Plan
- CSM WHS Management Plan:
- CSM Security Management Plan;
- CSM Chain of Responsibility Management Plan.

1.3 Background

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

includes the construction of new underground platforms at Central Station and new related pedestrian access ways. The works will be undertaken by Laing O'Rourke. The Project consists of the Metro Station Works, the Central Station Works and the Central Walk Works which are described in the sections below.

1.4 Planning Approval

The Project has been assessed by the Department of Planning and Environment under Section 115ZB of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as Critical State Significant Infrastructure (CSSI). The Project, its impacts, consultation and mitigation were documented in the following suite of documents:

- Critical State Significant Infrastructure Application SSI 15_7400;
- Sydney Metro – Chatswood to Sydenham –Environmental Impact Statement (Jacobs/Aracadis/RPS, 2016);
- Sydney Metro – Chatswood to Sydenham –Response to Submissions and Preferred Infrastructure Report (Jacobs/Aracadis/RPS 2016); and

The Planning Assessment Commission granted Approval for the Project on 9 January 2017 and the Laing O'Rourke scope of works is subject to the Minister's Conditions of Approval.

Following approval of the Sydney Metro City and Southwest – Chatswood to Sydenham Project, a modification (SSI Mod 2: Central Walk) was assessed by the Department of Planning and Environment and subsequently approved on 21 December 2017 under section 115ZI of the EP&A Act.

The consolidated Conditions of Approval's for the Sydney Metro City and Southwest have been defined from the following approval modification documents.

- CSSI 7400 MOD 1 – Victoria Cross and Artarmon Substation (determined 18 October 2017)
- CSSI 7400 MOD 4 – Sydenham Station and Metro Facility South (determined 13 December 2017)
- CSSI 7400 MOD 2 – Central Walk (determined 21 December 2017)
- CSSI 7400 MOD 3 – Martin Place Metro Station (determined 22 March 2018).
- CSSI 7400 MOD 5 - Blues Point Acoustic Shed (determined 2 November 2018).
- CSSI 7400 MOD 6- Administrative Changes- Modification to Sydney Metro City & Southwest - Chatswood to Sydenham (determined 21 February 2019)
- CSSI 7400 MOD 7- Administrative Changes- Modification to Sydney Metro City & Southwest - Chatswood to Sydenham (determined 29 June 2020)
- CSSI 7400 MOD 8- Blues Point Access Site- Modification to Sydney Metro City & Southwest - Chatswood to Sydenham (determined 25 November 2020)

1.5 Overview of the Central Station Main Works (CSMW) Project

The Metro Station Works include the installation of new platforms that will be constructed using sophisticated excavation techniques to create a cavern with an island platform, beneath Central Station's existing heavy-rail platforms 12, 13, 14 and 15.

The Central Station Works include new infrastructure and the adjustments to existing infrastructure at Central Station to construct, operate and maintain the Metro Station Works. The key features of the Central Station Works include:

- a new north-south concourse for Central Station which will link the new metro station with the existing northern entrance and north concourse, a new concourse entitled 'the Central Walk'; and
- adjustments to the existing Paid Intercity Concourse, Olympic Tunnel, north concourse and northern entrance to Central Station.

The Central Walk Works include the provision of other infrastructure to provide improved connectivity and other operational enhancements throughout Central Station. The key features of the Central Walk Works include:

- a new eastern entrance for Central Station at Chalmers Street level;
- a new eastern concourse for Central Station beneath existing platforms 16 to 23 (the 'Central Walk'), which will link the new eastern entrance, the new north south concourse, existing platforms 16 to 23 and the existing Eastern Suburbs Railway (ESR) concourse; and
- provisions to enable the future construction (by others) of an extension of the Central Walk through a new west concourse and a new western entrance for Central Station.

Other existing paid underground pedestrian connections within Central Station will continue to exist, albeit with minor temporary relocations during construction works associated with the CSMW Project.

1.6 CSMW Scope of Works

1.6.1 Permanent Works

The permanent new infrastructure to be constructed is shown in figure 1.1 and includes:

- Shortening of platforms 9 to 14 at the northern end, and a corresponding lengthening at the southern end;
- Demolition of platforms 13 to 15 and re-instatement of platforms 13 to 14 to accommodate the construction of the new metro station;
- Reinforcement of Platform 12
- Station excavation requiring the removal of approximately 230,000 cubic metres of spoil;
- A Tunnel Boring Machine (TBM) passing through the station (TBM works by others);
- Demolition of the 'Bounce Hostel', and

- Construction of the new eastern pedestrian portal, the eastern concourse and related station access arrangements to existing platforms.

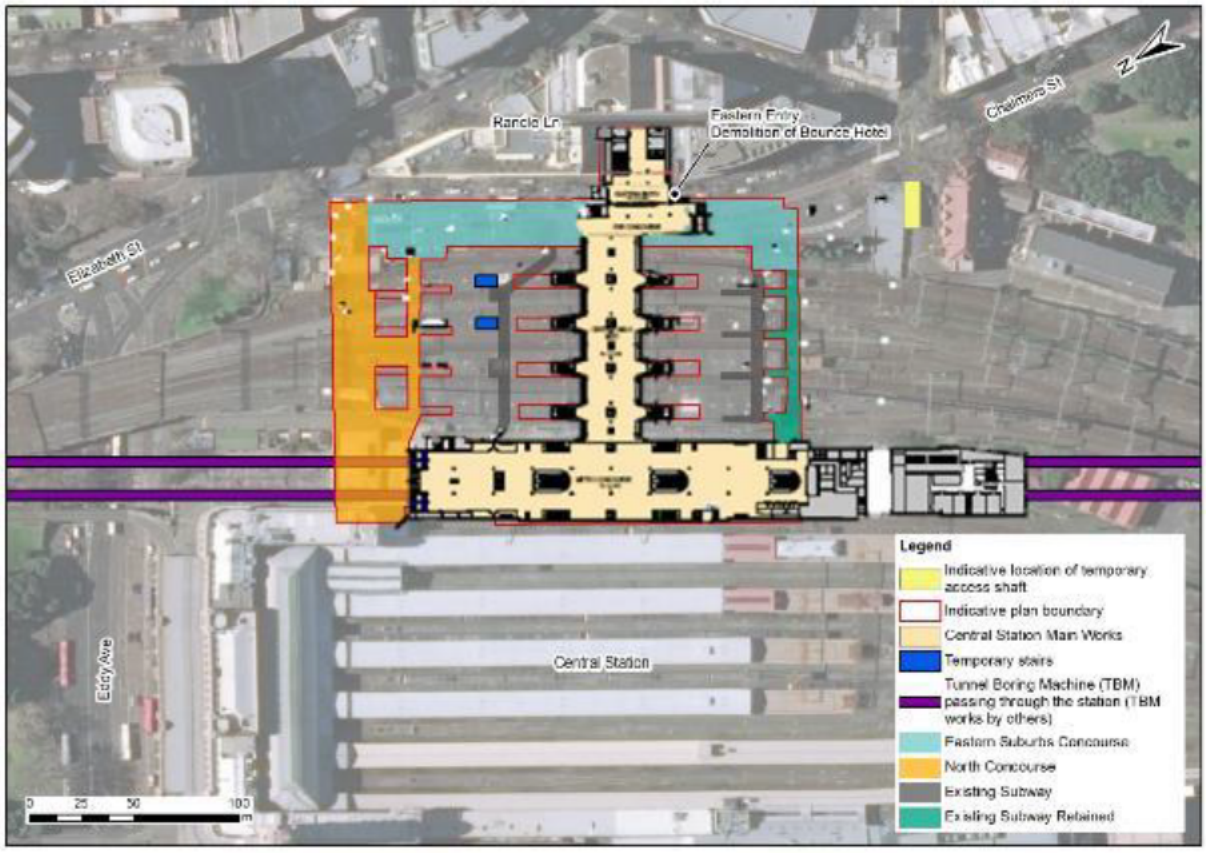

Figure 1-1 Depicts the project boundary and the key work areas of CSMW.

1.6.2 Ancillary works

Ancillary works include fencing, hoarding, maintenance access, utility works, drainage, noise barriers, road and transport network works and temporary site offices, laydown and work sites to support construction. Minor ancillary facilities including lunch sheds, office sheds, and portable toilet facilities were endorsed by the ER under CoA 18 for the Sydney Yard Access Project and documented in the Construction Visual Amenity and Landscape Management Sub Plan.

1.6.3 Combined Service Route (CSR)

The CSR for Central Station will provide for Communications (Comms) services (voice, data and IT connectivity, requiring 6 to 8 cables) and High Voltage electrical (HV) services that will service the whole site, both existing and the new infrastructure installations that are being introduced as part of the Central Station Main Works. It will extend as a circular route around the site, utilising existing service infrastructure where this is available and providing new installations as required to complete the system.

The CSR was included in the Environmental Impact Statement that was approved under SSI 15_7400 as part of the concept design (refer EIS Chapter 7, Project Description – Construction, Part 7.10.9, p231) and has progressed through a detailed design process. The CSR route will be

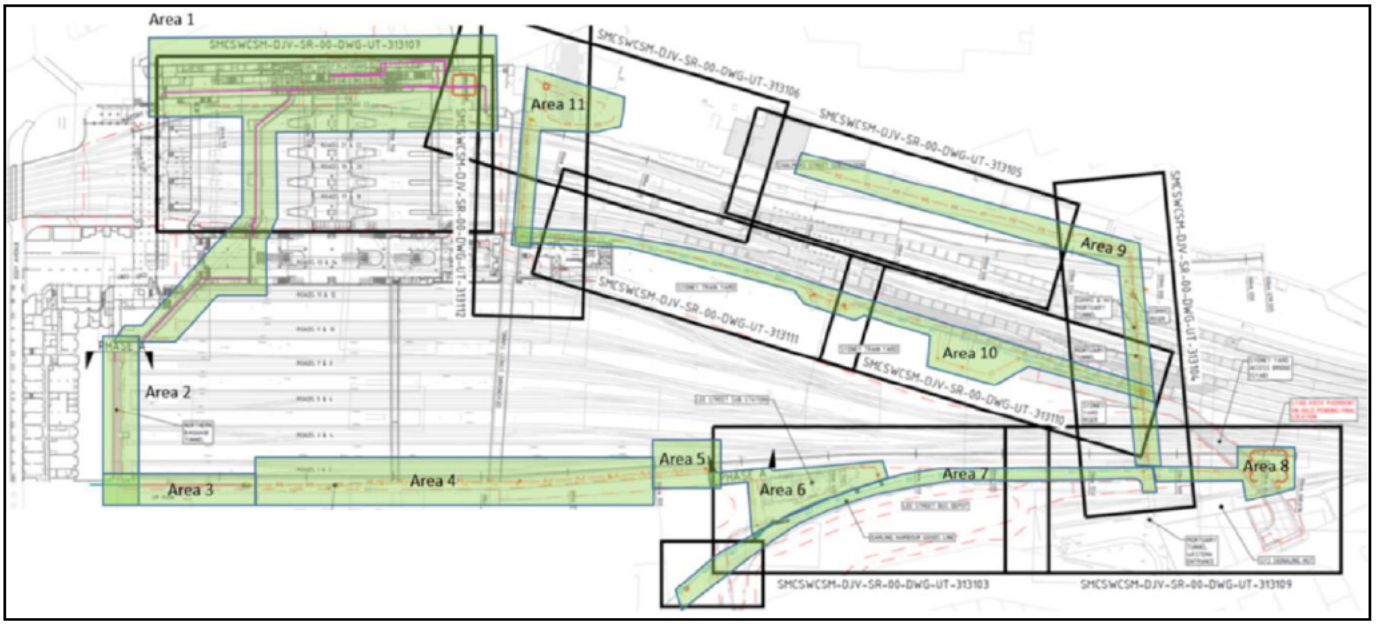

Figure 1.2 CSR Route around central station. Note,

delivered in two phases. Phase A occurs in areas, 2, 3 and 4 and is restricted to the Western Baggage Tunnel, Northern Baggage Tunnel and Platform 1. Phase B occurs in all other Areas and extends to the Darling Harbour Goods Line, Mortuary Tunnel, Sydney Yard, Water Mains tunnel, Prince Alfred Substation, Railway Institute driveway and Sydney Network Base.

