



Central Sydney Industrial Estate Subdivision (excluding Lot 6) | SSD 10459

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

Prepared for VE Property Pty Ltd | 28 April 2021





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Date	28 April 2021	28 April 2021

This plan be prepared and reviewed by environmental scientists with between 10 and 18 years experience in assessment and management of environmental and social impacts associated with construction projects.

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CHAPTER 1

INTRODUCTION

1 INTRODUCTION

1.1 Purpose

VE Property Pty Ltd (VE Property), will develop the Central Sydney Industrial Estate (CSIE) on land formerly known as the 'Western Area' of the former Shell Oil Refinery at Clyde. Stage 1 (Lot 6 of the subdivision) will be developed as the Downer Sustainable Road Resource Centre, the construction of which is addressed in a separate construction environmental management plan.

This construction environmental management plan (CEMP) defines the environmental management principles, processes, procedures and systems implemented for use throughout the duration of construction of the Central Sydney Industrial Estate subdivision works (the project).

This plan has been prepared by personnel listed on the cover page, who all have over 10 years' experience in the preparation of construction environmental management documentation.

1.2 Document scope

The scope of this management plan applies to all workers during construction of the project.

This plan applies to all aspects of environmental management for the project.

The target audiences for this plan are all construction workers and any other relevant stakeholders.

1.3 Consultation

In accordance with SSD 10459, the applicable stakeholders have been consulted. Evidence of consultation related to the sub-plans of this CEMP is included in the relevant sub-plan.

1.4 Conditions of consent

Environmental impacts of the CSIE were assessed in Element (2020) *Central Sydney Industrial Estate incorporating the Sustainable Road Resource Centre – State significant development – environmental impact statement* (the EIS), which was submitted with an application for State significant development (SSD) to the Department of Planning, Industry and Environment (DPIE) on 18 September 2020.

Development consent SSD 10459 was granted to VE Property on 31 January 2021 for the project described in Chapter 2. A copy of the development consent is attached as Annex A.

This CEMP has been prepared to satisfy the construction specific environmental conditions in Part B and environmental management conditions in Part C of SSD 10459 and in consideration of the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources 2004). Sub-plans (outlined in Section 3.2 and annexed) have been prepared to support this CEMP.

The specific requirements of these consent conditions, along with where these requirements have been addressed within this CEMP, are listed in Table 1.1.

Table 1.1 Construction conditions of consent

Condition		CEMP reference
Contamination		
B1	Prior to the commencement of earthworks, the Applicant must prepare an unexpected contamination procedure to ensure that potentially contaminated material is appropriately managed. The procedure must form part of the CEMP in accordance with condition C2 and must ensure any material identified as contaminated is disposed off-site, or otherwise treated to the satisfaction of the EPA Accredited Site Auditor, with the disposal location and results of testing submitted to the Planning Secretary, prior to its removal from the site.	Annex B
B2	The Applicant must ensure the development does not result in a change of risk in relation to any pre-existing contamination on the site so as to result in significant contamination.	Annex B
Air quality		
B3	The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.	Section 3.2
B4	During construction, the Applicant must ensure that: (a) exposed surfaces and stockpiles are suppressed by regular watering or other alternative suppression method; (b) all trucks entering or leaving the site with loads have their loads covered; (c) trucks associated with the development do not track dirt onto the public road network; (d) public roads used by these trucks are kept clean; and (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.	Section 3.2
Noise		
B12	The Applicant must comply with the hours detailed in Table 1. Earthworks and construction: Monday – Friday: 7 am to 6 pm Saturday: 8 am to 1 pm	2.3 Annex C
B13	Earthworks and construction works outside of the hours identified in condition B12 may be undertaken in the following circumstances: (a) works do not exceed the noise limits detailed in Table 8 of the Noise and Vibration Impact Assessment, prepared by Muller Acoustic Consulting, dated 17 September 2020; or (b) works agreed to in writing by the Planning Secretary; or (c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or (d) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.	2.3 Annex C
B14	The Applicant must prepare a Construction Noise Management Plan (CNMP) for the development to the satisfaction of the Planning Secretary. The Plan must form part of a CEMP in accordance with condition C2 and must (a) be prepared by a suitably qualified and experienced acoustic expert;	Annex C

Condition	CEMP reference
(b) describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009) (as may be updated or replaced from time to time); (c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers; (d) include a complaints management system that would be implemented for the duration of the development.	
B15 The Applicant must: (a) not commence construction of any relevant stage until the CNMP required by condition B14 is approved by the Planning Secretary; and (b) implement the most recent version of the CNMP approved by the Planning Secretary for the duration of construction.	Annex C
B18 The Applicant must prepare a Driver Code of Conduct and induction training for the development to minimise road traffic noise. The Code is to be incorporated into the CEMP required under condition C2 and the OEMP required under condition C5.	Annex E
Soils, water quality and hydrology	
B19 The Applicant must: (a) ensure that only VENM, ENM, or other material approved in writing by EPA or the Site Auditor is brought onto the site during construction; (b) keep accurate records of the volume and type of fill to be used; and (c) make these records available to the Planning Secretary upon request.	3.2
B20 Prior to the commencement of any construction or other surface disturbance the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements of the Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book (Landcom, 2004) guideline and the Erosion and Sediment Control Plan included in the CEMP required by condition C2.	3.2 Annex H
B23 Prior to the commencement of construction, the Applicant must prepare a Flood Emergency Response Plan (FERP). The FERP must form part of the CEMP and OEMP required by conditions C2 and C5 and must: (a) be prepared by a suitably qualified and experienced person(s); (b) address the provisions of the Floodplain Development Manual (2005) and any relevant guidelines; (c) be prepared in consultation with the State Emergency Service; (d) include details of: i. the flood emergency responses for both construction and operation phases of the development; ii. predicted flood levels; iii. flood warning time and flood notification; iv. assembly points and evacuation routes; v. evacuation and refuge protocols; and vi. awareness training for employees and contractors.	Annex D

Condition		CEMP reference
B24	The Applicant must: (a) not commence construction until the Flood Emergency Response Plan required by condition B23 is submitted to the Planning Secretary for information purposes; and (b) implement the most recent version of the Flood Emergency Response Plan for the duration of the development.	Annex D
Traffic		
B30	Prior to the commencement of construction, the Applicant must prepare a Construction Traffic and Pedestrian Management Plan (CTPMP) for the development to the satisfaction of the Planning Secretary. The CTPMP must form part of the CEMP required by condition C2 and must: (a) be prepared by a suitably qualified and experienced person(s), (b) be prepared in consultation with TfNSW; (c) detail the measures that are to be implemented to ensure road safety and network efficiency during construction; (d) detail heavy vehicle routes, access and parking arrangements; (e) include a Driver Code of Conduct to: i. minimise the impacts of earthworks and construction on the local and regional road network; ii. minimise conflicts with other road users; iii. minimise road traffic noise; and iv. ensure truck drivers use specified routes; (f) include a program to monitor the effectiveness of these measures; and (g) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.	Annex E
B31	The Applicant must: (a) not commence construction until the CTPMP required by condition B30 is approved by the Planning Secretary; and (b) implement the most recent version of the CTPMP approved by the Planning Secretary for the duration of construction.	Annex E
Road works and access		
B32	Prior to the issue of a Subdivision Works Certificate for Stage 3, detailed engineering plans of the new access road, proposed as part of Stage 3 are to be submitted to Council's Traffic and Transport Manager for consideration by the Parramatta Traffic Committee and approval by Council. The construction of the proposed road is to be carried out by the Applicant with all associated costs to be paid for by the Applicant.	3.2
B33	Prior to the release of the Subdivision Certificate for Stage 3, the Applicant must complete the construction of the access road described in condition B32 to the satisfaction of the relevant roads authority. The Applicant must obtain approval for the works under section 138 of the <i>Roads Act 1993</i> .	3.2
B34	Prior to any dedication, the Applicant must ensure that the construction of the road has been completed to the satisfaction of the relevant roads authority.	3.2

Condition		CEMP reference
Aboriginal heritage		
B39	If any item or object of Aboriginal heritage significance is identified on site: (a) all work in the immediate vicinity of the suspected Aboriginal item or object must cease immediately; (b) a 10 m wide buffer area around the suspected item or object must be cordoned off; and (c) Heritage NSW must be contacted immediately.	3.2
B40	Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the <i>National Parks and Wildlife Act 1974</i> .	3.2
Historic heritage		
B41	If any archaeological relics are uncovered during the course of the work, then all works must cease immediately in that area. Unexpected finds must be evaluated and recorded and, if necessary, excavated by a suitably qualified and experienced expert in accordance with the requirements of Heritage NSW.	3.2
Waste		
B47	All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.	3.2
B48	The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the latest version of EPA's Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014) and dispose of all wastes to a facility that may lawfully accept the waste.	3.2
B49	The Applicant must retain all sampling and waste classification data for the life of the development in accordance with the requirements of the EPA.	3.2
Pests, vermin and priority weed management		
B50	The Applicant must: (a) implement suitable measures to manage pests, vermin and declared priority weeds on the site; and (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or priority weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in the surrounding area.	3.2 6.1
Visual		
B51	Prior to the commencement of construction, the Applicant must prepare a Landscape Management Plan (LMP) to manage the revegetation and landscaping works on-site, to the satisfaction of the Planning Secretary. The LMP must form part of the OEMP required under condition C5. The LMP must: (a) detail the species to be planted on-site, using only locally native species; (b) describe the monitoring and maintenance measures to manage revegetation and landscaping works; and (c) be consistent with the Applicant's Management and Mitigation Measures at Appendix 2.	Annex F

Condition		CEMP reference
B52	The Applicant must: (a) not commence construction until the LMP is approved by the Planning Secretary. (b) must implement the most recent version of the LMP approved by the Planning Secretary; and (c) maintain the landscaping and vegetation on the site in accordance with the approved LMP required by condition B51 for the life of the development.	Annex F
B53	Prior to services installation works commencing within Devon Street, the Applicant is to engage an AQF Level 5 Arborist to prepare a: (a) Tree Protection Plan and Tree Management Specification to incorporate specific tree protection measures to the street trees located along Devon Street in accordance with AS4970-2009 (Protection of Trees on Development Sites); and (b) Tree Removal Plan for any trees proposed to be removed. In the event that street trees are required to be removed on Devon Street, replacement street trees are to be provided in consultation with Council.	3.2
B54	The Applicant must ensure the lighting associated with the development: (a) complies with the latest version of AS 4282-2019 - <i>Control of the obtrusive effects of outdoor lighting</i> (Standards Australia, 2019); and (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties, the public road network or the riparian corridor / Duck River.	3.2
Environmental management		
C1	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:	
C1	be prepared by a suitably qualified and experienced person/s;	1 Section 1.2.1 of the CNMP (Annex C) Section 1 and document control page of the CTPMP (Annex E) Section 1.2 of the LMP (Annex F)
C1(a)	details of: i. the relevant statutory requirements (including any relevant approval, licence or lease conditions);	1.6.1 Section 3.2 of the CNMP (Annex C) Section 4 of the CTPMP (Annex E) Section 8.3 of the LMP (Annex F)
C1(a)	ii. any relevant limits or performance measures and criteria; and	3.2