1.6.1 Construction Hours

In accordance with Condition of Approval (CoA) – E36 - Construction, except as allowed by Conditions E47 and E48 (excluding cut and cover tunnelling), must only be undertaken during the following standard construction hours:

- 7:00am to 6:00pm Mondays to Fridays, inclusive;
- 8:00am to 1:00pm Saturdays; and
- at no time on Sundays or public holidays.

CoA E37 places further restriction on the hours that 'high noise impact' generating activities may occur where internal noise levels are greater than Leq(15min) 60dBA at nearest sensitive receivers. Construction works and activities with the potential to exceed internal criteria will be scheduled to occur between the hours of 7am and 8pm. CoA E37 provides for an extended daytime period as it may be preferred by commercial (or residential) receivers for high noise generating activities to occur after 5pm. As required in CoA E38, the relevant receivers have been identified throughout the Construction Noise and Vibration Management Plan (CNVMP) regarding the determination of hours of respite so that construction noise (including ground-borne noise) does not exceed the Highly Noise Affected Management Level (HNAML) outlined within the Interim Construction Noise Guideline (ICNG).

Conditions E44 and E45 also allows construction outside of scheduled hours under a range of conditions such as emergency works, where a negotiated agreement has been reached with a substantial majority of sensitive receivers who are within the vicinity of and may be potentially affected by the particular construction, etc.

Condition E47 requires an out of hours work protocol be developed and implemented for work outside of the above standard construction hours. Condition E48 specifies that the following activities may occur 24 hours per day seven days a week, subject to Condition E47:

(a) tunnelling and associated support activities (excluding cut and cover tunnelling);

(b) excavation within an acoustic enclosure;

(c) excavation at Central without an acoustic enclosure (excluding Central Walk works at 20-28 Chalmers Street, Surry Hills);

(d) station and tunnel fit out; and

(e) haulage and delivery of spoil and materials.

1.7 Works Location and Site Layout

The project location and site layout is highlighted in **Error! Reference source not found.**-3.

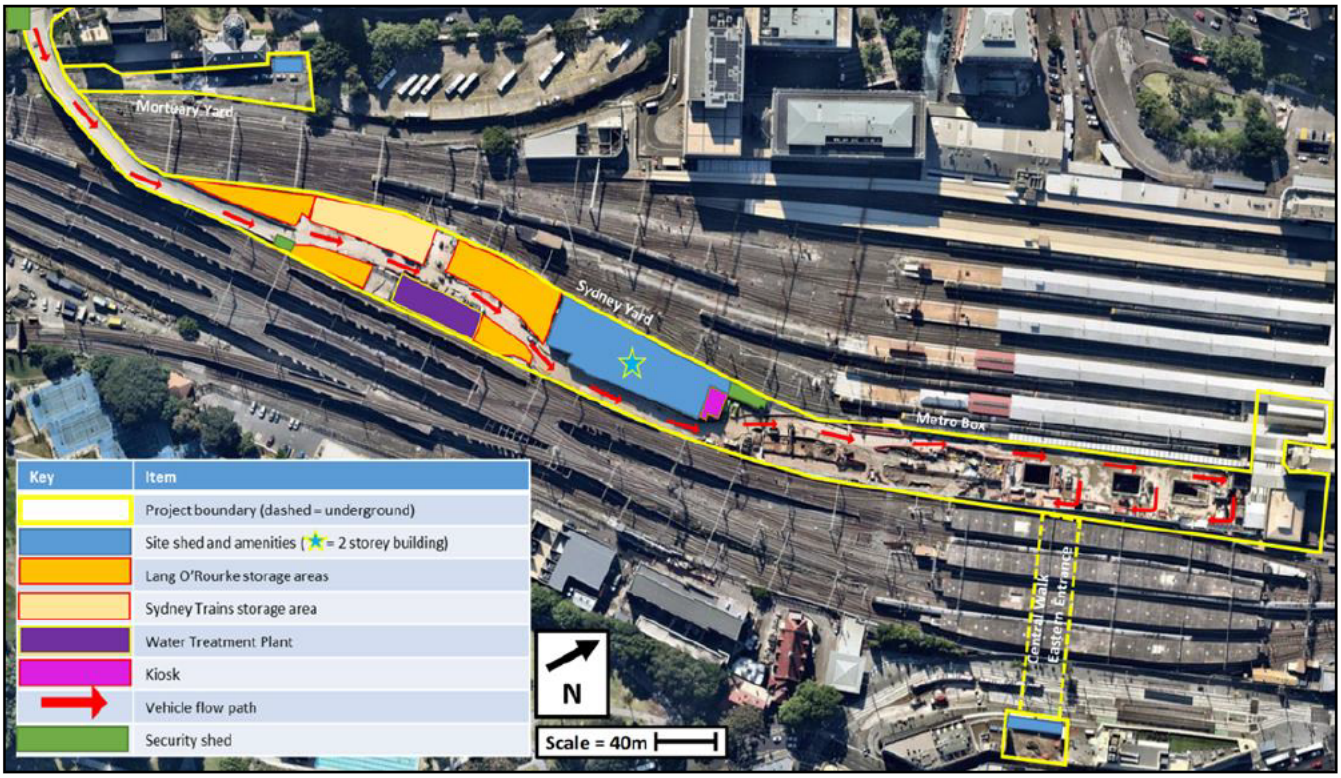

Figure 3: —CSMW Project footprint and key work areas.

1.8 Objectives and Targets

Laing O'Rourke will aim to comply with applicable legal and the other requirements of the PIRMP including the following objectives:

- implementing a rigorous and comprehensive PIRMP that meets the requirements of the Protection of the Environment Operations Act 1997(POEO Act) the Protection of the Environment Operations (General) Regulation 2009 and the Protection of the Environment Legislation Amendment Act 2011(POELA Act);
- testing the plan annually by running a scenario with key staff, debriefing and applying lessons learnt;
- providing training for all relevant staff on the project in the PIRMP;
- reporting all environmental incidents to the Environmental Representative (ER) and Sydney Metro within 24 hours, and
- notifying the Secretary of the Department of Planning Industry and Environment (DPIE) as soon as possible and in any event within 24 hours of a notifiable incident.

2. Legal and Other Requirements

This PIRMP complies with the requirements under the Part 5.7 of the POEO Act 1997 A Duty to Prepare and implement the Plan's POEO (General) Regulation 2009 Part 3A. The requirements under the legislation are supported by the EPA's "Environmental Guidelines: Preparation of Pollution Incident Response Management Plans."

Key areas which this PIRMP covers as outlined within the relevant legislation are included in Table 2-1.

Table 2-1: PIRMP Legislative Requirements

Legislation covered under this Plan	Reference POEO Act Part 5.7	Reference
153C	Information to be included in plan including procedures on actions to take after an incident and coordinating with authorities	Section 8
153D	Keeping of plan:	Section 10
153E	Testing of plan:	Section 12
153F	Implementation of plan:	Section 8
POEO (General) Regulation 2009		
98C(a)	Hazard assessment:	Section 6
98C(b)	Likelihood assessment	Section 6
98C(c)	Pre-Emptive Action	Section 6 and 12
98C(d)	Pollutant Inventory Types:	Section 7

Legislation covered under this Plan	Reference POEO Act Part 5.7	Reference
98C(e)	Pollutant Inventory Quantities:	Section 7
98C(f)	Safety Equipment	Section 7
98C(g)	Staff Contacts	Section 4
98C(h)	Authority Contact:	CSMW Emergency Contacts Table
98C(i)	Early Warnings Neighbours:	Section 8.3
98C(j)	Staff Safety:	Section 9
98C(k)	Maps location of pollutants:	Appendix B
98C(m)	Training of Staff	Section 11
98C(n)	Timing of Testing:	Section 12
98D(1)	Availability of the PIRMP	Section 10

3. Relationship with Other Plans and Licences

The PIRMP is a requirement under Part 5.7A of the POEO Act and addresses environmental incident procedures. The PIRMP should be read in conjunction with;

- The CSM Emergency Response Plan (ERP)
- The CSM Crisis Management Plan (CMP)
- The CSM Covid 19 Management Plan including the COVID Shutdown plan.

Where conflict between the two occur, the PIRMP will take precedence for environmental incidents.

3.1 Environment Protection Licence

Pre-construction minor works were delivered in accordance with the MCoA and the Sydney Trains Environment Protection Licence (EPL) 12208.

A project **EPL 21148** was acquired by LOR, **28 November 2018** (anniversary date) for the commencement of construction.

- **Scheduled Activity** - Railway Activities - Railway Infrastructure Construction
- **Fee Based Activity**-. Railway Infrastructure Construction (>=50,000T & track to be constructed <=10km)
- **Scale**- >100,000-500,000 remaining extraction or processing.

The EPL covers all works outlined in the CEMP and sub plans that are related to the scheduled activity. In accordance with CoA B15 (d), a copy or link of the Environment Protection Licence has been provided for information on the project website:

https://centralstationmetro.com/documents/

4. Roles, Responsibilities and Contact Details

The roles and responsibilities of key CSMW Personnel with respect to pollution incidents are as follows in Table 4-1.

Table 4-1: Roles and Responsibilities

Role / Position	Responsibilities
Project Director	• Ensure that PIRMP is prepared and implemented • Review and approve PIRMP • Ensure that sufficient resources are available for managing environmental incidents • Notify the Environmental Representative and Sydney Metro Representative on any environmental incidents that occur • Participate and / or review simulated Emergency Exercises
Project Environment Manager	• Be fully conversant with the requirements of the Plan, the CEMP and the Communications Requirements in Section 8 • Be responsible to notify relevant stakeholders and government authorities • Ensure the spill response flow chart, emergency contact numbers and details and any other bulletin of information pertaining to the PIRMP management is placed on noticeboards. • Educate supervisory personnel in accordance with plan requirements, statutory obligations and relevant procedures • Conduct a tool box talk re the requirements of the PIRMP • Assist with advice, reporting and response process to on-site personnel • Ensure the PIRMP is made available to staff responsible for implementing the PIRMP and authorised officers under the POEO Act • Assist in the notification of pollution incidents to the relevant authorities • Assist in communicating with neighbours and the local community about the PIRMP • Understand operation and location of spill kits and how to use emergency equipment • Complete Incident Notification Forms
Safety Manager	• Be responsible to Contact Emergency Services (Police. Fire Brigade Ambulance) • Stop entry of incoming vehicles if required • Attend to the environmental incident • Contain the environmental incident • Assess and evaluate an environmental incident

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Role / Position	Responsibilities
	• Evacuate site staff and personnel to assigned assembly point if required • Provide necessary assistance to the external Emergency Services as required (Police, Fire Brigade or Ambulance). • Ensure the requirements of the PIRMP are communicated in daily pre-starts • Understand operation and location of spill kits and how to use emergency equipment
Emergency Response Co-ordinator (Senior Area Warden-)	• Raise the alarm for an emergency response • Contact / communicate with emergency services • Coordinate emergency response and monitor the effectiveness; • Communicate with area / floor wardens • Coordinate the activities of all personnel in the emergency response team and make further directions as required by the situation; • Arrange deputy when absent; • Coordinate training requirements for the emergency response team and all other site personnel.
Assistant Emergency Response Co-ordinator (Area Warden- Deputy Senior)	• Assume the responsibilities normally carried out by the emergency response coordinator if the emergency response coordinator is unavailable and otherwise assist as required
First Aid Attendant (Details provided on Safety notice board displayed at project office entrance)	• Attends to the environmental incident and administers first aid • Assists the Project Director and Project Environmental Manager during evacuations • Maintains emergency equipment and spill kits • Notifies Site Supervisor of incidents • Understand operation and location of spill kits and how to use emergency equipment
Traffic Controller	• Assists the Emergency Response Coordinator during evacuations • Control traffic • Control access to site and stop entry of incoming vehicles.
Workers / Subcontractors / Visitors	• Report any incident immediately to the Site Supervisor • Follow all instructions by site Emergency Coordinator/managers

4.1 Emergency Response Team

Central Station Main Works Emergency Response Team

Communications Team
0447 007 122

David Breslin
Senior Area Warden
0477 086 895

Most Senior LOR Reps on Shift

Andrew Finley
0407 939 891
Metro Box

Jersen Leon
0402 751 559
Metro Box

Nicholas Arcaro
0406 080 010
Lead Safety

Area Wardens

Matthew Applebee
0448 817 058
North South & Northern Concourse

David Gilligan
0415 699 994
Central Walk

Jacob Hurst
0428 436 831
Sydney Yard

Jarrod Bartley
0448 656 790
ESR

Dani Lemos
0401 962 138
Basement

If someone is Injured call for the site first aider immediately

If an Ambulance is required, when phoning the Ambulance be prepared to say:

- Where you are
- Site Entrance Location (60 Regent St, Chippendale)
- Where to meet
- Details on symptoms / type of injury
- Any known history of the injured person
- Your name and contract number

DO NOT HANG UP UNTIL DIRECTED TO DO SO

Other actions:

- Direct someone to wait at the site entrance to guide emergency vehicles to injured part
- Keep calm - so you can help
- Ensure all Laing O'Rourke notifications are made - Area Warden to advise the Senior Area Warden immediately of an incident / emergency
- Do not disturb the incident scene until directed otherwise by the Emergency Response Co-ordinator

5. Environment or Pollution Incident Definitions

As outlined within the POEO Act, the definition of a pollution incident is: 'an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.'

Additional important terms used in this PIRMP are outlined below.

Emergency Incident – Sudden, unexpected, or impending situation that may cause injury, loss of life, damage to the property, and/or interference with the normal activities of a person or firm and which, therefore, requires immediate attention and remedial action act or omission that results in pollution.

Material Harm to the Environment –

(a) Harm to the environment is material 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 (or such other amount as is prescribed by the regulations), and

(b) Loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Emergency – An emergency is any situation in which there is danger to personnel, property or the environment and needs prompt action to control, correct, limit and return the site to a "safe" condition.

Emergency Response Plan (ERP) – Emergency Response Plan, Evacuation Plan, Rescue Plan or Critical Incident Response Plan.

Immediately – Promptly without delay.

6. Risk Classification, Assessment and Pre-emptive Actions

The CSMW Project team will apply the Risk Assessment Matrix identified in Table 6-1 and Risk Rating in Table 6-2 to identify adverse impacts, consequence and likelihood of a potential pollution incident.

Table 6-1: Risk Assessment Matrix

Probability ► ▼Consequence	CERTAIN 5	LIKELY 4	POSSIBLE 3	UNLIKELY 2	RARE 1
5 – Severe	25	20	15	10	5
4 – Major	20	16	12	8	4
3 – Moderate	15	12	9	6	3
2 – Minor	10	8	6	4	2
1 – Incidental	5	4	3	2	1

Table 6-2: Risk Rating Table

Risk	Consequence
Extreme (18 - 25)	Long Term damage, catastrophe, and toxic release off-site with detrimental effect and huge financial loss, environmental disaster.
High (10 - 17)	Soil, water air adversely affected in long term, economic and financial loss.
Moderate (5 - 9)	Soil, water air adversely affected in short term
Low (1- 4)	Could affect environment but release contained and managed on site

Potential environmental incidents will then be classified by the Project Environment Manager (PEM) in consultation with the Project Manager and site team using Table 6-3 as a guideline to an Environmental Incident Classification (EIC) and the corresponding Sydney Metro incident classifications. Further risk detail is provided in this section and CEMP Section 16.

Table 6-3: Environmental Incident Classification

LOR Incident Classification					
Class 3			**Class 2**		**Class 1**
Class Three Environmental Incidents typically cause short term or nuisance damage. The damage is easily rectified usually within one day. Class 3 incidents do not cause medium or long term damage. Direct costs including clean-up up to $10 000			Class Two Environmental Incidents create short to medium term damage to the environment. This damage will result in the environment taking up to 12 months to return to pre-existing conditions. Potential for prosecution or infringement notice. Direct costs including clean-up from $10 000 to $100 000		Class One Environmental Incidents create permanent or long term damage to the environment. This damage will result in the environment taking 12 months or more to return to pre-existing conditions. Major environmental investigation and potential for large prosecution. Direct costs including clean-up of more than $100 000
Corresponding Sydney Metro Incident Classification					
C6	**C5**	**C4**	**C3**	**C2**	**C1**
No appreciable changes to environment and/or highly localised event	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries	Short-term and/or well-contained environmental effects. Minor remedial actions probably required	Impacts external ecosystem and considerable remediation is required	Long-term environmental impairment in neighbouring or valued ecosystems Extensive remediation required	Irreversible large-scale environmental impact with loss of valued ecosystems

Following an inspection and assessment of the incident the Project Environmental Manager will reach a determination as to whether the incident is a minor event or requires to be escalated to 'Notify' and report status. This requires the PEM to apply both the Environmental Assessment and Risk Rating Matrix to classify the incident in the context of the Environmental Incident Classification.

A Low to Moderate rating of 1 to 9 on the Assessment Matrix deems the incident containable on-site and a Significant to High rating of 10 to 25, rates the incident as uncontainable and as such, is required to be escalated to 'Notify' or Class 1 or 2 status. All Class 1, and 2 environmental incidents will be reported on IMPACT, Laing O'Rourke's online incident reporting system.

Full written details of Class 1 and Class 2 incidents will be provided to the Secretary of DPIE within twenty four (24) hours from which the incident occurred.

Class 1 and Class 2 incidents will be reported to the EPA, Sydney Metro, Ministry of Health (contacts as agreed with NSW Health) WorkCover Authority, City of Sydney Council, Fire & Rescue and Sydney Water.

Table 6-4-4 represents the description of potential hazards, the location, the likelihood, pre-emptive actions, and circumstances that may increase the likelihood. This section is supported by the CEMP - Environmental Risk Assessment (ERA) Appendix C.

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Table 6-4: Hazardous Likelihood and Pre-emptive Actions

Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
Water Quality, Erosion and Sedimentation					
Sediment laden runoff from construction works leaving site.	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life. Potential impact on traffic safety. Potential for sediment laden runoff during rainfall. Potential for generation of dust. Fines for non-compliant escaping site.	Operational Areas	6 – Moderate Class C3	Water containment areas to have capacity to capture rain water Pumps to be readily available for dewatering Discharge permit obtained from Sydney Water Site to be monitored and inspected during and after periods of heavy deluge Site personnel directly involved in dewatering to be given training	Pumps not working Discharge permit not obtained from Sydney Water Site not supervised properly. No training
Non-compliant water from the Water Treatment Plant (WTP) being discharged from site	Non-compliant water entering the stormwater system and entering the waterways (Blackwattle Bay). Water that does not meet EPL discharge criteria could damage aquatic organisms and plants causing death or injury.	Water Treatment Plant	6 – Moderate Class C3	Control measures as per the EnviroPacific Water Treatment Plant Management Plan Water Treatment Plant maintenance procedural controls Tap-out-lock-out system for WTP during maintenance to override automatic discharge Notification SMS to mobile during WTP discharge events 24hr monitoring of TSS and pH in the final holding tank of the WTP	Failure of WTP Procedural failures during manual operation of the WTP

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Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
Non-compliant water from construction works discharged from site	Non-compliant water entering stormwater system waterways (i.e. polluting - not compliant with EPL discharge criteria).	Operational Areas	6 – Moderate Class C3	Control Measures as per the Construction Soil and Water Management Plan to be implemented. Groundwater treated on site prior to reuse or discharge. Induction and toolbox talks Toolbox training on site procedures for water discharge Educate site staff on licence conditions and consequences of prosecution Environmental Manager / representative to approve all water discharges from site Controlled over flow procedure prepared to be endorsed by EPA	No training Accidental discharge Failure of Water Treatment Plant
Works with the potential to intercept Groundwater table in an uncontrolled manner	Groundwater entering excavations without appropriate safeguards onsite could lead to ground water contamination	Operational Areas	6 – Moderate Class C3	Control Measures as per the Construction Groundwater Management Plan to be implemented. Groundwater treated on site prior to discharge. Induction and toolbox talks Toolbox training on site procedures for water discharge Educate site staff on licence conditions and consequences of prosecution	Measures not implemented correctly. No training

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Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
				Environmental Manager / Representative delegate to approve all water discharges from site	
Flooding of Central Station and surrounds	Contamination of floodwaters by sewage, fuels and/or chemicals onsite Potential for floodwaters to impact works within Central Station Potential re-direction of flood waters beyond work site as a result of works at Central Station Potential for flooding the Metro Tunnels and critical infrastructure to	Central Station	4 – Low Class C4 or Class C5	Control Measures as per the Construction Soil and Water Management Plan to be implemented. Install stormwater drainage protection within the project area. Conduct regular inspection of drains and replace protections where required. Ensure measures are inspected and maintained as the works progress and also prior to and post rainfall events. Provide training and awareness on the need to prevent pollution. Ensure pumps and dewatering set up is sufficient Prepare a controlled overflow strategy for rain events greater than the 24hr AEP for Sydney	Measures not implemented correctly. No training
Waste					
Waste disposal during construction.	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	Off-site disposal	4 – Low Class C4 or Class C5	Implement Sydney Metro's City and Southwest Sustainability Strategy. Implement Construction Waste Management and Recycling Plan.	Mis-identification of waste. Measures not implemented correctly. No training.

Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
				Identify opportunities to incorporate recovered materials into the permanent works. Provide facilities on site for source separation and recycling. Ensure accurate waste records are retained, including waste tracking dockets. Removal of wastes from the site would only be undertaken by a licensed contractor as required by the POEO Act and with appropriate approvals, if required, for contaminated materials, etc. All material to be recovered off-site to be appropriately classified in accordance with the Resource Recovery Exemptions. All material that requires off-site disposal to be appropriately tested and classified against the Waste Classification Guidelines (EPA, 2014).	
Earthworks spoil disposal.	Incorrect classification of waste (spoil) resulting in incorrect / illegal disposal/re-use.	Off-site disposal	9 – Moderate Class C4	Control Measures as per the Construction Spoil Management Plan to be implemented. Inductions, toolbox talks and training on recycling facilities and waste segregation practices. Separation of waste on site.	Mis-identification of waste. Measures not implemented correctly. No training.

Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
				Tracking of disposal processes. All contamination hotspots would be clearly marked in the field.	
Management of contaminated or untreated materials	Non-compliant material and contaminated water entering surrounding waterways. Decrease in health of nearby ecosystems.	Off-site disposal.	9 – Moderate Class C4	Implement Site Contamination Reporting Develop contamination management procedures and protocols. Identify any contamination hotspots and incorporate procedures for these locations into construction documentation. Develop unexpected finds procedures. Induct personnel on unexpected finds procedure.	Procedures not implemented and following correctly. No training or induction
Washout of concrete in undesignated areas.	Sediment laden/alkaline water polluting surrounding stormwater system / watercourses.	Surrounding waterways	6 – Moderate Class C3	Concrete washout areas clearly marked on Environmental Control Maps and delineated. Inductions on designated concrete washout areas. Subcontractor's agreements to include project compliant waste management principles	Procedures not implemented and following correctly. No training or induction. Negligence.
Hazardous Materials					

Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
Storage of hazardous substances, leaking plant and equipment and spillage from refuelling.	Localised ground contamination / pollution of stormwater requiring clean-up and/or receiving fines. Contamination of watercourse, riparian environment and groundwater ecosystems Risk of igniting volatile substances. Unauthorised access to site / potential vandalism/damage leading to pollution.	Operational Areas	3 – Low Class C3	Induction, toolbox talks and training on appropriate handling and storage of liquids. All storm water drains should be identified prior to works and protection installed. No bulk fuels to be stored on site. Storage areas to be away from sensitive areas and appropriately bunded. SDS approved prior to bringing hazardous substances on site including risk assessment. Plans showing storage locations and associated controls e.g. spill kits, etc. (Environmental Control Maps). Training in use of spill kits. Contingency plans would be developed to deal with any spills which might occur during construction. Clearly label containers. Regular auditing and inspection of storage areas and materials. Ensure hazardous materials are stored in appropriate areas. Reduce/eliminate need for hazardous substances. Ensure all work sites are secure before leaving the site.	Improper storage. No training on induction. Poor housekeeping.