Condition		CEMP reference
		Section 3.2 of the CNMP (Annex C)
C1(a)	iii. the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	3.2 Annex G Section 3.2 of the CNMP (Annex C) Section 6.3 of the FERP (Annex D)
C1(b)	details of site-specific training to be provided to construction and operation personnel to ensure compliance with the plans;	4 Section 6.2 of the CNMP (Annex C) Section 6.3.3 of the FERP (Annex D) Section 5.3 of the CTPMP (Annex E)
C1(c)	a description of the measures to be implemented to comply with the relevant statutory requirements (including any relevant conditions under SSD 9302), limits, or performance measures and criteria;	3.2 Annex G Section 5 and 6 of the CNMP (Annex C) Section 6 of the FERP (Annex D) Section 4 and Appendix A and B of the CTPMP (Annex E) Section 3, 4, 5 and 6 of the LMP (Annex F)
C1(d)	a program to monitor and report on the: i. impacts and environmental performance of the development; and	6 Annex G Section 6 of the CNMP (Annex C) Section 4 and 6 of the FERP (Annex D) Section 5 and Appendix B of the CTPMP (Annex E)

Condition		CEMP reference
		Section 7 of the LMP (Annex F)
C1(d)	ii. effectiveness of the management measures set out pursuant to paragraph (c) above;	6 Annex G Section 6 of the CNMP (Annex C) Section 4 and 6 of the FERP (Annex D) Section 5 and Appendix B of the CTPMP (Annex E) Section 7 of the LMP (Annex F)
C1(e)	a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Annex G Section 6 of the CNMP (Annex C) Section 5 and Appendix B of the CTPMP (Annex E)
C1(f)	a program to investigate and implement ways to improve the environmental performance of the development over time;	6, 7 Section 6 of the CNMP (Annex C) Section 5 and Appendix B of the CTPMP (Annex E)
C1(g)	a protocol for managing and reporting any: i. incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);	6.3 Section 6 of the CNMP (Annex C) Appendix B of the CTPMP (Annex E)
C1(g)	ii. complaint;	6.4 Section 6 of the CNMP (Annex C)
C1(g)	iii. failure to comply with statutory requirements; and	6.6 Section 6 of the CNMP (Annex C)

Condition		CEMP reference
C1(h)	a protocol for periodic review of the plan.	7 Section 6.8 of the CNMP (Annex C) Section 6.3.4 of the FERP (Annex D) Section 5 of the CTPMP (Annex E) Section 7 of the LMP (Annex F)
C2	The Applicant must prepare a Construction Environmental Management Plan (CEMP) in accordance with the requirements of condition C1 and to the satisfaction of the Planning Secretary.	This plan
C3(a)	As part of the CEMP required under Condition C2 of this consent, the Applicant must include the following: Construction Traffic and Pedestrian Management Plan (see Condition B30);	Annex E
C3(b)	Erosion and Sediment Control Plan;	Annex H
C3(c)	Construction Noise Management Plan (see Condition B14);	Annex C
C3(d)	Community Consultation and Complaints Handling;	5.2 6.4 Refer to sub-plans
C3(e)	Flood Emergency Response (see Condition B23);	Annex D
C4	The Applicant must: (a) not commence construction of the development until the CEMP is approved by the Planning Secretary and provided to the EPA; and (b) carry out the construction of the development in accordance with the CEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.	Noted – this plan
Reporting and auditing		
C10	The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 3.	6.3.2
C11	The Planning Secretary must be notified in writing to the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.	6.3.2

Condition	CEMP reference
C12 A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	6.3.2
C13 A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	6.3.2
Access to information	
C19 At least 48 hours before the commencement of construction until the completion of all works under this consent, the Applicant must: <ul style="list-style-type: none"> (a) make the following information and documents (as they are obtained or approved) publicly available on its website: <ul style="list-style-type: none"> i. the documents referred to in condition A2 of this consent; ii. all current statutory approvals for the development; iii. all approved strategies, plans and programs required under the conditions of this consent; iv. the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged; v. regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; vi. a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; vii. a summary of the current stage and progress of the development; viii. contact details to enquire about the development or to make a complaint; ix. a complaints register, updated monthly; x. the Compliance Report of the development; xi. audit reports prepared as part of any Independent Audit of the development and the Applicant's response to the recommendations in any audit report; xii. any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary. 	5.2.5

1.5 CEMP structure

The CEMP comprises:

1. The CEMP (this document) which:
 - a. provides background information and strategic and broad environmental management considerations for the project; and
 - b. includes procedures and processes for environmental management during project delivery; and
 - c. environmental management sub-plans, which describe controls and mitigation measures to manage specific environmental risks or customer/stakeholder concerns.

1.6 Standards and legislation

1.6.1 Legislation and regulatory requirements

VE Property is aware of the importance of complying with all applicable environmental measures, and where practicable, exceeds the minimum legislative and regulatory requirements. VE Property's obligations include conditions of regulatory approvals as well as the generally applicable environmental acts and their subsidiary legislation. VE Property and the project team monitor changes to environmental legislation through monthly updates on environmental law changes provided by EnviroLaw, and ensure compliance is maintained throughout the project's lifecycle.

Development consent SSD 10459 was granted to VE Property on 31 January 2021 for the project described in Chapter 2. A copy of the development consent is attached as Annex A.

The conditions relevant to the construction of the project are in Section 1.4.

1.6.2 Australian and New Zealand standards

The following standards relating to environmental management apply to the project:

- ISO 14001 Environmental Management Systems – Requirements with Guidance for Use.
- AS 1940 The Storage and Handling of Flammable & Combustible Liquids.
- AS 4326 The Storage and Handling of Oxidising Agents.
- AS 3780 The Storage and Handling of Corrosive Substances (similar standards exist for other classes of dangerous goods).
- AS 2436 Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites.
- AS/NZS 3833 The Storage and Handling of Mixed Classes of Dangerous Goods, in Packages and Intermediate Bulk Containers.

1.6.3 Other standards

The following other standards relating to environmental management apply to the project:

- BS 7385-2 Evaluation and Measurement for Vibration in Buildings. Guide to Damage Levels from Groundborne Vibration.
- IEC 61672.1-2004 Electroacoustics – Sound level meters (AS IEC 61672).

1.6.4 Guidelines

The following guidelines relating to environmental management apply to the project:

- IECA 2008 Best Practice Erosion and Sediment Control.
- ANZECC 1992 Australian Water Quality Guidelines for Fresh and Marine Waters.
- Landcom (2004) Managing urban stormwater – soils and construction volume 1.
- EPA (2014) Waste Classification Guidelines.



CHAPTER 2

PROJECT DESCRIPTION

2 PROJECT DESCRIPTION

2.1 Location and character

2.1.1 Location

The site is in Rosehill, approximately 2 km from the Parramatta Central Business District. The site address is 9 Devon Street, Rosehill and is part of lot 100 in deposited plan 1168951. The site covers 35.068 ha.

2.1.2 Zoning

The site is in the Parramatta Local Government Area (LGA) and is zoned IN3 Heavy Industrial under the land use table in Part 2 of the LEP.

2.1.3 Access and road network

The site is accessed from James Ruse Drive via Grand Avenue and Colquhoun Street or Grand Avenue, Durham and Devon streets (Figure 2.1). The site is accessed from Parramatta Road via Wentworth, Kay and Unwin streets.

Unwin, Kay, Wentworth, Colquhoun, Devon and Durham streets are local two lane/way roads with parking on both sides, although parking is limited on sections of these streets. Parramatta Road and James Ruse Drive are four lane state arterial roads.

Traffic management at local intersections comprises:

- Traffic signals at the intersections of Parramatta Road/Wentworth Street and James Ruse Drive/Grand Avenue.
- Roundabout at the intersection of Colquhoun Street/Grand Avenue.
- Priority for the Wentworth/Kay/Unwin/Colquhoun street route, with intersecting streets subject to give way and or stop signs.
- Stop sign at Grand Avenue/Durham Street intersection.

Traffic management at the Parramatta Road/Wentworth Street intersection comprises:

- Right turn bay and turning phase for the right turn into Wentworth Street.
- Two approach lanes in Wentworth Street.
- Two through lanes including one shared left in each direction of Parramatta Road.

Traffic management at the James Ruse Drive/Grand Avenue/Hassall Street intersection comprises:

- Right turning lanes in both approaches of James Ruse Drive and three through lanes (one shared left) in each direction.
- Multiple approach lanes in Grand Avenue and Hassall Street.

Personnel can also walk to the site from the Clyde Railway Station and bus stops on James Ruse Drive near George Street.

Figure 2.1
Local context

Central Sydney Industrial Estate incorporating the Sustainable Road Resource Centre
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN



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2.1.4 Sensitive receivers

To assess potential impacts from the project on nearby landowners, sensitive receivers are shown on Figure 2.1 of Annex C. The receivers are categorised as:

- 'R' – private residential.
- 'FR' – future residential.
- 'In' – industrial.
- 'C' – commercial.
- 'Wor' – place of worship.
- 'Sch' – school.
- 'AR' – active recreation.

2.2 Description

The project involves the staged subdivision of the Central Sydney Industrial Estate on lands known as the Western Area of the former Shell Oil Refinery at Clyde. Stage 1 (being Lot 6 of the subdivision) will then be developed as the Downer Sustainable Road Resource Centre described in a separate CEMP.

VE Property proposes the following:

- Staged subdivision of the site into fourteen lots that will form the Estate.
- Earthworks/filling to bench the lots to form a flat pad in the northern half of the site then gradually grading down towards the Duck River in the southern half of the site.
- Construction of a new public access road running south from an intersection with Devon Street, providing access to those lots that do not front Devon Street, in accordance with council specifications.
- Installation of an inter-allotment stormwater drainage system to provide a single stormwater connection point to each lot of the proposed subdivision. Temporary erosion and sediment controls will also be installed to manage water quantity and quality over the lots until they are sold and developed, when permanent stormwater management infrastructure will be installed within each lot.
- A 40 m average riparian corridor along Duck River.
- Landscaping/planting:
 - Along both sides and around the cul-de-sac of the proposed access road.
 - Within the previously disturbed part of the proposed riparian corridor along Duck River in accordance with a LMP (Annex F) and vegetation management plan (VMP).

Provision has been made for a 5 m easement for services along the northern site boundary adjacent Devon Street. The extension of the following key municipal services will likely be required to suit the needs of each of the lots:

- Potable water – potentially construction of a ring main linking the main under Colquhoun Street to the main under Durham Street (subject to separate approval by Sydney Water).
- Wastewater (sewer) – extension of the rising main along Devon Street and minor sideline extension of the gravity sewer along Colquhoun Street (subject to separate approval by Sydney Water).
- Electricity – supply may be required to each lot from the high voltage line along Devon Street (subject to separate approval by Endeavour Energy).

Development of the Estate for new industrial uses (in accordance with current zoning), other than Lot 6, will then be subject to future applications.

2.2.1 Lot preparation

Condition B47 of SSD 9032 requires the rehabilitation of the Western Area to achieve the final landform shown in Appendix 4 of the consent. This application does not seek to modify the approved final landform, but rather, it seeks approval for the development of further earthworks to re-contour the land on the lots.

The lots other than Lot 64 will be benched in two stages (no works are proposed on Lot 64, which will be maintained as is).

Bulk earthworks on the other lots will comprise the construction of a flat pad at reduced level (RL) 4.8 m Australian height datum (AHD) in the northern half. The proposed earthworks will then gradually grade down towards Duck River in the southern half of the site to RL 4.4 m and 4.3 m AHD at the southern ends of lots 63 and 64 respectively.