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Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
				All liquids i.e. paint etc. are to be securely locked away at the end of each day.	
Encountering asbestos / contaminated material on site.	Transfer of material into previously uncontaminated area (outside work site) causing new contamination.	Construction areas	9 – Medium Class C4	Completion of HazMat surveys. Inspections of excavated and filled surfaces would be made during construction to determine the presence of visible asbestos. Conduct further site investigations to determine the presence and extent of contamination prior to construction works commencing Contaminated soils would not be stockpiled on the structural fill layer or formation layers to avoid cross contamination.	Incorrect Waste Classification. Procedures not implemented and following correctly. No training or induction
Fuel contaminated runoff from construction works leaving site	Fuel contaminated runoff entering stormwater or waterways (i.e. polluting - not compliant with discharge criteria). Any fuel or chemical spills associated with construction have the potential to impact habitats, particularly downstream aquatic habitats via stormwater systems or waterways.	Construction areas Downstream receiving waters	3 – Low Class C4	All storm water drains should be identified prior to works and controls implemented. No bulk fuels to be stored on site. Appropriate bunding/storage of substances. Toolbox on site procedures for sediment controls and chemical storage.	Improper storage. No training on induction. Poor housekeeping.

Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
				Educate site staff on project conditions and consequences of prosecution.	
Air Quality					
Dust from the construction works (including; site establishment, excavations, piling)	Potential pollution of waterways and air Dust activity in close proximity to residential and commercial premises, complaints received.	Construction areas.	4 – Low Class C5	Toolbox training on Dust and Air Quality Management. Provide dust mitigation measures through water sprays/misting as required. If required (i.e. visual assessment or complaint indicates high dust levels), dust monitoring will be completed to assess total suspended particulates in conjunction with Occupational Health, Hygiene and Wellness Management Plan. Erosion and Sediment Control Plans approved/implemented before works commence.	No training or induction. Dust sprays not working. High winds.

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Pollution Incident Response Management Plan

Description of Hazard	Potential Environmental Impact	Location	Residual Risk and Class Rating	Pre-emptive Actions	Circumstances That May Increase the Likelihood
Exhaust from plant and equipment.	Emissions resulting in air pollution.	Construction areas and transport routes.	4 – Low Class C5	Inductions and toolbox training on Dust and Air Quality Management. Well maintained plant/ equipment and pre-start checks and servicing. Non-compliant vehicles removed from site / repaired.	No training or induction. Improper machinery.

7. Inventory of Pollutants

As per the requirements of clause 98c(1)(d) and (e), Laing O'Rourke have developed an inventory of potential pollutants that will be kept on the premises. This includes the potential pollutant, approximate quantity, location of storage, current controls and PPE required in the event of an incident. This is listed in Table 7-1.1 and will be updated progressively as part of the PIRMP reviews.

Locations of potential hazards (where relevant) are also shown on the Environmental Control Map in Appendix B.

Table 7-1: Inventory of Pollutants

Site	Central Station Main Works				
Hazard	**Approximate Quantity**	**Location**	**Current / Proposed Control**	**Referring Document**	**PPE required in the event of an incident**
Diesel	30,000-40,000L	Machinery and Vehicles. Refuelling area, bunded generator tanks	Bunded diesel tray, Double bunded tank Spill Kits	MSDS	Spill Kit, gloves, masks, goggles, disposable overalls, fire extinguishers
Asbestos	Unknown	Site wide, high probability in old services	Training on asbestos awareness Use of licensed contractor's. Unexpected finds protocol	Safety Management Plan	Masks, goggles, disposable overalls Specialist removal assistance
Oil	<1,000L	Machinery and Vehicles	Bunded container, appropriate chemical separation	MSDS	Spill Kit, gloves, masks, goggles, disposable overalls Fire Extinguishers
Petrol	<1,000L	Machinery and Vehicles. Refuelling area	Bunded container, appropriate chemical separation	MSDS	Spill Kit, gloves, masks, goggles, disposable overalls, fire extinguishers
Other Chemicals	<1,800L	Bunded chemical storage container	Bunded container, appropriate chemical separation	Chemical Register	Gloves, masks, goggles, disposable overalls, gumboots

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Site	Central Station Main Works				
Grease, coolant, hydraulic oil, paints, lubricants, gas, stormwater etc, other specialised products	Same as other chemicals	Bunded chemical storage container	Bunded container, appropriate chemical separation		Spill kits, fire extinguishers, gloves, masks, goggles, disposable overalls, gumboots
Sulphuric Acid > 51%	2,300L	In double walled chemical tank, stored on a bund, and kept within the WTP bund.	Bund, SDS, PPE, double walled tank, spill kit, physical separation, bund	SDS Register	Chemical suit, gloves, safety glasses, goggles, safety shower, spill kit, bunding, gumboots
Caustic Soda Liquid 30%	2,300L	In double walled chemical tank, stored on a bund, and kept within the WTP bund.	Bund, SDS, PPE, double walled tank, spill kit, physical separation, bund	SDS Register	Chemical suit, gloves, safety glasses, goggles, safety shower, spill kit, bunding, gumboots
Sodium Hypochlorite Solution 10-30%	5,000L	In double walled chemical tank, stored on a bund, and kept within the WTP bund.	Bund, SDS, PPE, double walled tank, spill kit, physical separation, bund	SDS Register	Chemical suit, gloves, safety glasses, goggles, safety shower, spill kit, bunding, gumboots
Ferric Chloride Solution 10-30%	2,300L	In double walled chemical tank, stored on a bund, and kept within the WTP bund.	Bund, SDS, PPE, double walled tank, spill kit, physical separation, bund	SDS Register	Chemical suit, gloves, safety glasses, goggles, safety shower, spill kit, bunding, gumboots
Sodium Bisulphate >10-25% solution	1,500L	In double walled chemical tank, stored on a bund, and kept within the WTP bund.	Bund, SDS, PPE, double walled tank, spill kit, physical separation, bund	SDS Register	Chemical suit, gloves, safety glasses, goggles, safety shower, spill kit, bunding, gumboots

8. Implementation and Communication Requirements

8.1 Implementation and Internal Communication

If a pollution incident occurs in the course of an activity on site so that material harm to the environment (within the meaning of Section 147 PEOA) is caused or threatened, the person carrying out the activity must immediately implement any pollution incident management response that was developed to meet the requirement of the POEO Act.

The steps when managing an incident is represented in Table 8-1-1.

Table 8-1: Implementation Steps

Step	Key items	Description
Step 1	Personnel in immediate vicinity of incident stop work immediately and make the area safe and asses the incident. Stop work immediately and make the area safe and contact Site Supervisor and Site Superintendent. Identify and assess incident severity, determine initial incident level and evaluate response.	Assess the incident based on its potential to escalate. Initial assessment needs to assess risk and look at impact on: - Environment - Pedestrians - Community - Local Business - Neighbouring buildings - Traffic - Stormwater drains - Other businesses
	Site Supervisor/Superintendent to notify the Project Director and Environmental Manager.	If the incident is defined as an Emergency, follow procedures in the Incident / Emergency Management Plan and Crisis Management Plan as required.
Step 2	Depending on the severity of the incident, the Project Director and Environmental Manager to notify Emergency Services / Hazmat (as required), Sydney Metro the EPA, and other agencies as required. t	The Project Environmental Manager or Laing O'Rourke site staff who have been trained and approved to notify relevant authorities, make contact with the relevant agency being: EPA on 131 555 Ministry of Health (contacts as agreed with NSW Health) WorkCover Authority on 13 10 50 Sydney Council 02 92659333 Fire & Rescue NSW on 1300 729 529 Sydney Water 13 20 90 Notify affected persons in immediate area using Sydney Metro communications strategy
Step 3	Establish command and control	The Project Environment Manager to nominate the required Incident Control Review initial situation analysis and assess and confirm incident category (PIRMP Table 6-1 to 6-3) Appoint additional resources to assist the Site Superintendent and Project Environment Manager at incident site. If the event is defined as an Emergency, the Roles and Responsibilities are detailed in the Incident / Emergency Management Plan and the Crisis Management Plan as requried. Manage the incident at site level or escalate to request assistance from relevant authorities

Step	Key items	Description
Step 4	Manage the incident Actions to eliminate the immediate risk to	Coordinate the incident at whole Implement Sydney Metro's communications protocols Review and monitor effectiveness of response Review situational analysis and confirm incident category
Step 5	Manage the recovery	Agree recovery objectives Commence debrief procedures Implement close out communications
Step 6	Improvement actions Actions to improve future operations	Debrief following incident in accordance with Laing O'Rourke procedures. Draft Incident Report Update Risk Registers

8.2 External Government Agency Consultation

As per the requirements CoA 41, A42, A43, A44 and the requirement to notify a pollution incident to regulatory agencies (Section 148) is triggered when there is a risk of 'material harm to the environment'. Table 8-2 outlines the external government liaison reporting requirements should an incident occur.

Table 8-2: External Government Reporting Requirements

Activity or Event	Environmental Issue or Non-compliance	Low Severity incident	Medium Severity Incident	High Severity Incident
	Report to CSMW Project Manager and Environmental Manager	**Report to Project Environmental Manager and Sydney Metro**	**Must be Reported to Authorities & Environmental Representative and Sydney Metro**	**Must be Reported to Authorities & Environmental Representative and Sydney Metro**
	Potential event that could result in a future incident.	**Unlikely that material environmental harm has occurred**	**Material harm likely to have occurred**	**Material harm has occurred**
General environmental effects	An occurrence or set of circumstances that presents opportunity for improvement or has the potential to cause or lead to an environmental incident (low, significant, moderate or high severity) or non- compliance if not rectified.	Pollution or degradation which has short-term (less than 3 months) and reversible detrimental effects on the environment and/or community.	Pollution or degradation which has persistent (greater than 3 months) but reversible detrimental effects on the environment and/or community	Pollution or degradation which has or may have irreversible detrimental effects on the environment and/or community
Discharges to water	Unplanned discharge from site to stormwater drains Unplanned discharge from the WTP that that does not meet discharge criteria for receiving waters.	Minor / trivial discharge to waters with negligible impact on environment e.g. discharge contained / removed, no impact on receiving environment	Discharge to waters with Moderate term impact on environment e.g. • Oil spill escapes into storm water or watercourse • Minor pollution of groundwater in localised area(s)	Major and persistent discharge of pollutant to waters, long term impact on water resources e.g. Sediment trap/gross pollutant trap failure Hydrocarbon / chemical

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Activity or Event	Environmental Issue or Non-compliance	Low Severity incident	Medium Severity Incident	High Severity Incident
	Report to CSMW Project Manager and Environmental Manager	**Report to Project Environmental Manager and Sydney Metro**	**Must be Reported to Authorities & Environmental Representative and Sydney Metro**	**Must be Reported to Authorities & Environmental Representative and Sydney Metro**
	Potential event that could result in a future incident.	**Unlikely that material environmental harm has occurred**	**Material harm likely to have occurred**	**Material harm has occurred**
			• Discharge from site or the WTP not in accordance with EPL discharge criteria. • Concrete slurry enters waters	contamination of groundwater or water
Dust emissions to atmosphere	Unplanned discharge from site to atmosphere.	Minor discharge of pollutant to atmosphere e.g. • No visible deposition of dust outside premises • No risk to human or environmental health.	Release of pollutant to atmosphere causes: • Risk to human or environmental health. • Generation of dust causing significant, nuisance or hazard to the community or environment	Major or persistent discharge of hazardous pollutant that involves: • explosion or leak of hazardous gas • possible or actual evacuation of local vicinity • Significant risk to human health or the environment. • Asbestos dust with potential long-term damage to human health
Noise & vibration	Generation of noise outside approved hours & limits Vibration causing property damage Generation of noise or vibration causing community complaints	Generation of noise or vibration causing community complaints	Generation of noise or vibration causing community complaints	Major or persistent generation of noise or vibration causing community complaints
Solids & other wastes	Unapproved waste material leaving the site	Unapproved storage, transport, treatment or disposal of a minor quantity of non-hazardous waste removed to an unlicensed facility	Unapproved storage, transport, treatment or disposal of a significant quantity of non-hazardous waste or minor quantity of hazardous waste easily removed to an approved facility	Unapproved storage, transport, treatment or disposal of a significant quantity of hazardous or non-hazardous waste not easily removed to an appropriate location.
Archaeological, heritage or cultural issues	Unauthorised access to no-go zone Damage to identified heritage structures	Non-compliance with Unexpected Finds Procedure in Construction Heritage Management Plan NB: Depending on details such events may still need to be reported to OEH as per legislation		

8.3 Community and Neighbour Communication

As a requirement of Clause 98C (1)(i) and CoA A41, A42 and A43, the CSMW representative will notify the neighbours and community as outlined in Table 8 and the CSMW Project's Community Consultation Plan. The steps when managing an incident are presented in Table 8-3:

Table 8-3 Presents the steps when managing an incident.