Cut and fill is likely to be balanced with approximately 33,000 m³ cut and 33,000 m³ fill.

There will be an allowance for the importation of up to 30,000 m³ of virgin excavated natural material (VENM) and/or excavated natural material (ENM) for site presentation.

All lots will be hydroseeded or spread with tackifier after earthworks to prevent wind erosion.

2.2.2 Access

Lots 51-56 will be accessed via new private entry driveways subject to a future development application after the lots are sold. Lots 55 and 56 will have the option of access either off Devon Street or the new public road. Lots 58-64 will be accessed from Devon Street via a new public road with driveways to the new road subject to future development applications after the lots are sold.

The new access road will be connected to Devon Street and will be an industrial road with asphalt surface and kerb and guttering to council standards. It is proposed as a public road.

The road reserve of the proposed road will be 21 m wide with a 12 m wide carriageway, 3.65 m wide western verge, and a 5.35 m wide eastern verge including a 3 m wide shared cycle/pedestrian path.

A road easement will be provided from the road to Duck River to allow for the potential road extension and bridge.

2.2.3 Stormwater management

Construction erosion and sediment controls

An erosion and sediment control plan has been included in Annex H.

Initially, a 'Type D' sediment basin will be installed on the southern site boundary, which will catch and treat the five day 85th percentile volume during construction. Water will be diverted to the basin via temporary diversion drains inside the site boundary, along the proposed road and the boundaries of some lots.

Type D basins are generally pumped out following rain when suspended solid concentrations of less than 50 mg/L are achieved from flocculation treatments.

Sediment fences will be installed along the site boundary to prevent sediment, not captured in the sediment basin, from migrating offsite.

Post construction pre-operation erosion and sediment controls

Once the lots are prepared, additional temporary Type D sediment basins will be installed in a corner of each lot to treat sediment laden runoff until the lots are developed by eventual owners. Additional temporary diversion drains will be provided to divert water from the lots to the basins. The basins will discharge to pits associated with the permanent drainage network described below.

Other management measures will be:

- Minimising the extent of disturbed areas across the site at any one time.
- Progressive stabilisation of disturbed areas or previously completed earthworks.
- Regular monitoring and implementation of remedial works to maintain the efficiency of all controls.

2.2.4 Landscaping

Areas of the site will be landscaped as described below and in Annex F.

Riparian corridor

There will be an average 40 m wide riparian corridor along the Duck River at the southern site boundary.

Access road reserve

The verges to the proposed road will be planted in accordance with council requirements.

Northern boundary

A 5 m easement along the sites northern and north-western boundaries will be provided for services along Devon and Colquhoun streets.

The existing turf and trees along the Devon and Colquhoun street frontages will be retained where possible, except at the proposed site access road. Provision has also been made for a 5 m landscape setback along the Devon and Colquhoun streets frontage with landscape works/planting subject to future development applications.

2.2.5 Services

The site is serviced with key municipal services as part of its previous use as Clyde Refinery and Terminal. However, the site will require service extensions to the proposed lots.

The following existing services are shown on Drawing C013919.01-DA15 (refer to Appendix 1 of Annex A):

- Potable (drinking) water.
- Recycled Water.
- Wastewater (sewer).
- Electricity.
- Communications.
- Gas.

Potable water

A connection to Sydney Water's 375 mm cast iron cement lined potable water main in Colquhoun Street is available to Lot 51. However, no connections are available to the other lots. VE Property

has engaged a Sydney Water servicing coordinator (SWSC) to coordinate delivery of potable water to the site.

Sydney Water will issue a notice of requirements after the development application is approved, which will confirm connection requirements to the new lots. The SWSC advises potable water supply can be provided to each lot by way of mains connection along Devon Street.

However, the SWSC advises Sydney Water will likely take the opportunity to link the existing 375 mm main in Colquhoun Street with the 200 mm main in Durham Street along Devon Street. This would produce a 'ring main', providing a higher level of reliability for lots in this area in case of a main break/shutdown.

Potable water services will be designed to the requirements of Sydney Water following the receipt of the notice of requirements.

Sewer

The following Sydney Water sewer assets occur adjacent to the site:

- Rising main in Durham and Devon streets.
- Gravity main in Colquhoun Street.

The SWSC will coordinate provision of sewer to the site and advises a rising main/pressure main will be required from Colquhoun Street to the lots. Sydney Water will confirm sewer requirements in the notice of requirements.

Recycled Water

A recycled water service operated by Water Utilities Australia (Aquanet) along Devon and Durham streets is available to the site. Water Utilities Australia has advised supply could be made available and that the water is suitable for industrial uses, irrigation, wash down, cooling towers and boilers and use in recycling processes.

VE Property will negotiate extension of the current supply along the new public road to all lots to make recycled water available to future users, should new users require it.

Electricity

The site is in a good location for electrical supply given its proximity to Camellia Zone and Rosehill Zone substations.

Endeavour Energy has granted approval for the installation of all electrical services.

An electrical substation to suit the initial streetlight power for the subdivision, will be built on Lot 54.

Communications

NBN Co is the communications authority relevant to the site. There are national broadband network (NBN) services in Devon Street which can be extended to each lot. The need for minor extensions will be confirmed with NBN Co.

2.3 Hours of construction, employment, plant and equipment

Preparation of the lots will commence after conclusion of the works associated with WARP. Civil works will commence in the second half of 2021 and will take approximately nine months. Installation of services will occur prior to this, likely in the first half of 2021.

Construction will typically occur between 7am-6pm Monday-Friday and 8am-1pm Saturday. Construction will also take place at night-time and on Sundays when required. Construction on public holidays will be avoided.

There will be up to 35 construction employees on site at any time.

There will be up to 10 items of plant and equipment on site at any time comprising water cart, dump trucks, excavators, front end loaders, compactors, concrete truck, bulldozer, grader, backhoes, small and medium cranes, concrete pump, kerb and guttering machine, piling rig and concrete crusher.

2.4 Construction contacts

The key construction contacts are in Table 2.1.

Table 2.1 Construction contacts

Role	Name	Contact details
Project Director	TBC	TBC
Project Manager	TBC	TBC
Senior Project Engineer	TBC	TBC
Project Environment Manager	TBC	TBC
Site Supervisor	TBC	TBC
Safety Manager	TBC	TBC



CHAPTER 3

ENVIRONMENTAL MANAGEMENT

3 ENVIRONMENTAL MANAGEMENT

3.1 Objectives and targets

The objectives and targets in Table 3.1 aim to ensure that identified and potential environmental impacts that could occur during works are within acceptable and agreed limits. This is achieved through pro-active environmental management planning prior to carrying out work.

Table 3.1 Objectives and targets

Focus area	Objective	Target
Legal Compliance	<ul style="list-style-type: none"> ▪ Compliance with all legal requirements. ▪ Construct the project in accordance with environmental approvals. 	<ul style="list-style-type: none"> ▪ No regulatory infringements, including PINS and prosecutions. ▪ 100% compliance with statutory approvals.
Monitoring	Complete internal environmental audits in accordance with the pre-planned audit schedule.	Complete 100% of scheduled environmental audits.
Reporting	Promote a positive reporting culture. Ensure all environmental observations, hazards and near misses and incidents are recorded. Ensure actions are closed out by the nominated due dates.	0 actions arising from incident overdue >30 days.
Planning	Ensure that workers are provided with regular and up-to-date information on environmental aspects for the duration of the project.	Review the content of the CEMP prior to 25% of the scheduled project duration to maintain the currency of information provided to workers and others.
Risk Management	Ensure that workers are familiar with hazards and risks associated with the execution of the scope of work (work under contract).	Work is conducted in accordance with the CEMP, sub-plans and conditions of consent.
Consultation	Ensure that workers are regularly consulted on matters that affect the environment.	Conduct pre-start meetings (daily), and toolbox meetings (monthly).
Training	Ensure workers are provided with training to enable work practices to be undertaken that are safe and minimise risk to the environment.	All workers undertake, as a minimum, the two levels of induction training, i.e. project specific induction and site specific induction.

3.2 Risk management

Throughout the duration of the project, risks and opportunities are identified, assessed, and controlled using a number of different tools.

The identification of environmental activities, the respective potential impact to the environment and measures to avoid, mitigate and manage the potential environmental impacts is determined following a review of the:

- contract and its associated environmental conditions;
- development consent conditions (Annex A);
- environmental impact statement and response to submissions; and
- actual scope of work and consideration of all applicable legislation, standards, and other conditions.

Table 3.2 provides measures to avoid, mitigate and manage the potential environmental impacts identified through the environmental impact assessment of the project. The sub-plans outlining further management measures for specific aspects are in the following annexes:

- Annex B: Unexpected contamination procedure.
- Annex C: Construction noise management plan (CNMP).
- Annex D: Flood emergency response plan (FERP).
- Annex E: Construction traffic and pedestrian management plan (CTPMP).
- Annex F: Landscape management plan (LMP).
- Annex G: Contingency management plan.
- Annex H: Construction erosion and sediment control plan (ESCP).

Table 3.2 Environmental management measures

Aspect	Measure	Timing/frequency
General	All reasonable and feasible measures will be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from construction.	Construction
	All licences, permits, approvals and consents will be obtained and maintained as required for the development.	Prior to construction and ongoing
	VE Property will obtain relevant approvals from service providers before the construction of any utility works.	Prior to construction
	The information listed in Condition C19 will be uploaded to the website and kept up to date.	At least 48 hours prior to construction
	The incidents and complaints management strategies in this CEMP will be implemented to ensure that any incidents and/or complaints relating to the construction activities are promptly and effectively addressed.	Construction
	Construction employees and contractors will be suitably inducted and trained prior to commencing any work on site.	Prior to construction and ongoing
Air quality	Weather forecast to be checked prior to undertaking material handling or processing and appropriate management measures implemented prior to adverse weather to minimise dust e.g. dampening exposed surfaces and haul roads, dampening or covering temporary stockpile with high fines fractions.	Construction
	If adverse weather conditions occur during construction, activities are to be assessed and modified as required. Cease activity where reasonable levels of dust cannot be maintained using available means.	
	Engines of on-site vehicles and plant to be switched off when not in use.	Construction
	Vehicles and plant are to be fitted with pollution reduction devices where practicable.	Construction
	Vehicles are to be maintained and serviced according to manufacturer's specifications.	Construction
	Activities are to be visually monitored to identify dust generation.	Construction
	The extent of exposed surfaces and stockpiles is to be kept to a minimum.	Construction
	Exposed areas and stockpiles are either to be covered or are to be dampened with water as far as is practicable if dust emissions are visible, or there is potential for dust emissions outside operating hours.	Construction
	Stockpiles of material that are going to remain in place for an extended period of time and have the potential to generate dust are to either be covered or vegetated.	
	Dampen material when excessively dusty during handling.	Construction
	Reduce drop heights from loading and handling equipment where practical.	Construction
	Vehicle traffic is to be restricted to designated routes.	Construction
Co-ordinate the delivery schedule to avoid a queue of incoming or outgoing trucks that will be idling for extended periods of time.	Construction	