Step	Key items	Description
Step 1	Laing O'Rourke to list Notifiable Groups	The list of notifiable organisations is to include the following details: a) The name of the company or organisation b) The buildings address and location in proximity to the site c) The name of the organisation or facility's' contact person. d) The contact person's phone numbers (mobile and landline) and e-mail.
Step 2	Evaluate the Environmental Incident	In the event of an incident or emergency being identified, appropriate personnel will implement response procedures or internal protocols.
Step 3	Make the area safe	The intent of considered Incident Response is to negate or contain adverse environmental impacts resulting from an environmental incident (event or occurrence) or emergency (serious, unexpected or dangerous occurrence).
Step 4	Activate the Sydney Metro Communications Protocol	Contact Sydney Metro communications team
Step 5	Make all contacts	Sydney Metro to make all contacts
Step 6	Report of the process	Complete Environmental Incident and Non-Compliance Report (Appendix C)

9. Staff Safety

The primary source of emergency communications will be via two-way radios and mobile phones as a secondary source.

The emergency response personnel involved in forming the Project's Emergency Response Team will undertake training to their role in this procedure and use of relevant emergency equipment, this consists of detailed briefings of the PIRMP by the Project Environmental Manager and/or Site Supervisor prior to the commencement of any construction works, or when the PIRMP is significantly changed or updated.

Personnel who hold responsibilities under the PIRMP will be trained and all workers and visitors attending site shall be inducted into PIRMP (outlined in Section 11).

10. Availability and Privacy

10.1 Website Information

As a requirement under Clause 98D, a copy of this PIRMP document will be uploaded onto the CSMW Project's website.

10.2 Availability and Location of the PIRMP

As a requirement under Clause 98D(1), a copy of this PIRMP document will be located at the site office and on Laing O'Rourke's project drive (K51). In any event, the availability of this PIRMP will be made available by locating printed copies in the same locations that the Environment Protection Licence (EPL) is located.

10.3 Privacy Protection

Where components of the PIRMP are considered to contain sensitive private information then only those cleared should be permitted access to the full Plan. Alternative plans with such information removed (e.g. contact phone numbers and names) can be more widely distributed. Full plans will be made available to the relevant government agencies, on request or during an incident response activity.

11. Training

Under the requirements of clause 98C (2) (e) of the POEO (G) Regulation, training will be provided to ensure the relevant staff and contractors are aware of the key steps to manage an emergency or pollution incident. All training conducted, and records kept will be managed through Pegasus.

The requirements of the PIRMP will be outlined in conjunction with the emergency response procedures in the site induction for all new employees and contractors. A toolbox talk outlining the key components on the PIRMP/emergency response procedures will be presented to all CSMW staff and contractors as required.

Incident training will be given to the CSMW Management team before commencing works and annually to:

- Provide specific skills such as emergency response drills, evacuations to enable the proficient use of specialised equipment;
- Ensure outcomes from mock evacuation and other emergency management exercises are communicated; and
- Ensure knowledge of legislative and statutory requirements.

12. Testing

The PIRMP will be tested every twelve months as per the requirement of the POEO (G) Regulation. The testing of the PIRMP is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date and that each plan is capable of being implemented in a workable and effective manner.

Testing will need to cover all the components of the PIRMP, including the effectiveness of training.

Plans will be reviewed within one month of any pollution incident occurring in the course of an activity to which a licence relates to assess, in the light of that incident, whether the information included in the plan is accurate and up to date, and that the plan is still capable of being implemented in a workable and effective manner.

The project will implement rehearsals (drills) to check the relevance and adequacy of the procedure, resources and equipment and may include any of the following:

- Practical rehearsals of the project emergency response personnel roles;
- Inspection of emergency signs, equipment, facilities and readiness;
- Emergency response drills and rehearsals;
- Test response to likely scenarios that could be faced by the project emergency response personnel; and
- A full evacuation exercise is to be conducted on site establishment and throughout construction at intervals deemed necessary according to the PEM.

Appendix A provides a PIRMP test register.

13. Incident Reporting Procedure

As per the requirements of CoA 41, A42, A43, A44 all incidents will be documented and action plans established to prevent a reoccurrence. All High and Significant risks will be investigated. Where lessons are learnt for the investigation or current procedures are identified as ineffective, the CEMP and associated sub plans will be revised to include the improved procedures of requirements.

Appendix A: PIRMP Test Register

Pollution Incident Response Plan

Test Register

S98C(n) POEO (G) Regulation

Contents

Purpose

The PIRMP will be tested every twelve months as per the requirement of the POEO (G) Regulation. The testing of the PIRMP is to be carried out in such a manner as to ensure that the information included in the plan is accurate and up to date and that each plan is capable of being implemented in a workable and effective manner. Testing will need to cover all components of the PIRMP, including the effectiveness of training.

Plans must also be tested within one month of any actual pollution incident occurring in the course of an activity to which a licence relates to assess, in light of that incident, whether the information included in the plan is accurate and up to date, and the plan is still capable of being implemented in a workable and effective manner.

The project must implement rehearsals (drills) to check the relevance and adequacy of the procedure, resources and equipment. Table 1 below provides a register of the variety of PIRMP tests possible, and indicates when these tests have been undertaken.

Prior to the implementation of any practical rehearsals or evacuations that require the involvement of key personnel, it is advised that all individuals familiarise themselves with their roles and responsibilities during the pollution handling, communication and reporting process of the PIRMP. Roles and responsibilities are detailed within Section 4 of the PIRMP.

Table 1: Register of Test undertaken for the PIRMP to date.

Drill	Date	Details
Practical rehearsals of the project emergency response personnel roles	30/04/20	Test - Impact sewer main during excavation - (EE)
Inspection of emergency signs, equipment, facilities and readiness	Various	P:\0900 Safety\0920 Emergency Response\Emergency Equipment
Emergency response drills and rehearsals	Various	P:\0900 Safety\0920 Emergency Response\Emergency Response Drill & Exercises\Completed Exercise Reports
	Crisis Management	P:\0700 Authorities & Community\0714 Issues and Crisis Management
Test response to likely scenarios that could be faced by the project emergency response personnel	09/01/19	500L of diesel fuel - (SY)
	30/04/20	Test - Impact sewer main during excavation - (EE)
A full evacuation exercise is to be conducted on site establishment and at 6 monthly intervals.	23/5/19	Test – Excavator catching on fire - (MB)
	7/02/20	Subsidence Road 12 – (MB)

Update due to incident	07/02/20	Subsidence Road 12 – (MB)
	16/03/20	Uncontrolled WTP discharge – (SY)

NOTE: MB – Metro Box, EE = Eastern Entrance, CW = Central Walk, SY = Sydney Yard, MS = Mortuary Station, ESY = Eveleigh Stabling Yard, NC = Northern Concourse, GC = Grand Concourse.

Implementation and Internal Communication

If a pollution incident occurs in the course of an activity on site so that material harm to the environment is caused or threatened, the person carrying out the activity must immediately implement any pollution incident management response that was developed to meet the requirement of the POEO Act. The steps when managing an incident is presented below in Table 2 (Extracted from Table 8 – PIRMP).

Table 2: The expected PIR procedure, for a practical rehearsal of the PIRMP.

Step	Key items	Description
Step 1	Personnel in immediate vicinity of incident stop work immediately and make the area safe and asses the incident. Stop work immediately and make the area safe and contact Project Manager Identify and assess incident severity, determine initial incident level and evaluate response	Assess the incident based on its potential to escalate. Initial assessment needs to assess risk and look at impact on: • Environment • Pedestrians • Community • Local Business • Neighbouring buildings • Traffic • Stormwater drains • Other businesses
Step 2	Notify Sydney Metro, Hazmat and the EPA if the incident was not contained on site	Notify affected persons in immediate area using Sydney Metro communications strategy Laing O'Rourke site staff who have been trained and approved to notify relevant authorities, make contact with the relevant agency being: EPA on 131 555 Ministry of Health (contacts as agreed with NSW Health) WorkCover Authority on 13 10 50 Sydney Council 02 92659333 Fire & Rescue NSW on 1300 729 529 Sydney Water 13 20 90

Step 3	Establish command and control	Project Environment Manager to nominate the required Incident Control Review initial situation analysis and assess and confirm incident category (PIRMP Table 5) Appoint additional resources to assist Project Environment Manager at incident site. Manage the incident at site level or escalate to request assistance from relevant authorities
Step 4	Manage the incident Actions to eliminate the immediate risk to life and property	Coordinate the incident at whole Implement Sydney Metro's communications protocols Review and monitor effectiveness of response Review situational analysis and confirm incident category
Step 5	Manage the recovery (after the incident)	Agree recovery objectives Commence debrief procedures Implement close out communications
Step 6	Improvement actions (after the incident) Actions to improve future operations	Debrief following incident in accordance with Laing O'Rourke procedures. Draft Incident Report Update Risk Registers

Scenarios

Practical rehearsal - Sewerage in the Eastern Entrance

The scenario selected will occur within the Eastern Entrance. During excavation, one of the excavator buckets or hammers will impact a major sewer main, resulting in the inflow of a large quantity of sewerage into site. Over time, sewerage continues to accumulate within the site, and has the potential to seep out onto Chalmers street into the stormwater system.

Key stages of the event are illustrated in Figure 1 and include the following:

- The impacted sewage pipe is of a large diameter. Flow is under a steady, low pressure, causing a consistent flow of sewage to inundate site within 15 minutes of impact. The pipe is broken, leaving a large hole at the point of impact.
- Within 20 minutes, a steady stream of sewage is observed to have the potential to migrate off site down Chalmers street into the stormwater system.
- Live drains are located within Chalmers street approximately 20m from the Eastern Entrance.

Using Table 2 in this document, as well as Tables 2 and 6 of the PIRMP, complete Table 3 following completion of the practical rehearsal.