Aspect	Measure	Timing/frequency
	Speed limits are to be enforced.	Construction
	Vehicle loads are to be covered when travelling off-site.	Construction
Water and soils	If more than 3 ML/yr of groundwater is predicted to be taken during construction of the project, VE Property or their appointed contractor will consult with NRAR regarding acquisition of a license under the NSW <i>Water Management Act 2000</i> .	Prior to groundwater dewatering
	Erosion and sediment control plans (ESCPs) (Appendix B3 of Appendix B of the RTS), or equivalent, will be incorporated into the CEMP. The ESCPs will be prepared in accordance with the Blue Book. The following aspects will be addressed within the ESCPs and CEMPs: <ul style="list-style-type: none"> Construction traffic restricted to delineated access tracks and maintained until construction complete. Appropriate sediment and erosion controls to be implemented prior to soil disturbance. Stormwater management to avoid flow over exposed soils which may result in erosion and impacts to water quality. Location of stockpiles outside of flow paths. Inspection of all permanent and temporary erosion and sedimentation control works prior to and post rainfall events. 	Prior to and during construction
	The quality of discharge from the site is to satisfy the following Water Quality Objectives (WQOs) per Landcom Blue Book requirements: <ul style="list-style-type: none"> Water pH released from a controlled sediment basin outflow shall be within the range 6.5 to 8.5. Suspended solids released from controlled sediment basin outflows will be no greater than 50mg/L, 75 NTU's (Nephelometric Turbidity Units) or other turbidity measurement based on confirmed laboratory correlation. Any correlation should be confirmed through laboratory assessment. Oils and grease – no visible films or odour. Litter – no visible litter washed or blown from the site. 	Construction
	The effectiveness of sediment and erosion control measures will be confirmed through ongoing site inspections by the construction contractor. Adjustments as required during the construction period will be made based on confirmed site conditions and effectiveness of the implemented measures.	Prior to and during construction
	Only VENM, ENM, or other material approved in writing by EPA will be brought onto the site.	Construction
	Accurate records of the volume and type of fill used will be kept and made available to the Planning Secretary upon request.	Construction
	VE Property or their appointed contractor will comply with section 120 of the POEO Act, which prohibits the pollution of waters.	Construction
	All temporary earth diversion berms/bunds and sediment basin embankments will be machine compacted, seeded and mulched for temporary vegetation cover as soon as they have been formed.	Construction
	Clean water will be diverted away from disturbed ground and into the drainage system.	Construction
	All sediment trapping structures and devices will be inspected after storms or high rainfall (>20mm) for structural damage or clogging, trapped material will be removed to a safe, approved location.	Construction – after rain

Aspect	Measure	Timing/frequency
	All cut and fill slopes will be seeded and hydromulched.	Construction – within 10 days of completion of slopes
	Access and exit areas will include 'truck shaker', or other approved methods, for the removal of soil materials from motor vehicles.	Construction
	VE Property or their appointed contractor will provide and maintain slopes, crowns and drains on all excavations and embankments to ensure satisfactory drainage at all times. Water will not be allowed to pond on the works unless such ponding is part of an approved ESCP.	Construction
	Sediment basins will have a marker placed as per the detail to indicate when sediment should be removed.	Construction
	Sediment removed from a basin is to be classed and dewatered prior to removal from site.	Construction
Biodiversity	An average 40 m riparian corridor will be provided along Duck River consistent with the averaging rule described in DPI Water's (2012) Guidelines for Riparian Corridors on Waterfront Land.	Construction
	The existing native vegetation along Duck River is to be demarcated as a no-go zone and is to include appropriate signage. Access to the 40 m riparian corridor (outside the existing native vegetation) during construction is to be limited to personnel and equipment required to install the stormwater outfalls and for revegetation works in accordance with the vegetation management plan. After the stormwater outfalls and revegetation works are complete, the 40 m riparian corridor will be permanently fenced, and the only access will be for maintenance.	Prior to and during construction
	The riparian corridor within the project site is to be inspected on a regular basis to allow early identification of any unexpected impacts associated with construction of the project, so that construction management measures can be adjusted/ revised to prevent any further impacts.	Construction
	Excavations are to be checked at the start of each day for the presence of any fauna that may have entered the site and become trapped during the night. A suitably qualified ecologist is to be engaged to relocate any fauna if required.	Construction
	If unexpected threatened flora and fauna species are discovered, stop works immediately and contact DPIE - Environment, Energy and Science group for advice.	Construction
	If impacts to aquatic environments are observed within the vicinity of the work area (e.g. spill of any chemicals or substantial runoff of sediment), works at that location should cease and the NSW EPA and/or council should be contacted for further advice.	Construction
	Suitable measures will be implemented to manage declared priority weeds.	Construction
	Prior to services installation works commencing within Devon Street, VE Property is to engage an AQF Level 5 Arborist to prepare a: <ul style="list-style-type: none"> ▪ Tree protection plan and tree management specification to incorporate specific tree protection measures to the street trees along Devon Street in accordance with AS4970-2009 (Protection of Trees on Development Sites). ▪ Tree removal plan for any trees proposed to be removed. If street trees are required to be removed on Devon Street, replacement street trees are to be provided in consultation with Council. 	Prior to installation of services
Aboriginal heritage	The following procedure will be implemented if a suspected Aboriginal or historic heritage object is identified during construction of the project:	Construction

Aspect	Measure	Timing/frequency
unexpected finds protocol	<ul style="list-style-type: none"> ▪ All works must cease immediately in the area to prevent any further impacts to the object. ▪ A 10 m wide buffer area around the suspected item or object must be cordoned off. ▪ Notify environmental representative. ▪ Engage a suitably qualified archaeologist to determine the nature, extent and significance of the find and provide appropriate management advice. Management action(s) will vary according to the type of evidence identified, its significance (both scientific and cultural) and the nature of potential impacts. ▪ Notify the Environment, Energy and Science Group of the unexpected find and management advice provided by the appointed archaeologist. ▪ Prepare and submit an Aboriginal Heritage Information Management System (AHIMS) site card for the site if it is Aboriginal. ▪ Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the <i>National Parks and Wildlife Act 1974</i>. 	
Historic heritage unexpected finds protocol	<p>If any archaeological relics are uncovered during the course of the work, then all works must cease immediately in that area. Unexpected finds must be evaluated and recorded and, if necessary, excavated by a suitably qualified and experienced expert in accordance with the requirements of Heritage NSW.</p>	Construction
Human skeletal remains	<p>The following procedure (New South Wales Police Force, 2015; NSW Health, 2008) will be implemented if potential human skeletal remains are identified during construction of the project:</p> <ol style="list-style-type: none"> 1. All work in the vicinity of the remains should cease immediately. 2. The location should be cordoned off and the NSW Police notified. 3. If the Police suspect the remains are Aboriginal, they will contact the Environment, Energy and Science Group and arrange for a forensic anthropologist or archaeological expert to examine the site. <p>Subsequent management actions will be dependent on the findings of the inspection under Point 3 above:</p> <ul style="list-style-type: none"> ▪ If the remains are identified as modern and human, the area will become a crime scene under the jurisdiction of the NSW Police. ▪ If the remains are identified as pre-contact or historic Aboriginal, the Environment, Energy and Science Group and relevant Aboriginal parties are to be formally notified in writing. Where impacts to exposed Aboriginal skeletal remains cannot be avoided an appropriate management mitigation strategy will be developed in consultation with Environment, Energy and Science Group and Aboriginal parties. ▪ If the remains are identified as historic non-Aboriginal, the site is to be secured and Heritage NSW contacted. ▪ If the remains are identified as non-human, work can recommence immediately. 	Construction
Hazardous substances and dangerous goods	All personnel will complete awareness training that includes hazardous substance management, emergency response and the use of spill kits.	Construction
	Hazardous materials will be transported to and from the site by a licensed contractor, and stored and handled in accordance with the requirements of relevant regulatory requirements, Australian Standards and the ADG Code.	Construction
	Vehicles and transport vessels used on-site are to be regularly inspected for leaks, spills or other damage.	Construction

Aspect	Measure	Timing/frequency
	Storage and handling of any dangerous goods shall comply with Australian Standards, including but not limited to AS1940 and AS 3780.	Construction
	Appropriately sized and stocked spill response kits would be provided within strategic areas of the site, and within mobile vehicles used to transport hazardous materials at the site.	Construction
	Spill response kits would be maintained, clearly identified and readily accessible on site for use in case of accidental spill. Key staff will be skilled in their location as well as usage, application and disposal of contaminated material.	Construction
	During construction activities, all hazardous substances will be stored in appropriate containers in bunded areas within mobile vehicles, or designated storage areas to minimise the risk of spillages and mobilisation of any pollutants into the soil or stormwater drains.	Construction
	Vehicles and equipment will be refuelled at the diesel storage area.	Construction
	Any scheduled mobile plant maintenance and repairs will be conducted offsite	Construction
	Equipment will not be used if there are any signs of fuel, oil or hydraulic leaks. Leaks will be repaired immediately, or the equipment will be removed from site and replaced with a leak-free item.	Construction
	Any chemicals and fuels will be stored, labelled, transported and used in accordance with Australian standards and in line with best practices. All hazardous substances or chemicals imported to site shall be accompanied by a safety data sheet.	Construction
	A database would be maintained to assist in the recording and management of any chemicals and hazardous substances stored at the project site.	Construction
	Any fuels spillage will be collected, and the contaminated material disposed of at a licensed waste management facility.	Construction
	Emergency procedures will be prepared and implemented for dealing with spillage of hazardous substances and dangerous goods.	Construction
	Any contaminated soil resulting from spills would be excavated, classified in accordance with Waste Classification Guidelines, and disposed to a licensed waste management facility, or, remediated on site in accordance with recommendations provided within a contaminated land management action plan developed by a contaminated land specialist.	Construction
	The unexpected contamination procedure in Appendix B will be implemented if suspected contamination is discovered during works.	Construction
Public safety	To address the risks to public safety, the site will be fully fenced. The site entry and exit points will be monitored by surveillance cameras, and have necessary signage erected. All vehicle and pedestrian movements in and out of the site will be closely monitored.	Construction
	All visitors to the site will be required to report to the site administration office and register prior to gaining entry to the active areas of the site.	Construction
Risk to workers	Designated first aid and emergency response equipment will be available. Appropriately trained personnel will be on site throughout the life of the operations to provide first aid and respond to site emergencies.	Construction
	Any injuries incurred at the site will be reported and investigated in consultation with SafeWork NSW and other relevant authorities. Any recommendations or findings of investigation reports will be implemented by VE Property and their appointed contractor where feasible and practical.	Construction