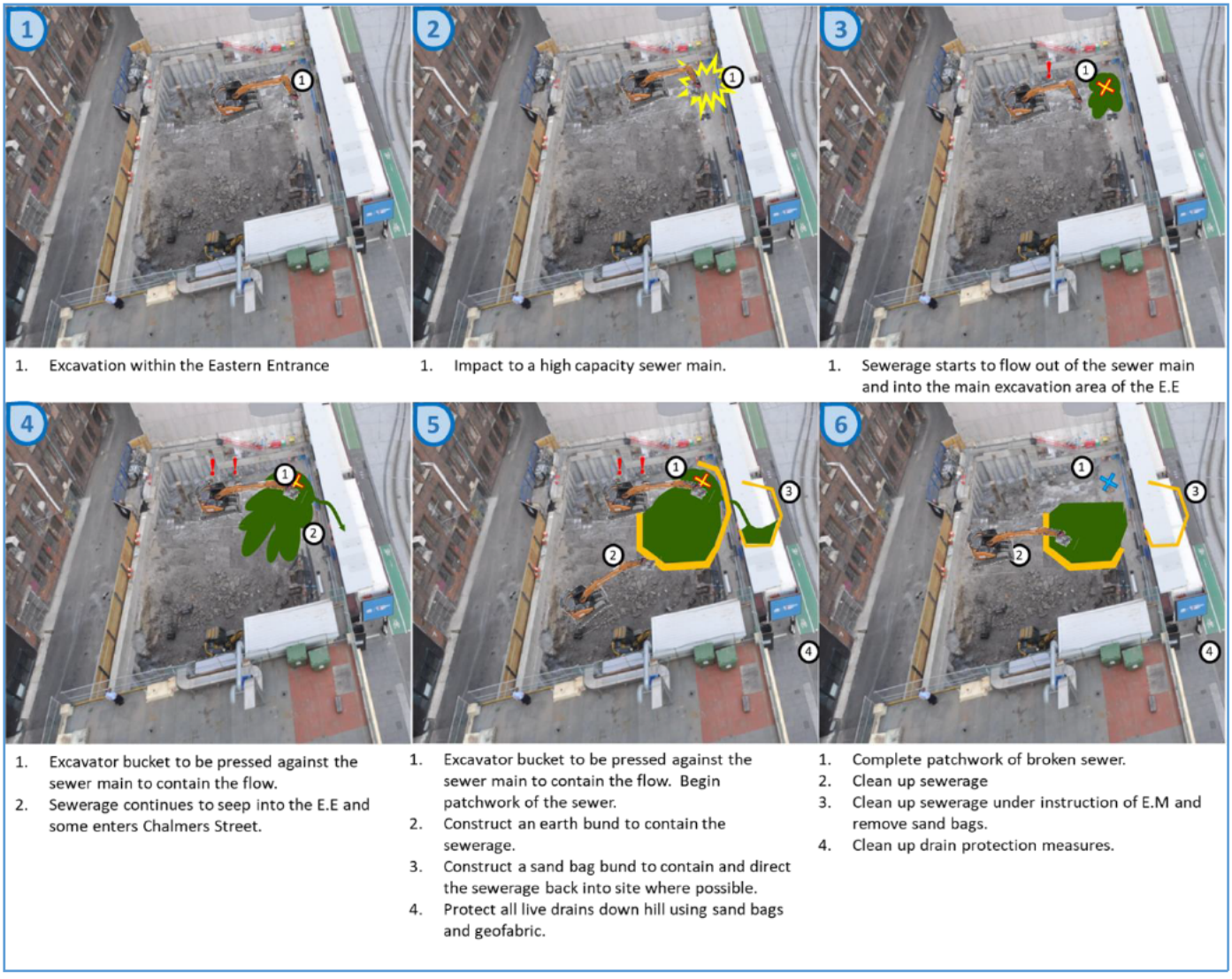


Figure 1: Depicts the proposed rehearsal of the PIRMP within the Eastern Excavation - Sewage pipe impact.

Community and Neighbour Communication Template – Outcome of test scenario

As a requirement of Clause 98(1)(i) and CoA A41, A 42 and A43, the CSMW representative will notify the neighbours and community as outlined in Table 8 of the PIRMP and the CSMW Projects Community Consultation Plan.

As part of this exercise, Table 3 below was populated based on the outcome of the test scenario. Outcomes of the exercise are detailed further within a specific Emergency Response Drill Report.

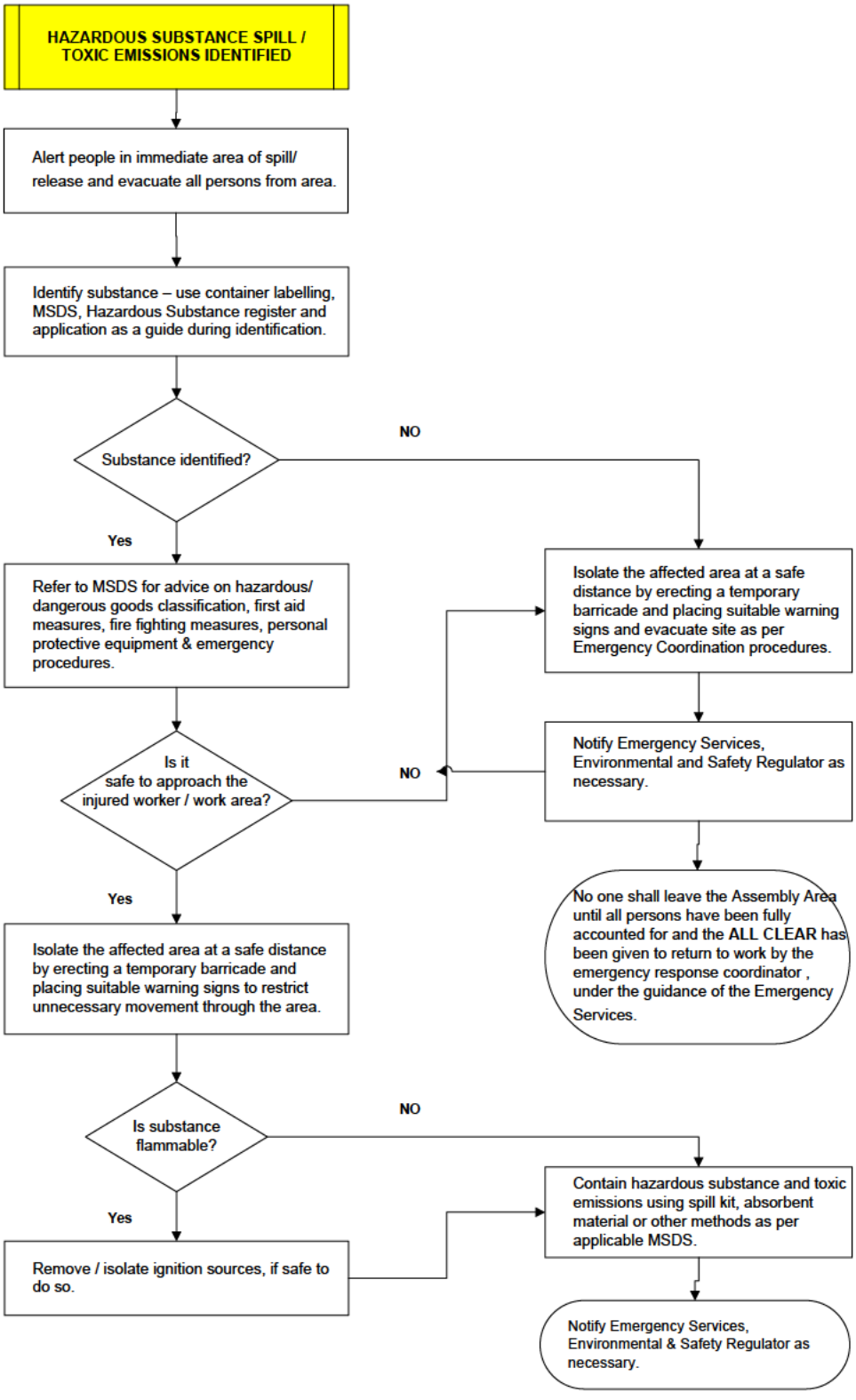
Table 3: Implementation steps of the PIRMP

Step	Key items	Description	Scenario Test notes
Step 1	Laing O'Rourke to list Notifiable Groups	The list of notifiable organisations is to include the following details: a) The name of the company or organisation b) The buildings address and location in proximity to the site c) The name of the organisation or facility's' contact person. d) The contact person's phone numbers (mobile and landline) and e-mail.	a) Laing O'Rourke b)28-30 Chalmers St Surry Hills c) Tom Mullens d) Mob: 0436 [redacted] [redacted]@laingorourke.com.au
Step 2	Evaluate the Environmental Incident	In the event of an incident or emergency being identified, appropriate personnel will implement response procedures or internal protocols.	An excavator has impacted a large sewer pipe while excavating within the Eastern Entrance. A large volume of sewage continues to flow into site, and there is potential for discharge from site to enter the stormwater system. Key site personnel contacted: • Site Supervisor: Michael Sundstrom: 0438 [redacted] • Superintendent - Nick Kowalonek: 0477 [redacted] • Environment Manager: 0408 [redacted] • Safety Manager - Mick Flanagan: 0428 [redacted] • Community Manager - Mathilde Desprez: 0437 [redacted] • Project Engineer - Sam Laporte: 0455 [redacted]

			This incident has been pre-classified as **Moderate.**
Step 3	Make the area safe	The intent of considered Incident Response is to negate or contain adverse environmental impacts resulting from an environmental incident (event or occurrence) or emergency (serious, unexpected or dangerous occurrence). This may be as simple as up righting a container of petrol chemical or turning of a water valve.	The following actions were enacted by the Site Supervisor and Superintendent to limit the extent of impact to the construction workers, the public, as well as the environment: 1) Stop works, and isolate the area from construction personnel not required to be there. 2) Under instruction begin containment of the incident including: Blocking the outlet for sewage and constructing an earth bund to contain the spread. 3) Isolate the spill on Chalmers street from public access, install a sand bag bund to direct the flow back into the E.E and protect downhill drains. Site supervisors contacted the EM immediately, who will then escalate the situation and notify the required personnel. Site supervisors also contacted the Community, and Safety Managers while the Project Engineer suggested contacting utility providers.
Step 4	Activate the Sydney Metro Communications Protocol	Contact Sydney Metro communications team	E.M contacted Sydney Metro and enacted the Sydney Metro Communications Team.
Step 5	Make all contacts	Sydney Metro to make all contacts aware of the incident.	Sydney Metro E.M was instructed to contact all relevant personnel.
Step 6	Report of the process	Complete Environmental Incident and Non-Compliance Report (Appendix C of the PIRMP)	E.M discussed the process of completing an incident report and non-compliance report with all attendees at the PIRMP Test event.

Central Station Main Works Project
Pollution Incident Response Management Plan

Appendix B - Chemical Release / Explosion / Spill / Leak Procedure



Central Station Main Works Project
Pollution Incident Response Management Plan

Appendix C: Maps

Central Station Main Works - Environmental Control Plan (Sydney Yard)

LAING O'ROURKE

Contact Information	
Environmental Manager – Lucas Dobrolot	0422 417 385
Construction Director – Greg Cook	0409 780 896
Independent Environmental Representative – Michael Woolley	0409 492 197
TfNSW Construction Response Line	1800 775 465
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EPA Environmental Line / Pollution Incident Response Line	131 555
Emergency	000 or 112

Incident and Complaints Procedure

All water to be discharge via WTP. Seek Environmental Manager's approval for any other form of discharge!!