Aspect	Measure	Timing/frequency
Waste	Waste will be managed in accordance with the waste hierarchy of avoidance, re-use, recycling/re-processing/treatment and disposal.	Construction
	Waste will be managed in accordance with EPA's (2014) Waste Classification Guidelines and regulatory requirements. This will include (i) its classification prior to leaving the site and (ii) recording (via an appropriate waste tracking system) its legal off-site transportation for re-use, recycling or disposal.	Construction
	Waste will be stored in a suitable container, with a lid, and transported from the site to an appropriate facility. Enough suitable receptacles for general waste, hazardous waste and recyclable materials will be provided for waste disposal, including sufficient bins to allow separation of wastes for recycling.	Construction
	All waste materials removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the materials.	Construction
	Wastes will be securely stored to ensure that pollutants are prevented from escaping.	Construction
	Fuel, lubricant or hydraulic fluid spillages will be collected using absorbent material and the used spill kit material will be stored separately before disposal to a suitably licensed waste facility.	Construction
	Hazardous materials will only be removed by suitably qualified, licensed and experienced contractor.	Construction
	Documents and records of the transport and destination of all materials removed from site will be kept as proof of correct disposal and for environmental auditing purposes.	Construction
	Waste streams will be sorted to maximise the reuse/recycling potential and minimise disposal costs.	Construction
	Waste will be covered, stored and removed in a timely manner so as not to attract animals.	Construction
	Waste handling, transport and disposal will be in accordance with the requirements of the POEO Act, WARR Act and relevant EPA or SafeWork NSW guidelines.	Construction
	A waste management register will be maintained and will include: <ul style="list-style-type: none"> ▪ Type of waste and its classification (according to the POEO Act and Waste Classification Guidelines). ▪ Quantities of waste, measured in tonnes. ▪ How and where the waste was reused, recycled, stockpiled or disposed of. ▪ Date when the waste was reused, recycled, stockpiled or disposed of. ▪ Name and waste transport licence (if applicable) of the transporter used. 	Construction
All sampling and waste classification data will be retained for the life of the development in accordance with the requirements of the EPA.	Construction	
Landscaping and visual amenity	Landscaping will be in accordance with the landscape design report and landscaping plans in Annex F.	Construction
	Outdoor lighting will be installed and operated in accordance with Australia Standard 4282–2019 – Control of the obtrusive effects of outdoor lighting, including directing lighting inside the site minimising light spillage outside the site.	Pre-construction/ design and construction

Aspect	Measure	Timing/frequency
New access road	Prior to the issue of a Subdivision Works Certificate for Stage 3, detailed engineering plans of the new access road, proposed as part of Stage 3 are to be submitted to Council's Traffic and Transport Manager for consideration by the Parramatta Traffic Committee and approval by Council. The construction of the proposed road is to be carried out by VE Property with all associated costs to be paid for by VE Property.	Pre-construction/ design and construction
	Prior to the release of the Subdivision Certificate for Stage 3, VE Property must complete the construction of the access road described in condition B32 to the satisfaction of the relevant roads authority. VE Property must obtain approval for the works under section 138 of the <i>Roads Act 1993</i> .	Pre-construction/ design and construction
	Prior to any dedication, VE Property must ensure that the construction of the road has been completed to the satisfaction of the relevant roads authority.	Construction

3.3 Change management

Zero Harm related changes in the workplace are managed using the following process:

- Initiate and plan the change.
- Consult on the change.
- Approve the change.
- Implement the change.
- Review the change.

3.4 Subcontractor management

Subcontractors comply with the requirements of the subcontract agreement, which includes the details of all environmental requirements while performing works under the control and direction of VE Property or their appointed contractor.

Subcontractor personnel adopt the same responsibilities as outlined for personnel, inclusive of reporting all matters relating to health, safety, and the environment.

Pre-qualification evaluation and assessment, engagement, review and on-site management and monitoring of subcontractors is undertaken.



CHAPTER 4

TRAINING AND AWARENESS

4 TRAINING AND AWARENESS

4.1 Overview

VE Property recognises the importance of employee training and induction, and the critical role it plays in supporting the safe and environmentally responsible conduct of project operations.

VE Property promotes the following:

- A person must not undertake an activity that pollutes, or might pollute, the environment unless the person takes all reasonable and practicable measures to prevent or minimise any resulting environmental harm.
- In determining what activities are required to be taken, the following are considered (amongst other things):
 - The nature of the pollution or potential pollution and the sensitivity of the receiving environment.
 - The current state of technical knowledge and likelihood of successful application of the activities that might be taken.
 - The financial implications of the activities that might be taken, as those implications relate to the class of person undertaking activities of the same or a similar kind.

VE Property manages project activities in such a manner as to:

- minimise impact to the environmental; and
- educate personnel on their responsibilities relating to protecting the environment.

All personnel have environmental management responsibilities, and VE Property ensures that these responsibilities are communicated to all personnel via appropriate environmental management training, including the initial environment induction.

4.2 Inductions

Environmental awareness training is provided to all personnel involved with the project, including all subcontractors and visitors, via inductions.

A project specific induction is delivered to all personnel and subcontractors highlighting the hazards specific to the site, and the controls necessary to manage them appropriately. Induction handbooks and associated training presentations may be used for the induction.

Personnel are re-inducted annually. The environmental component of the induction is tailored for each group of inductees (as applicable) to ensure that specific components of work are adequately addressed. This method of environmental awareness training ensures that all personnel are aware of:

- The importance of conformance with environmental policy and procedures and the requirements of the CEMP and associated sub-plans.
- The significant environmental aspects of the project works and the environmental benefits of improved work performance.
- Their roles and environmental responsibilities for achieving conformance with environmental policy and procedures and with the CEMP, including site emergency preparedness and response requirements.
- The potential consequences of departure from specified operating procedures.

All personnel, including subcontractors, attend inductions prior to commencing work on the project. Records of inductions are recorded in the project's training matrix.

4.2.1 Induction and environmental training

The Project Manager will ensure that all employees and contractors involved in construction are appropriately inducted and trained prior to commencing work on site. Training in relation to environmental responsibilities and implementation of this CEMP will take place initially through the site induction training and then on an ongoing basis through 'toolbox talks' (or similar).

The environmental induction training will cover all elements of the CEMP and will include, as a minimum, the following:

- Purpose and objectives of the CEMP.
- Requirements of due diligence and duty of care.
- Conditions of any environmental licences, permits and approvals.
- Potential environmental emergencies on site and the emergency response procedures, locations and training in the use of emergency spill kits for spills on water and on land.
- Reporting, notification and management requirements for pollution, contamination and other environmental incidents, and for damage and maintenance to environmental controls.
- High-risk activities and associated environmental safeguards i.e. earthworks, night works, operation and maintenance of concrete washouts, and washing, refuelling and maintenance of plant and equipment.
- Working in or near environmentally sensitive areas.
- Site-specific issues including:
 - Erosion and sediment controls, water quality controls and sediment basin management (Section 3.2 and Annex H).
 - Restricted access to the Duck River riparian corridor (Section 3.2).
 - Responsibilities under the NSW *National Parks and Wildlife Act 1974*, including the need to cease work immediately and report any object of potential Aboriginal heritage unearthed during ground disturbance (Section 3.2).
 - Noise management controls (Annex C) and air quality management controls (Section 3.2).
 - Traffic controls to maintain surrounding property access for residences and businesses and to minimise disruptions to these properties for the duration of construction (Annex E).
- Incident management processes (Section 6.3).

Toolbox talks will be held to identify environmental issues and controls when works commence in a new area of the site or a new activity, as well as when environmental issues arise on site. The toolbox talk will include but not be limited to:

- A description of the activity and the area.
- Identification of the environmental issues and risks for the area.
- Outline the mitigations measures for the works and the area (Section 3.2).

4.2.2 Visitor inductions

Subcontractors that attend site on an intermittent basis, e.g. a delivery driver, are typically inducted on a visitor basis. Subcontractors are assessed by the relevant member of the project team on a case-by-case situation to determine if a subcontractor is required to undertake a visitor induction or full site induction.

A visitor induction is valid for a period of 2 weeks.

4.3 Training

Employee training and competency requirements are reviewed annually, or as an employee's role changes.

VE Property or its contractor will maintain a database of training records and employee competencies that provides capabilities such as tracking expiry of time limited competencies and programming of training requirements.

Personnel who undertake activities with significant environmental risk complete specialist environmental training, which is conducted by the head civil contractor on behalf of VE Property, in addition to the environmental induction.



CHAPTER 5

COMMUNICATIONS

5 COMMUNICATIONS

5.1 General

Achieving effective communication between all parties is critical to ensure that the requirements of this CEMP are met.

VE Property and their appointed contractor will use a number of methods to communicate with employees, subcontractors, and visitors.

Typical methods of communication on site include:

- Pre-start meetings.
- Zero Harm start-up (i.e. pre-commencement) toolbox talks.
- Zero Harm inductions.
- Noticeboards.
- Toolbox talks.
- Environment alerts.

Pre-start and toolbox meetings include delivering key environmental messages and audit and inspection results and communicating environmental risks for the scheduled activities.

Pre-start meetings are minuted and the minutes reviewed and signed by the meeting chairperson, and made available to all VE Property workers and visitors (if applicable) on site.

The Project Manager ensures that relevant documentation is filed electronically, and hard copies made available to personnel. Hard copy documentation made available to personnel typically includes:

- Standard operating procedures.
- Work instructions.
- Fatal risk control standards.
- Risk assessments.
- Minutes of meetings.
- Copies of pertinent legislation and codes of practice.

5.2 External communication

5.2.1 Stakeholders

Primary community stakeholders during construction will comprise the following immediate neighbours:

- Viva Energy.
- Downer.
- Goodman Property.
- Charter Hall Rosehill Distribution Centre.
- Rosehill Gardens.

5.2.2 Communications information

Prior to major site establishment, VE Property or its contractor will provide information to neighbours regarding current and upcoming construction activities and possible disturbances, including:

- a program of construction activities.
- scheduling.
- details of mitigation measures to minimise impacts.

VE Property's appointed contractor will provide neighbours with 24-hour contact details.

5.2.3 Information channels

The project phone number, email and direct mail address will provide neighbours the opportunity to gain information about the project and raise any concerns. Both enquiries and complaints will provide important feedback to improve project processes and mitigation measures to avoid or minimise further complaints.

These numbers and contact details will be included on all notifications, signage and advertisements relating to construction activities.

5.2.4 Media and government relations

VE Property and their appointed contractors will implement the following protocols if contacted by the media or a government representative:

- Ensure no statement (written, verbal or photographs) is provided to media or government representatives regarding the project, without the prior written approval of VE Property executive management.
- Do not permit media or government representatives onsite without prior written approval from VE Property executive management.

5.2.5 Access to information

At least 48 hours before the commencement of construction VE Property will:

1. make the following information and documents (as they are obtained or approved) publicly available on its website:
 - a. the documents referred to in condition A2 of the consent;
 - b. all current statutory approvals for the development;
 - c. all approved strategies, plans and programs required under the conditions of the consent;
 - d. the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
 - e. regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of the consent;
 - f. a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - g. a summary of the current stage and progress of the development;
 - h. contact details to enquire about the development or to make a complaint;
 - i. a complaints register, updated monthly;
 - j. any other matter required by the Planning Secretary; and
2. keep such information up to date, to the satisfaction of the Planning Secretary.



CHAPTER 6

MONITORING AND CORRECTIVE ACTION

6 MONITORING AND CORRECTIVE ACTION

6.1 Audit and inspection

VE Property's civil contractor will conduct internal environmental audits to ensure the ongoing adequacy and effectiveness of the CEMP, and to facilitate continuous improvement.

In addition to planned internal audits, the project team verifies environmental conformance to the CEMP as per the reviews in Table 6.1

Table 6.1 Environmental reviews

Review	Objective	Frequency
Meteorology	Meteorological data including rainfall will be monitored.	Daily
Solid wastes	<ul style="list-style-type: none"> ▪ Recycling where practical and economically feasible. ▪ Appropriate use of landfill site for disposal. ▪ Appropriate placement and use of site amenities. 	<ul style="list-style-type: none"> ▪ Spot checks of recycling facilities. ▪ Informal daily, formal weekly inspections using the environmental inspection checklist.
Biodiversity	<ul style="list-style-type: none"> ▪ Compliance with the project's biodiversity management measures (Section 3.2). ▪ Pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area. 	Informal daily inspections of the site to locate any fauna that may have become trapped, formal weekly inspections of the Duck River riparian corridor using the environmental inspection checklist.
Erosion and sediment control measures	<ul style="list-style-type: none"> ▪ Implementation, monitoring, and maintenance of all soil erosion and sediment control measures defined in Section 3.2 and the erosion and sediment control plan. ▪ The quality of stormwater discharged from the site is to satisfy the WQOs as per Landcom Blue Book requirements. 	<ul style="list-style-type: none"> ▪ Informal daily, formal weekly inspections using the environmental inspection checklist. ▪ Water quality in sediment basin to be tested prior to discharge from site.
Work site storage and handling of fuels, oils, chemicals, and paints	Compliance with dangerous substances regulations.	Informal daily, formal weekly inspections using the environmental inspection checklist.
Hydrocarbon and oil spills	<ul style="list-style-type: none"> ▪ Minimal hydrocarbon and oil spills by use of well maintained construction plant and on-site refuelling protocols. ▪ All accidental spills contained and don't pollute groundwater/ surface water. ▪ Compliance with management measures. 	Continuous monitoring by Environmental Advisor and/ or Site Supervisor. Spot checks of sites and weekly inspections using the environmental inspection checklist.
Air quality and dust management	<ul style="list-style-type: none"> ▪ No visible dust off-site. ▪ No dust complaints. ▪ Compliance with the management measures. 	Monitoring by the Site Supervisor. Spot checks of sites and weekly inspections using the environmental inspection checklist.
Noise	No noise complaints.	Following a complaint: <ul style="list-style-type: none"> ▪ Attended noise investigations will be undertaken in response to any formal complaint to verify that the noise is from construction activities at the site and to identify the source of the noise.

Review	Objective	Frequency
		<ul style="list-style-type: none"> Attended noise investigations will take place during the expected noisiest construction periods and be representative/ indicative of any impact across all potentially affected sensitive receivers.
Traffic management	<ul style="list-style-type: none"> No visible mud/ dirt being tracked onto public roads. No complaints about construction heavy vehicles using the local road network. No complaints from neighbouring industrial premises about impacts to their property access/ egress. 	Monitoring by the Site Supervisor. Weekly inspections using the environmental inspection checklist.
Applicable impact mitigation strategies	Compliance to task-based risk assessment requirements and the CEMP and any relevant sub-plans.	Informal daily, formal weekly using the environmental inspection checklist.
Housekeeping	<ul style="list-style-type: none"> Tidy work site with no litter and all waste contained in appropriate containers. Containers to be emptied and disposed of at appropriate intervals. No waste leaving the site unmanaged/ accidentally eg windblown waste or waste in stormwater runoff. 	Informal daily, formal weekly inspections using the environmental inspection checklist.

Whenever practical, personnel conducting an audit address identified deficiencies during the course of the inspection. In all other cases the Supervisor is responsible for ensuring an action and a date for addressing each deficiency is assigned to each outstanding action. The Site Supervisor monitors the progress of rectification of any outstanding corrective actions.

Results of all audits are made available to personnel via pre-start, and/ or toolbox meetings.

6.2 Subcontractor audits

Subcontractors are required to audit their workspace, as communicated to the subcontractor through the tender and contract. Compliance with this requirement is a contract deliverable.

The reviews listed in Table 6.1 also apply to subcontractor activities and workspaces.

6.3 Incident and environmental non-compliance

For the purposes of this CEMP, an 'incident' is *an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance*. A 'non-compliance' is *an occurrence, set of circumstances or development that is a breach of the consent*.

Common types of environmental incidents include:

- Sewage spills (to land or to water).
- Emulsion spills (to land or to water).
- Hydrocarbon spills (to land or to water).
- Sediment discharge (to land or to water).
- Unexpected finds (cultural heritage).
- Damage to heritage items or protected flora and fauna.

Possible non-compliances include non-compliance with the management measures outlined in this CEMP, and mitigation strategies/ management measures outlined in the CEMP sub-plans.

Where detected, any non-compliance or environmental impact exceeding specified limits are investigated by the Environmental Advisor to determine the extent of possible non-conformance. The non-compliance is corrected as soon as possible with necessary action taken to prevent recurrence.

All non-compliances are reported and clearly identify the corrective/ preventative actions to be taken and the close-out date.

6.3.1 Responsibility

The Project Manager is responsible for ensuring that the appropriate management response and handling procedures are instigated and carried through in the event of an incident and/or non-compliance. All employees, contractors and subcontractors are to:

- Notify the Project Manager of any hazard or potential hazard that may result in an incident and/or non-compliance, regardless of the nature or scale.
- Take immediate action (where it is safe to do so) to prevent, stop, contain and/or minimise any adverse impact associated with an incident and/or non-compliance.

The induction and toolbox talks outlined in Chapter 4 will be used to ensure all site employees, contractors and subcontractors are aware of and understand their obligations for incident and/or non-compliance response.

6.3.2 Notification requirements

Incidents

Section 147 of the *Protection of the Environment Operations Act 1997* (POEO Act) defines material harm as:

(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.

Notification responsibilities for incidents that have caused or threaten to cause material harm to the environment are detailed in Section 148 of the POEO Act. In summary, these are broadly categorised as follows.

Duty of an employee or any person undertaking an activity

Any person engaged as an employee or undertaking an activity with regard to the project will, immediately after becoming aware of any potential incident (even if outside of normal business hours), notify the Project Manager of the incident and all relevant information about it. The Project Manager will be available 24 hours a day, seven days a week and have the authority to stop or direct works.

Duty of an employer or occupier of the premises to notify

The employer or occupier of the premises (in this case, the Project Manager) on which the incident occurred, who is notified (or otherwise becomes aware of) of the incident, will immediately notify the relevant authorities about the incident and all relevant information.

Under the POEO Act, “relevant authority” means any of the following:

- The appropriate regulatory authority – the Environment Protection Authority (EPA);
- If the EPA is not the appropriate regulatory authority – the local authority for the area in which the pollution incident occurs (i.e. Council);
- NSW Public Health Unit;
- SafeWork NSW; and
- Fire and Rescue NSW.

Table 6.2 lists the contact details for these authorities. The person reporting the pollution incident will provide the following key details:

- Location of the pollution incident/emergency.
- Nature of the pollution incident/emergency.
- Their name and contact details.
- Details of any required assistance.

Table 6.2 Agency contacts

Agency	Detail	Number
DPIE	Compliance Unit	1300 305 695 or 02 9228 6111 compliance@planning.nsw.gov.au
EPA	Environment Line	131 555 info@environment.nsw.gov.au
	Head office (Sydney)	02 9995 5000
Parramatta City Council	Main switchboard	1300 617 058 or 02 9806 5050
NSW Public Health Unit	Western Sydney Local Health District	(02) 8890 5555
SafeWork NSW	Incident Notification Hotline	131 050 Select Option 3 to report a “Serious Incident or Fatality” – this will result in the incident being recorded and the appropriate person being contacted.
Emergency Services	NSW Police	131 444
	NSW Fire and Rescue	1300 729 579
	NSW Ambulance Service	Emergency: 000

Once becoming aware of an incident, VE Property will immediately (within 24 hours) notify the DPIE, via the Major Projects website, and other relevant agencies if an incident, or potential incident, causes (or may cause) harm to the environment. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 3 of Annex A.

Non-compliances

DPIE will be notified via the Major Projects website within seven days of becoming aware of any non-compliance.

A non-compliance notification will identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

6.3.3 Incidents and non-compliance procedure

Upon becoming aware of an incident and/or non-compliance, the procedure outlined below will be followed.

1. Preventative action

Where possible and safe to do so, immediate action will be taken to prevent, stop, contain and/or minimise the environmental impact of the incident and/or non-compliance.

In the unlikely event that an incident and/or non-compliance requires the evacuation of the site, actions will be completed in accordance with evacuation procedures. All employees and contractors are to be made aware of the location of emergency assembly areas through site inductions, signage and regular toolbox talks.

2. Assistance

If adequate internal resources are not available and the incident and/or non-compliance threatens public health, property or the environment, it is essential that Fire and Rescue NSW be contacted by telephoning 000 for emergency assistance.

Contacting Fire and Rescue NSW does not negate the notification requirements in Table 6.2.

3. Notify

Under the provisions of the POEO Act, there is a duty to notify any incident that has caused or threatens to cause material harm to the environment and all relevant information about the incident. The specific duties to notify are outlined above.

If there is a serious incident or emergency, it is more than likely that Fire and Rescue NSW will take control and manage the required investigation and remedial activities. Any instructions issued will be strictly adhered to.

DPIE and other relevant authorities be provided with a written incident notification via the Major Projects website within 24 hours after the incident.

A written notification will:

- Identify the development and application number.
- Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident).
- Identify how the incident was detected.
- Identify when the Applicant became aware of the incident.
- Identify any actual or potential non-compliance with conditions of consent.
- Describe what immediate steps were taken in relation to the incident.
- Identify further action(s) that will be taken in relation to the incident.
- Identify a project contact for further communication regarding the incident.

Non-compliances will be notified in accordance with Section 6.3.2.

4. Investigate

Immediately investigate the cause of the incident and/or non-compliance.

5. Remedial action

Address the cause of the incident and/or non-compliance and mitigate any further environmental impact. In some instances, outside resources such as specialist contractors/consultants may be required.

6. Record

It is imperative that an honest assessment of the situation is carried out and documented in order to minimise the potential for similar events in the future. On this basis, every incident is to be recorded in an incident report. A copy of the completed report will be maintained for at least five years.

A detailed incident report be provided to the DPIE within 30 days of the incident occurring.

The detailed incident report will include:

- A summary of the incident.
- Outcomes of an incident investigation, including identification of the cause of the incident.
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence.
- Details of any communication with other stakeholders regarding the incident.

All non-compliances are recorded.

7. Preventative action

Once the incident and/or non-compliance has been suitably handled, appropriate measures will be identified and implemented to reduce the possibility of re-occurrence.

6.3.4 Incident and non-compliance register

An incidents and non-compliance register will be maintained during construction and will contain:

- A copy of the environmental incident and non-compliance notification requirements and handling procedure described above.
- Site evacuation procedures.
- A separate reference sheet containing the contact details for the contacts in Section 2.4 and the contact details for the regulatory authorities listed in Section 6.3.2.
- Blank hard copies of the incident report.
- Copies of all completed incident report which are to be maintained for at least five years after the event to which they relate.

6.3.5 Minor environmental incidents

There is the possibility of minor environmental incidents occurring as part of this project. A 'minor environmental incident' is where there has been no potential or actual material harm to the environment. Examples are excessive dust sighted by the project team or a small, contained hydrocarbon spill that does not leave a site boundary and are cleaned up without residual on-site environmental harm.

Minor environmental incidents will still be handled under the process in Section 6.3.3 except there will be no requirement for government notification. All minor or major incidents will be recorded in

the incidents and non-compliance register. A minor incident does not constitute a non-compliance with the development consent.