Noise and Vibration

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- The YHA is a sensitive receiver on Platform 0.
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  - Tunneling and associated support activities (excluding cut and cover tunneling)
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Hazardous/Contaminated Material

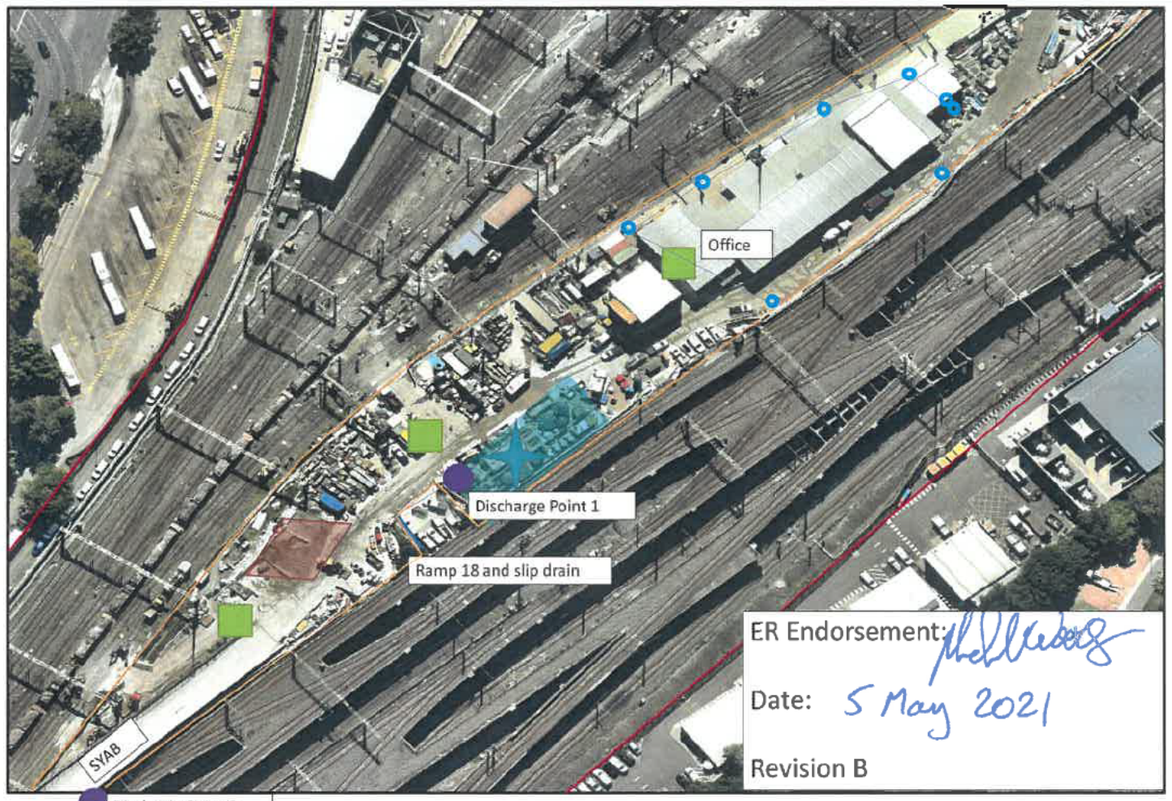
- The Unexpected Finds Protocol must be employed in the instance that any foreign material is uncovered. This may include material that exhibits an odd texture, emits a foul odour, or exhibits a strange colour. If discovered;
  - Immediately cease work and contact the Site Supervisor,
  - Demarcate the 'unexpected find' to prevent access and install appropriate environmental and safety controls,
  - Project Leader to contact the client representative,
  - Protect the environment by implementing control measures to divert surface runoff away from the potentially contaminated ground,
  - Capture and manage any surface runoff contaminated by exposure to contaminated ground.

Waste

- Use skip bins and ensure there are an adequate number of bins on site to hold all waste generated.
- Waste must be classified prior to disposal – refer to NSW EPA Waste Classification Guidelines.
- Licensed waste contractors will be utilised to remove waste.
- Retain waste disposal permits and figures on the amount of waste that has been removed from site.

Traffic Management

- Refer to the CSMW Construction Traffic Management Plan, detailing the route to the site, signage, and traffic control measures.
- There will be no queuing due to construction related traffic on any roads adjacent to the site.
- There will be no construction parking in non-approved zones or parking areas.
- Ensure pedestrian access ways are clearly defined and maintained.



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Large Hydraulic Hammer	(1600 kg – 18 to 34t excavator)	22 m	73 m
Vibratory Pile Driver	Sheet piles	2 m to 20 m	20 m
Pile Boring	≤ 800 mm	2 m (nominal)	n/a
Jackhammer	Hand held	1 m (nominal)	Avoid contact with structure

Symbol	Legend
	Water Treatment Plant
	Temporary stockpile area
	Drains (not connect to mains stormwater)
	Discharge points
	Spill kits (subject to change as required)
	Site fence
	Project boundary

Biodiversity

- Vegetation in Sydney Yard adjacent to Track 16 is to be removed in accordance with Section 6 of the Biodiversity Management Plan and offset. No other vegetation is to be trimmed or removed.
- No access to the Mortuary Station gardens is permitted.
- The local WIRES group/veterinarian would be contacted if any fauna are injured on site or require capture/relocation
- Plant and equipment brought on to site must be cleaned and free of deleterious material, mud and other material that may harbour weed seeds.

Dust and Air Quality

- Ensure surface excavation footprints are minimised to limit potential dust creation from exposed areas.
- Waste or any other material must not be burnt on construction sites.
- Temporary soil stockpiles during site establishment are to be maintained, e.g. hosed down or covered.
- Stockpiling for prolonged periods of time should be avoided
- Demolition and excavation must be managed to minimise dust generation e.g. water dust suppression.
- The engines of all on-site vehicles and plant should be switched off when not in use for an extended period.
- Plant must be well maintained and serviced to minimise emissions.
- All vehicles carrying loose or potentially dusty material to or from the site must be fully covered.
- Spray exposed work areas to suppress dust using water carts.
- Remove dirt from haul vehicles prior to entering public roads.
- Remove any spit dirt by construction equipment or vehicles on public roads immediately.
- Reprogram dust generating work during periods of high wind or when fugitive dust emissions cannot be controlled.

Water Quality Management

- Before undertaking any construction work (including any earthmoving or vegetation removal works), implement all soil and water management works. See Soil and Water Management and Erosion and Sediment Control Plans.
- Enviro pods are to be installed and maintained across all drains on site.
- Water discharge must be approved by the Environmental Manager. Discharge quality must comply with:
  - TSS: ≤ 50mg/L.
  - pH: Between 6.5 and 8.5.
  - No oil or grease
- Erosion and Sediment Control devices are to be maintained when their capacity has been reduced to 25%.
- Maintain existing drainage infrastructure wherever possible.
- Undertake progressive rehabilitation and/or stabilisation of completed areas to minimise erosion hazard.
- Construction plant, vehicles and equipment will be refueled off site or in designated refueling areas away from drainage lines or waterways where possible.
- Hazardous substances that could result in a spill will be undertaken away from drainage or stormwater lines and, wherever possible, within defined bunds.
- Conduct regular inspections and maintenance of all erosion and sediment controls to ensure they are effective.

Delivery and Storage of Chemicals

- Ensure Safety Data Sheets (SDS) are available on site for all fuels, oils, chemicals and dangerous goods.
- The SDS and material risk assessment including any specific control measures are to be submitted where required to the Safety Manager for every substance to be brought on to site.
- Chemicals, fuels and oils must be stored in a securely bunded area with appropriate signage.
- Chemicals fuels, oils and chemicals to be stored inside impervious bunds to contain 110% of the stored volume. Bunded areas must be located undercover to prevent ingress of rain.
- Drivers must be in attendance at all times when the unloading of fuel, oil or chemicals takes place on site.
- No water to be discharged from bunded areas into site drainage system. Contaminated water must be removed by an appropriately licensed contractor.
- Absorbent material used to clean up spills to be disposed of in accordance with the EPA Waste Classification Guidelines (inside Waste Disposal Bags and into the general waste skip).
- Spill kits must be located on site.

Trade Waste

- Personal effluent disposal into STA bus sewer
- Washout not permitted onsite. Brushes and empty paint tins are to be dried and disposed in the general waste skip.
- Trade waste and other prohibited substances will not be discharged into stormwater drains or sewerage system without approval from the Environmental Manager.

Sustainability And Climate Change Requirements

- A target of 5% bio diesel mix is set for all diesel-powered plant and equipment and a target of 10% blended ethanol mix for all petrol-powered plant and equipment.
- The works are to utilise low Volatile Organic Compounds paints, finishes, sealants and adhesives and low emission formaldehyde composite wood products.
- Concrete used in the construction of the Works and the Temporary Works must be supplied by members of the Cement Concrete and Aggregate Association of Australia (CCAA) or a similar international association or organisation.
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- Repurpose heritage bricks to reduce waste material generated.

Central Station Main Works - Environmental Control Plan (Metro Box)

LAING O'ROURKE

Contact Information	
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Construction Director – Greg Cook	
Independent Environmental Representative – Michael Woolley	
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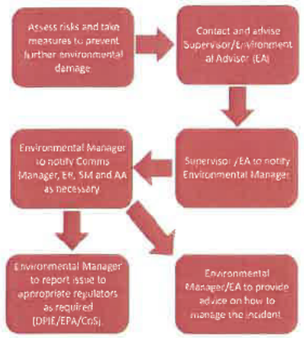

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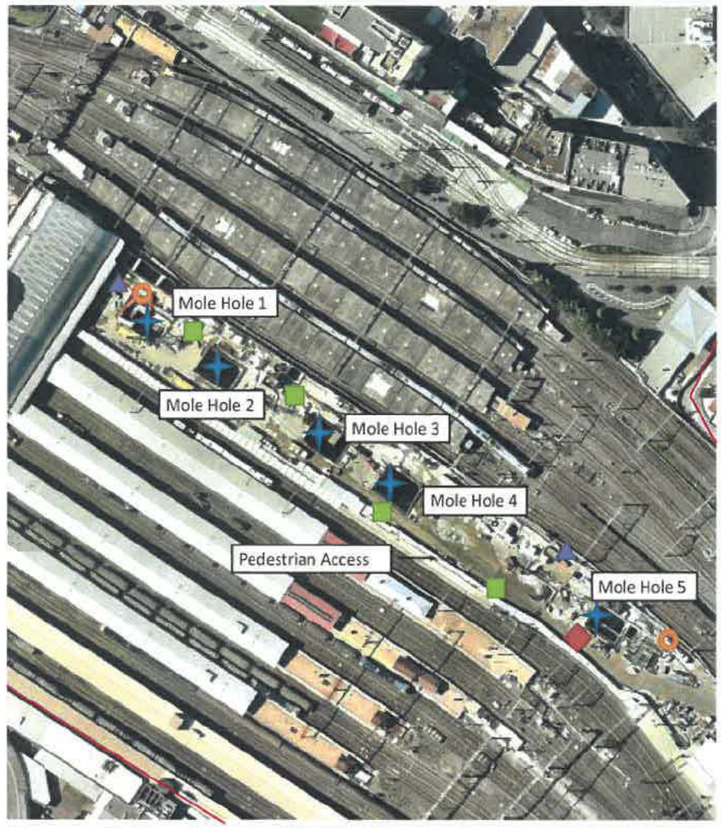

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Jackhammer	Hand held	1 m (nominal)	Avoid contact with structure

Symbol	Legend
✦	Mole holes 1-5
◆	Temporary stockpile area
○	Air extraction unit
▲	Fish tank
■	Spill kits (subject to change)

ER Endorsement: [signature]

Date: 5 May 2021

Revision B

Delivery and Storage of Chemicals

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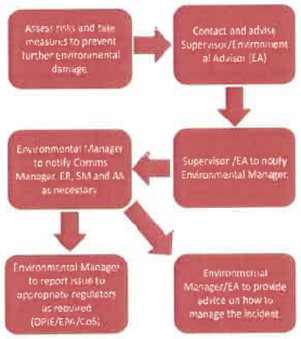
Central Station Main Works - Environmental Control Plan (Central Walk)

LAING O'ROURKE

Construction Activity/Areas

- Excavation and FRP of Grand Concourse
- North-south concourse
- ESR and Ghost Platform
- Eastern Entrance – breakthrough and construction of Devonshire St tunnel
- Suburban platform modifications

Incident and Complaints Procedure



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ER Endorsement: Michael Woolley

Date: 5 May 2021

Revision B

Symbol	Legend
	Central Walk area (subsurface)
	Eastern Entrance
	New escalators
	New lifts
	Guards rooms
	Hoarding (changes based on scope)
	Chalmers St Noise Logger
	Residential buildings
	Sydney Dental Hospital
	Sensitive Receiver
	Noise direction towards sensitive receiver

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  - Tunneling and associated support activities (excluding cut and cover tunneling)
  - Excavation within an acoustic enclosure
  - Excavation at Central Walk without an acoustic enclosure (excluding Central Walk works at Eastern Entrance)
  - Station and tunnel fit out
  - Haulage and delivery of spoil and material
- No work will be undertaken outside the agreed hours without prior approval. See the Environmental Manager.
- Delivery operations must be undertaken during construction hours, unless specifically required by Police or RMS requirements.
- Where practical, avoid the use of multiple noisy plant close together or adjacent to sensitive receivers.
- High efficiency mufflers must be fitted to all plant and equipment.
- All plant must be maintained in accordance with the manufacturer's requirements.
- Noise generating equipment must be oriented away from sensitive areas with tonal alarms turned off.
- The safe working distances are defined for both cosmetic damage (BS 7385) and human comfort (the NSW Vibration Guideline). See the Environmental Manager if you need to work within these distances.