6.4 Environmental complaints

In the event of a third-party environmental complaint the following steps will be taken:

- Record complaints as an incident.
- Investigate and verify complaints and assesses if excessive off-site impacts have occurred.
- Implement corrective measures including modification of methods and operational techniques to avoid recurrence or minimise ongoing adverse impacts.
- Complete monitoring/additional investigations to verify the adequacy of the recommendations, as required.
- Notify the complainant of actions taken.
- Continue to monitor activity, if required.

6.4.1 Responsibility

The Project Manager is responsible for ensuring that the appropriate management response and handling procedures are instigated and carried through in the event of an environmental complaint. The induction and toolbox talks will be used to ensure all site employees are aware of and understand their obligations for complaints response.

All employees who take receipt of a complaint, either verbal or written, are to immediately notify the Project Manager.

6.4.2 Procedure

1. Record and acknowledge

Any employee who receives a complaint, either verbal or written, is to immediately notify the Project Manager.

In the normal course of events, the first contact for complaints will usually be made in person or by telephone. The complainant's name, address and contact details, along with the nature of the complaint, will be requested. If the complainant refuses to supply the requested information, a note will be made on the form and the complainant advised of this.

2. Assess and prioritise

The Project Manager will prioritise all complaints by considering the seriousness of the complaint including risk to health and safety and will attempt to provide an immediate response via phone or email.

3. Investigate

A field investigation will be initiated to confirm details relevant to the complaint and the cause of the problem. Any monitoring information and/or records at and around the time of the complaint will be reviewed for any abnormality or incident that may have resulted in the complaint.

If the complaint is due to an incident, the notification requirements and handling procedures outlined in Section 6.3 will be followed.

4. Action or rectify

Once the cause of the complaint has been established, every possible effort will be made to undertake appropriate action to rectify the cause of the complaint and mitigate any further impact.

The Project Manager will assess whether the complaint is founded or unfounded and delegate the remediation, as required.

5. Respond to complainant

The Project Manager will oversee the rectification of the issue and respond to the complainant once the issue has been resolved. The complainant will be provided with a follow up verbal response on what action is proposed. Where a complaint cannot be resolved by the initial or follow-up verbal response, a written response will be provided to the complainant.

6. Record

Every complaint received is to be recorded in the complaints register. In accordance with Condition C19 of SSD 10459, the complaints register will be uploaded to the website 48 hours prior to commencing construction and will be updated monthly.

7. Preventive action

Once the complaint has been suitably handled, appropriate measures will be identified and implemented to negate the possibility of re-occurrence. The complaint is not closed out and the Complaints Register is not finalised until the preventative actions are completed and recorded.

6.4.3 Dispute resolution

VE Property's dispute resolution process meets the requirements of the Work Health and Safety Regulation 2011.

If there is a dispute arises between VE Property and Council or a public authority, in relation to an applicable requirement in the Development Consent or relevant matter relating to construction, either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's determination of any such dispute will be final and binding on the parties.

In the case of a dispute between VE Property and a community member/complainant, either party may refer the matter to the DPIE and/or relevant regulatory authority for consideration, advice and/or negotiation. If the matter escalates, a third-party mediator may be required.

6.5 Environmental breach

Subcontractors found to be in breach of this CEMP are managed in accordance with the subcontract under which they have been engaged.

Employees who breach the requirements of this CEMP are managed in accordance with the project's employee relations management plan. Personnel found to be grossly negligent or commit an intentional environmental breach are removed from site and managed in accordance with the project's employee relations management plan.

6.6 Reporting

Environmental performance is reviewed and documented via minutes of scheduled project meetings utilising inputs from the Environmental Advisor, Project Manager and Safety Manager.

Environmental reporting requirements are in Table 6.3.

Table 6.3 Environmental reporting requirements

Requirement	Timing/frequency	CoC/CEMP reference
The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 3.	Within 24 hours	SSD 10459 Condition C10
The Planning Secretary must be notified in writing to the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.	Within 7 days	SSD 10459 Condition C11
A register of all complaints, incidents and non-compliances will be kept.	For at least 5 years after completion	CEMP sections 6.3.4 and 6.4.2
VE Property or their appointed contractor will record environmental performance during regular management meetings and/or 'toolbox talks'. Items to be discussed and recorded include: <ul style="list-style-type: none"> ▪ Results of any monitoring. ▪ Any environmental incidents that have occurred during the previous period, including the management/ corrective actions. ▪ Any complaints that have been received during the previous period, including any management/ corrective actions. 	Weekly	CEMP Section 4.2
A copy of all environmental records will be maintained, including: <ul style="list-style-type: none"> ▪ Site environmental inspection reports. ▪ Environmental monitoring data. ▪ Internal and external audit reports. ▪ Reports of environmental incidents, environmental, associated actions taken, and follow-up actions. ▪ Minutes of management review meetings. ▪ Induction and training records. 	For at least 5 years after completion	Best practice and CEMP sections 6.1, 6.2, 6.3.4, 6.7, 4.2 and 4.3
A Waste Management Register will be maintained and will include: <ul style="list-style-type: none"> ▪ Type of waste and its classification (according to the POEO Act and Waste Classification Guidelines). ▪ Quantities of waste, measured in tonnes. ▪ How and where the waste was reused, recycled, stockpiled or disposed of. ▪ Date when the waste was reused, recycled, stockpiled or disposed of. ▪ Name and waste transport licence (if applicable) of the transporter used. 	Ongoing	Section 3.2

6.7 Contingency plan

The table in Annex G lists the actions to be implemented if inspections, monitoring and/or auditing indicate that the mitigation measures listed in Section 3.2 and the sub-plans are not effective in managing environmental impacts.

All Condition Amber and Condition Red occurrences will be recorded and discussed during the toolbox talks.



CHAPTER 7

CEMP REVIEW

7 CEMP REVIEW

The CEMP is formally reviewed annually (as a minimum) and whenever the plan, risk, and/ or activities change from the scope/ content.

The review is conducted by a review team comprising the Project Manager (or delegate) and the Environmental Advisor/ Project Environmental Manager (or Safety Manager) and considers performance against the CEMP with respect to incident trends and findings from internal and external audits.

The Project Manager (or delegate) ensures any changes to the CEMP as a result of review/ change is communicated to personnel.



APPENDIX A

DEVELOPMENT CONSENT SSD
10459



APPENDIX B

UNEXPECTED CONTAMINATION PROCEDURE

APPENDIX B – UNEXPECTED CONTAMINATION PROCEDURE

Procedure

During excavation works there is the potential of encountering in-ground unexpected contamination. Unexpected contamination may include (but not be limited to):

- Asbestos containing materials.
- Additional light non-aqueous phase liquid/hydrocarbon impact.
- Buried building rubble.
- Unusual soil staining and discoloration.
- Odours emanating from the ground during earthworks.

Where unexpected finds are uncovered:

- Works are to cease immediately in the vicinity of the excavation.
- The site supervisor is to be informed immediately.
- If deemed necessary the area surrounding the unexpected find is to be barricaded to ensure the area is not further disturbed.
- If required a suitably qualified environmental specialist is to visit the site, assess the discovery and undertake assessment/provide recommendations.

The environmental specialist is to advise on the required course of action for the unexpected contamination, this may include:

- Sample collection and analysis.
- A detailed assessment (if required).
- Preparation of an assessment report and remediation plan (if required).

All reports are to be prepared in accordance with relevant NSW EPA guidance and provided to relevant regulatory/approval authority and VE Property for record keeping requirements.

Where analysis of unexpected contamination indicates a potential risk to either human health and/or the environment, a task specific works plan (as detailed below) may be prepared. The plan is to be developed to outline task specific procedures/processes to be adopted to minimise the risk to human health and/or the environment from any unexpected contamination.

Task specific works plan

If suspected contamination is encountered, the construction contractor will ensure a task specific works plan is prepared by a suitably qualified environmental professional to ensure all environmental risks are appropriately managed.

1. The works plan should be prepared for the specific works to be undertaken.
2. The works plan should be prepared in accordance with industry best practice standards at the time of works and must comply with all relevant NSW EPA regulatory guideline criteria relating to contaminated sites.

The plans should include (but not be limited to) the following details:

- Risks to human health and the environment – potential risks associated with the work should be highlighted.
- General site management – details of required inductions of employees or contractors.
- Procedures and methods to be used for undertaking the works.
- Specific details of ways to limit disturbance of impacted soils/groundwater/redundant site drainage infrastructure etc.
- Mitigation measures.

- Air/dust monitoring action levels, including monitoring procedures for lower explosive limit and volatile organic compounds around areas of residual hydrocarbon impacts.
- Personal protective equipment.
- Other protection measures (cabin ventilation, etc.).
- Roles and responsibilities for implementing the mitigation measures.
- Soil and groundwater management controls – as a minimum the following requirements should be detailed:
 - Any groundwater extracted during intrusive works is to be disposed in accordance with NSW EPA waste disposal guidance.
 - Excavated soils should be placed in a bunded area to minimise potential run off.
 - Excavated concrete containing asbestos formwork should be covered following excavation to prevent wind-blown emissions of potential asbestos.
 - Soil / concrete material should be kept moist to limit dust.
 - Excavated materials, where possible, be replaced in the same location. Where this is not practical, material must be disposed of in accordance with NSW EPA waste disposal regulations.
 - Excavated concrete materials containing asbestos formwork are not to be replaced in the site and are to be disposed offsite in accordance with NSW waste disposal requirements at the time of works.
- Reinstatement of the site surface.
- Waste management including waste disposal.
- Record keeping, audit and review.

Emergency response

In the event of any incident, the first priority shall be the safety of all personnel and the community in the immediate vicinity.

In the event of a serious emergency at the site, the following procedure will be followed:

1. Stop work.
2. All personnel shall leave the work zone via established entry/exit routes.
3. Leave the site and assemble at the emergency assembly area (as designated by the project manager).
4. Await further instructions from the designated project manager. No project personnel or visitors are to leave the assembly area unless advised to do so by the project manager or their onsite representative to be nominated at a later stage.

The project manager or their designated entity will notify the relevant service as to the details regarding any emergency.

Following emergency response, all practical steps should be taken to minimise the risk of further environmental damage as soon as possible after the event. The situation should be stabilised by following the appropriate incident management or contingency plan procedures. The appropriate staff should be notified and emergency procedures enacted.

Typical first response actions may include:

1. Assessment of vapour concentrations/asbestos fibre counts from air monitoring in excavation areas and associated risk to human health.
2. Temporary repair or isolation of failed plant/equipment component.
3. Sampling of impacted site media, be it soil, groundwater and/or surface water.

Follow-up action will include the development of a work plan to remediate or manage the impacted site media. The work plan would detail any sampling and analysis requirements to define the

nature and extent of impact, methods for the recovery, handling, storage and treatment of impacted material, disposal and/or reuse options for impacted material and personal protective equipment requirements.

Records will be kept of any incidents, accidents, hazardous situations, unusual events and unsafe health exposures and the corrective action taken. Where necessary, this procedure should be updated based on findings of corrective actions/improvements etc.

Reporting

Reporting in relation to unexpected contamination is summarised in Table B.1.

Table B.1

Report	Requirement
Material classification reports	<ul style="list-style-type: none"> ▪ All reports relating to unexpected contamination are to be kept by VEP upon completion of works. ▪ Reports are to include detailed laboratory analysis and subsequent classification information and materials tracking information detailing the total volume and final placement/disposal location.
Non-conformance reporting	<ul style="list-style-type: none"> ▪ Non-conformances will be recorded in a non-conformance and corrective action report. Details of the non-conformance, including any immediate corrective actions undertaken, are to be recorded by the operational staff. ▪ It is the responsibility of the project manager to immediately initiate corrective actions, if required. Once completed, the site supervisor/foreman will provide details of the actions undertaken on the non-conformance report and sign, date and file the report.
Incident reporting	<ul style="list-style-type: none"> ▪ Records will be kept of any environmental incidents, accidents, hazardous situations, unusual events and unsafe health exposures and the corrective action taken. ▪ The project manager will adequately investigate the cause of any incident so that necessary changes in work practices can be made to prevent the incident recurring.
Performance monitoring	<p>This procedure should be reviewed by VEP after incidents or reported findings, to ensure that:</p> <ul style="list-style-type: none"> ▪ Information and environmental management strategies remain current. ▪ Any opportunities for improvement are identified. ▪ Changes to legislation, licence and approval conditions are identified and complied with. <p>The assessment should take into account all changes such as (but not limited to):</p> <ul style="list-style-type: none"> ▪ Changes to site conditions. ▪ Work requirements. ▪ Legislation. ▪ Environmental condition.



APPENDIX C

CONSTRUCTION NOISE MANAGEMENT PLAN



APPENDIX D

FLOOD EMERGENCY REPOSE PLAN



APPENDIX E

CONSTRUCTION TRAFFIC AND PEDESTRIAN MANAGEMENT PLAN



APPENDIX F

LANDSCAPE MANAGEMENT PLAN



APPENDIX G

CONTINGENCY MANAGEMENT PLAN

ANNEX G – CONTINGENCY MANAGEMENT PLAN

Item	Trigger/ response	Condition		
		Green	Amber	Red
Noise impacts at sensitive receivers	Trigger	Noise levels do not exceed applicable NMLs.	Noise levels exceed applicable NMLs.	Noise levels exceed highly noise affected criteria (75 dBA).
	Response	Ongoing best practice management measures to minimise noise emissions.	Implement all feasible and reasonable mitigation and management measures to minimise noise impacts.	Implement all feasible and reasonable mitigation and management measures to ensure noise levels are below highly noise affected criteria. If noise levels cannot be kept below applicable limits then a different construction method or equipment will be utilised or respite periods will be implemented by restricting the hours that the very noisy activities can occur.
Visible dust leaving the site	Trigger	No visible dust leaving the site during daily inspections.	Visible dust leaving the site during daily inspections.	There is visible dust leaving the site multiple times during a day OR from multiple locations within the site.
	Response	Continue monitoring program as normal.	Review and investigate construction activities and respective control measures, where appropriate. Implement additional remedial measures, such as deploying additional water trucks etc.	Investigate dust generating activities, and if necessary, temporarily halt them.
Queuing	Trigger	No queuing identified	Queuing identified within site.	Queuing identified on the public road.
	Response	No response required. Continue monitoring program.	Review the construction delivery schedule. If drivers are not following the correct schedule, then they should be provided with additional training and an extra copy of the driver code of conduct.	Review and investigate construction activities. If it is concluded that construction activities are directly responsible for queuing on public roads, implement additional control measures such as: <ul style="list-style-type: none"> ▪ Put a temporary hold on incoming heavy vehicle deliveries. ▪ Review CTMP and update where necessary. ▪ Provide additional training.

Item	Trigger/ response	Condition		
		Green	Amber	Red
Erosion	Trigger	No evidence of erosion.	Minor gully or tunnel erosions present and/or rilling. Evidence of sediment or sediment laden water leaving the site.	Significant gully or tunnel erosions present and/or rilling. Evidence of sediment or sediment laden water leaving the site.
	Response	Continue CEMP and ESCP implementation.	A suitably trained person to inspect the site. Review of erosion and sediment structures. Remediate as appropriate. Revise ESCP if required.	A suitably trained person to inspect the site. Review of erosion and sediment structures. Remediate as soon as practical. Revise ESCP if required.
Water management structures	Trigger	Water management structures have been designed, constructed and managed in accordance with the Blue Book and the ESCP.	Inspections indicate that water management structures illustrate minor non-compliance with the Blue Book and the ESCP.	Inspections indicate a failure of the water management structures.
	Response	Continue CEMP and ESCP implementation.	A suitably trained person to inspect the site. Review of water management structures. Remediate as appropriate. Revise ESCP if required.	A suitably trained person to inspect the site. Remediate as soon as practical. Review of engineering design and revise ESCP.
Heritage	Trigger	No unknown heritage items uncovered.	Potential heritage item uncovered.	Potential heritage item uncovered causing significant delays to project.
	Response	Continue CEMP implementation.	Stop work and implement the unexpected finds protocol in Section 3.2.	Stop work and implement the unexpected finds protocol in Section 3.2. Heritage item to be salvaged and removed from site by a qualified archaeologist, if requested by Heritage NSW.
Unexpected Contamination	Trigger	No unexpected contamination uncovered during earthworks.	Areas of possible unexpected contamination uncovered.	Areas of unexpected contamination uncovered.
	Response	Continue CEMP implementation.	Stop work immediately and implement the unexpected contamination finds procedure (Annex B).	Stop work immediately and implement the unexpected contamination finds procedure (Annex B).



APPENDIX H

CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN



APPENDIX I

PROJECT ROLES AND RESPONSIBILITIES

ANNEX I – PROJECT ROLES AND RESPONSIBILITIES

The Project Manager works with the relevant functional managers and human resources personnel to ensure adequate resources are in place for the project, as per the project's employee relations management plan.

The Project Manager ensures that the specific roles, inter-relationships, and lines of reporting for the project are defined in the project's organisational structure, and may assign:

- an individual to a specific role
- the responsibilities for the specific role to themselves; or
- the responsibilities for the specific role to other project team members.

Project Manager

- Ensure the legislative and corporate safety, health and environment management measures and controls are implemented and maintained.
- Visibly committing to and implementing environmental practices as defined in the CEMP.
- Overseeing site occupation and project delivery compliance to the CEMP, and ensuring environmental records are maintained and made available upon request to government agencies.
- Reporting project environmental status and environmental incidents to the Environmental Advisor.
- Reviewing and participating in environmental incident investigations and nominated corrective measures.
- Attending project and environmental meetings.
- Participating in environmental audits.
- Initiating environmental reviews with the Environmental Advisor to facilitate continual improvement.
- Ensuring environmental works are carried out in accordance with the CEMP and applicable sub-plans, and VE Property procedures.
- Co-ordinating and facilitating task-based risk assessment activities for their area of responsibility.
- Ensuring all personnel, including subcontractors and visitors, undertake project defined induction and training, and are aware of any evacuation and emergency procedures.
- Ensuring daily and weekly environmental inspections are carried out and actions identified are implemented immediately.
- Ensuring environmental issues are raised at site toolbox meetings.
- Participating in emergency response as part of the emergency response team.

Site Supervisor (foreman)

- Ensuring environmental works are carried out in accordance with the CEMP and applicable sub-plans, and VE Property procedures.
- Reporting environmental incidents to the Project Manager and the Environmental Advisor as they are identified.
- Participating with the Environmental Advisor in the investigation of incidents in their area of responsibility.
- Ensuring environmental issues are raised at site toolbox meetings.

Environment and Sustainability Manager (governance role)

- Providing senior support to the Project Manager and Environmental Advisor/ Zero Harm Advisor to ensure environmental works are carried out in accordance with the CEMP and the respective sub-plans, and VE Property procedures.
- Periodically review and audit to verify compliance with this plan.
- Providing technical support to site staff.

- Assisting in the investigation of any incidents.

Project Environmental Manager or Safety Manager

The project team organisational structure will include a Project Environmental Manager or Safety Manager as defined in the project management plan.

- Providing senior support to the Project Manager and Environmental Advisor to ensure environmental works are carried out in accordance with the CEMP and applicable sub-plans, and VE Property procedures.
- Providing technical support to site staff.
- Assisting in the investigation of any incidents.
- Participating actively in project team environmental and WHS meetings.
- Assisting in achieving zero environmental incidents for the project.
- Maintaining a useable library of environmental documentation.
- Undertaking weekly and monthly environmental inspections across all areas of the site and presenting alerts or findings at toolbox meetings.
- Regularly audit system/CEMP and producing high quality environment audit reports.
- Provide guidance in resolving environmental issues with a view to continuous improvement and elimination of any environmental incidents.
- Co-ordinating and delivering environmental training, including for environmental management, spill response, and spill prevention.
- Assisting field personnel in the development of project specific documentation, e.g. task-based risk assessments.
- Monitoring and reporting on energy, greenhouse gas and waste management, including sewage disposal.
- Being familiar with and implementing the requirements of this CEMP, as required.
- Complying with any regulations or statutory obligations for environmental management.

Environmental Advisor

- Visibly committing to environmental procedures and instruction, and maintaining environmental records defined within this CEMP.
- Reporting to the Environmental Manager, Safety Manager, and Project Manager on environmental issues, as required.
- Providing environment planning (inclusive of impact mitigation measures) and discipline technical support to the Project Manager and project team.
- Assisting the Project Manager/ Environmental Manager in providing environmental training and inducting all site personnel, including subcontractors and visitors.
- Providing environmental input to the formulation of task-based risk assessments, as required.
- Resolving and/ or facilitating solutions to site environmental issues and problems.
- Liaising with relevant regulatory authorities and stakeholders, as required.
- Reviewing and participating in environmental incident investigation and nominating corrective measures.
- Carrying out environmental inspections.
- Initiating environmental reviews with the Project Manager and facilitating continual improvement.
- Directing the workforce (in consultation with the Project Manager) to stop work in order to achieve compliance with the environmental requirements of the head contract, as covered in the CEMP and applicable sub-plans, or to prevent environmental damage.

Construction personnel

- Visibly committing to environmental procedures and instruction.
- Completing required inductions as specified in this CEMP.
- Participating in the formulation of task-based risk assessments.

- Implementing environmental controls as detailed in inductions, task-based risk assessments, all aspects of this CEMP and applicable sub-plans, compliance documents, procedures, and standards.
- Reporting environmental incidents and issues to the relevant Supervisor or to the Environmental Advisor.
- Using equipment provided to reduce environmental hazards or emissions.
- Participating in daily and weekly environmental inspections.
- Contributing to the overall project goal for zero environmental impacts and incidents by making suggestions for improvement where identified.
- Complying with all aspects of this CEMP and all associated compliance documents, permits, procedures, and standards.
- Conducting task-based risk assessments and providing to VE Property prior to execution.
- Undertaking induction(s) as defined by this CEMP and complying with project environmental instructions.
- Providing to VE Property details of all hazardous substances, contained within safety data sheets, proposed for use in subcontractor scope.
- Providing other environmental related data to VE Property as defined by this CEMP, including data for NGER, waste generation, and water consumption.
- Attending site meetings when requested.
- Reporting, investigating, and implementing corrective measures arising from associated environmental incidents.
- Attending environmental training and awareness sessions.

Safety Administrator

- Reporting to the Environmental Manager, Safety Manager, and Project Manager on environmental issues, as required.
- Visibly committing to environmental procedures and instruction, and maintaining environmental records defined within this CEMP.
- Providing administrative support to the environmental team, specifically:
 - Inductions and registrations.
 - Audit and inspection results.
 - Incident reports.
- Verification of competency and training record update



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