Central Station Main Works - Environmental Control Plan
Eastern Entrance

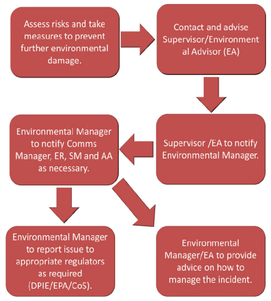
LAING O'ROURKE

Construction Activities

- Demolition of the Bounce Hotel
- Perimeter piling for the new Eastern Entrance
- Short term closure of Randle Lane to permit piling activities include capping beam construction.
- Excavation of the Eastern Entrance and load out of spoil from Randle Lane
- Canopy tube installation
- Station construction and fit out

Contact Information	
Environmental Manager – Lucas Dobrolot	0422 417 385
Construction Director – Greg Cook	0409 780 896
Independent Environmental Representative – Michael Woolley	0409 492 197
TfNSW Construction Response Line	1800 775 465
TfNSW Info Line	1800 684 490
EPA Environmental Line / Pollution Incident Response Line	131 555
Emergency	000 or 112

Incident and Complaints Procedure



Don't discharge water without Environmental Manager's approval unless it is going to the Water Treatment Plant

Archaeology and Heritage

- All Archaeology at the Eastern Entrance (EE) has been salvaged to date.
- Should suspected heritage or archaeological items be found, begin the Unexpected Finds Protocol:
  1. Work is to cease in the area immediately
  2. Notify Sydney Metro
  3. The object is to be left in place
  4. Engage heritage specialist to determine significance of the find
  5. Do not recommence works until heritage specialist has given approval to do so.

Biodiversity

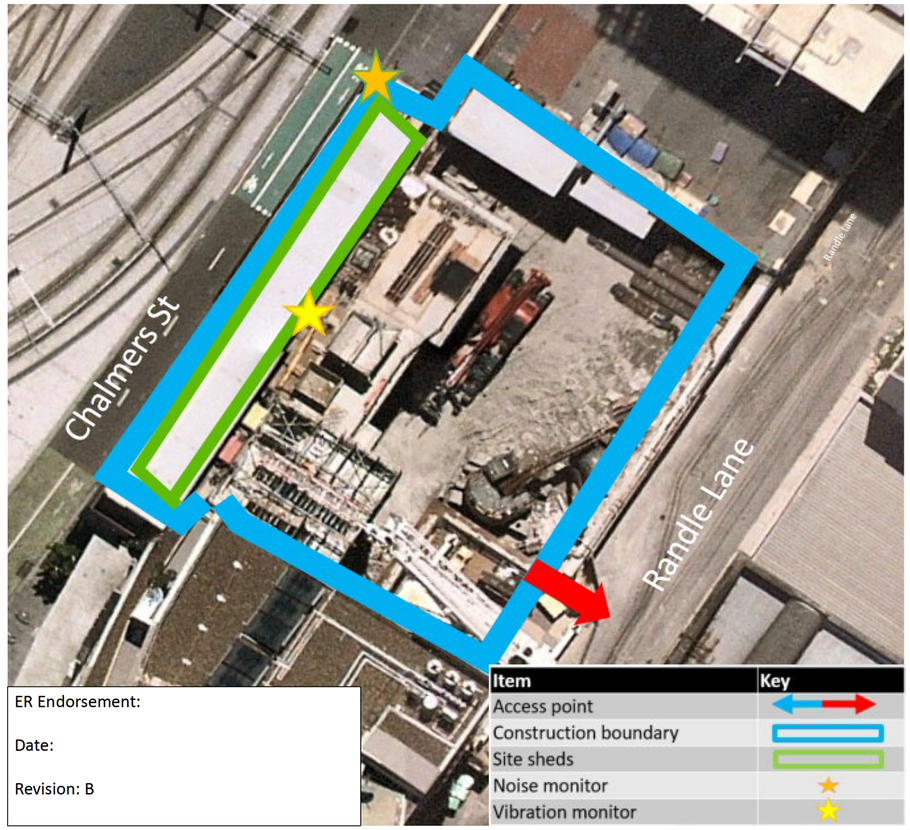
- The EE Construction site has no biodiversity value.
- If any fauna is encountered – stop works and engage the Environmental Team who may contact a Fauna Handler.

Traffic Management

- Traffic may be temporarily held for a maximum of 15 minutes on Randle Lane while loading occurs.
- There will be no construction parking in non-approved zones or parking areas.
- Ensure pedestrian access ways are clearly defined.
- Haulage routes used must align to those approved in the CTMP.
- During slit trenching: Traffic control to direct bike riders to dismount and walk around area of excavation.

Waste

- Use skip bins and ensure there are an adequate number of bins on site to hold all waste generated.
- Waste must be classified prior to disposal – refer to NSW EPA Waste Classification Guidelines.
- Licensed waste contractors will be utilised to remove waste.
- Retain waste disposal permits and figures on the amount of waste that has been removed from site.



ER Endorsement:

Date:

Revision: B

Plant Item	Rating/Description	Safe Working Distance – metres (m) Cosmetic Damage (BS 7385)	Human Comfort (the NSW Vibration Guideline)
Vibratory Roller	< 50 kN (Typically 1-2 tonnes)	5 m	15 m to 20 m
	< 100 kN (Typically 2-4 tonnes)	6 m	20 m
	< 200 kN (Typically 4-6 tonnes)	12 m	40 m
	< 300 kN (Typically 7-13 tonnes)	15 m	100 m
	> 300 kN (Typically 13-18 tonnes)	20 m	100 m
	> 300 kN (> 18 tonnes)	25 m	100 m
Small Hydraulic Hammer	(300 kg - 5 to 12t excavator)	2 m	7 m
Medium Hydraulic Hammer	(900 kg – 12 to 18t excavator)	7 m	23 m
Large Hydraulic Hammer	(1600 kg – 18 to 34t excavator)	22 m	73 m
Vibratory Pile Driver	Sheet piles	2 m to 20 m	20 m
Pile Boring	≤ 800 mm	2 m (nominal)	n/a
Jackhammer	Hand held	1 m (nominal)	Avoid contact with structure

Noise and Vibration

- Construction activities will be restricted to the hours of Monday to Friday 7:00 am to 6:00pm; Saturday 8:00am to 1:00pm and at no time on Sundays and public holidays.

*Due to COVID-19 – Government Gazette Notice No. 75– there may be extended construction hours with the **exception of high noise impact activities**.*

- High Noise Activities such as rock breaking, rock hammering, jack hammering and saw cutting shall be scheduled between:
  - 8.00 am to 6pm Monday to Friday;
  - 8.00 am and 1.00 pm Saturdays

High noise impact activities should not occur for more than 3 hours continuously. Ensure 3-hour blocks of work are separated by a minimum of 1 hour respite.

- Delivery operations must be undertaken during construction hours, unless specifically required by Police or RMS requirements.
- Where practical, avoid the use of multiple noisy plant close together or adjacent to sensitive receivers.
- High efficiency mufflers must be fitted to all plant and equipment.
- All plant must be maintained in accordance with the manufacturer's requirements.
- Noise generating equipment must be oriented away from sensitive areas with tonal alarms turned off.
- The safe working distances are defined for both cosmetic damage (BS 7385) and human comfort (the NSW Vibration Guideline). See the Environmental Manager if you need to work within these distances.
- 24Hr Noise and Vibration monitoring loggers to be installed on site to monitor impacts of construction activities to sensitive receivers.

Water Management

- The Eastern Entrance site is an open excavation–causing all site water to collect within the site boundary.
- Collected site water will be captured in IBCs for treatment at the Water Treatment Plant at the Sydney Yard (CSM main site).
- Water discharge must be approved by the Environmental Manager. Discharge quality must comply with:
  - TSS: ≤ 50mg/L.
  - pH: Between 6.5 and 8.5.
  - No oil or grease
- Site has been designed to prevent the ingress of clean water from the surrounding hardstand into the construction site in accordance with erosion and sediment control measures detailed in the CSWMP.
- Construction plant, vehicles and equipment will be refueled off site or in designated refueling areas away from drainage lines or waterways where possible.
- Drains in Randle lane will be protected by sandbag bunds and regularly maintained.
- During slit trenching: sandbags to be placed around drains in Chalmers street. Clean water is to be diverted away from excavation area and the work site covered at the end of each shift.
- During slit trenching/saw cutting: wet vac or sandbags to be used to contain any slurry and to prevent run off.

Hazardous/Contaminated Material

- Waste Classification Analysis has indicated that the area of excavation has low potential for contamination. However, the Unexpected Finds Protocol must be employed in the instance that any foreign material is uncovered. This may include material that exhibits an odd texture, emits a foul odour, or exhibits a strange colour. If discovered;
  - Immediately cease work and contact the Site Supervisor,
  - Demarcate the 'unexpected find' to prevent access and install appropriate environmental and safety controls,
  - Project Leader to contact the client representative,
  - Protect the environment by implementing control measures to divert surface runoff away from the potentially contaminated ground,
  - Capture and manage any surface runoff contaminated by exposure to contaminated ground.

Dust and Air Quality

- Plant must be well maintained and serviced to minimise emissions.
- All vehicles carrying loose or potentially dusty material to or from the site must be fully covered.
- Stockpiling for prolonged periods of time should be avoided.
- Any stockpiles must be managed appropriately (covering/wetting down)
- Excavation must be managed to minimise dust generation.
- Spray exposed work areas to suppress dust.
- All construction vehicles exiting site must be inspected so as not to track material onto Randle Lane.
- Reprogram dust generating work during periods of high wind.
- The engines of all on-site vehicles and plant should be switched off when not in use for an extended period.
- During slit trenching: water to be used throughout saw cutting of hardstand. Slurry to be contained using wet vac or sandbags.

Sustainability And Climate Change Requirements

- A target of 5% bio diesel mix is set for all diesel-powered plant and equipment and a target of 10% blended ethanol mix for all petrol-powered plant and equipment.
- The works are to utilise low Volatile Organic Compounds paints, finishes, sealants and adhesives and low emission formaldehyde composite wood products.
- Concrete used in the construction of the Works and the Temporary Works must be supplied by members of the Cement Concrete and Aggregate Association of Australia (CCAA) or a similar international association or organisation.
- Steel used in the construction of the Works and the Temporary Works must be supplied by suppliers that are certified under the Australian Certification Authority for Reinforcing Steels (ACRS) or a similar international association or organisation.
- Fabricated steel products are specified in accordance with AS 5131 Fabrication & Erection of Steelwork and certified through the National Structural Steelwork Compliance Scheme.
- PVC used in the construction of the Works and Temporary Works is supplied by suppliers that meet the "Best Practice Guidelines for PVC in the Built Environment"
- Timber products used in the Works and Temporary Works are from either re-used timber, post-consumer recycled timber or from Forest Stewardship Council Australia, certified timber suppliers.

Delivery and Storage of Chemicals

- Ensure Safety Data Sheets (SDS) are available on site for all fuels, oils, chemicals and dangerous goods.
- The SDS and material risk assessment including any specific control measures are to be submitted where required to the Safety Manager for every substance to be brought on to site.
- Chemicals, fuels and oils must be stored in a securely bunded area with appropriate signage.
- Chemicals fuels, oils and chemicals to be stored inside impervious bunds to contain 110% of the stored volume. Bunded areas must be located undercover to prevent ingress of rain.
- Drivers must be in attendance at all times when the unloading of fuel, oil or chemicals takes place on site.
- No water to be discharged from bunded areas into site drainage system. Contaminated water must be removed by an appropriately licensed contractor.
- Absorbent material used to clean up spills to be disposed of in accordance with the EPA Waste Classification Guidelines (inside Waste Disposal Bags and into the general waste skip).
- Spill kits must be located on site.

Central Station Main Works - Environmental Control Plan
Eastern Entrance

LAING O'ROURKE

Construction Activities

Incident and Complaints Procedure

Archaeology and Heritage

Biodiversity

Traffic Management

Waste

EA Endorsement:

Date: 2/10/24

Revision: B

Noise and Vibration

Water Management

Hazardous/Contaminated Material

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Delivery and Storage of Chemicals