This is a subordinate management plan to be used in conjunction with the Project Management Plan

Rosehill Sustainable Road Resource Centre

Customer: Sydney Capital Investment

Contract Number: 3-Sixteen

Document Preparation and Control	Document Review
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Document Version History			
Version No.	**Date**	**Document Status**	**Brief Description of Change(s) from Previous Version**
1	30/11/2020	Draft	First draft
2	04/01/2021	Draft	Second draft – address comments from review
3	29/01/2021	Draft	Third draft – update plan in accordance with development consent
4	01/02/2021	Draft	Fourth draft – for submission to DPIE for review
5	05/02/2021	Final	

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1 PURPOSE

This construction environment management plan (CEMP) defines the environmental management principles, processes, procedures, systems, tools, and templates implemented for use throughout the duration of construction of the Rosehill Sustainable Road Resource Centre (the project).

This plan is subordinate to the Project Management Plan (PMP) which has been developed to:

- satisfy the requirements of the contract; and
- support the project team in completing the requirements of 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.

2 DOCUMENT SCOPE

The scope of this management plan applies to all Downer workers during construction of the Rosehill Sustainable Road Resource Centre.

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

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

2.1 Conditions of consent

Development consent SSD 10459 was granted to VE Property on 31 January 2021 for the project described in Chapter 7. 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). Various sub-plans (outlined in Section 3.1 and appended) 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 the following table.

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 7.2

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 7.2
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	6.2.3 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.	6.2.3 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; (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.	Annex C
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.	7.2
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.	7.2 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
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
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.	7.2
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 *National Parks and Wildlife Act 1974*.	7.2
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.	7.2
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.	7.2

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.	7.2
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.	7.2
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.	7.2 10.1
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
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.	7.2
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 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);	5 Section 3.2 of the CNMP (Annex C) Section 7.2 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	7.2 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;	7.2 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;	8 Section 6.2 of the CNMP (Annex C) Section 6.3.3 of the FERP (Annex D) Section 8 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;	7.2 Annex G Section 5 and 6 of the CNMP (Annex C) Section 6 of the FERP (Annex D) Section 7 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	10 Annex G Section 6 of the CNMP (Annex C) Section 4 and 6 of the FERP (Annex D) Section 8 and Appendix B of the CTPMP (Annex E) Section 7 of the LMP (Annex F)

C1(d)	ii. effectiveness of the management measures set out pursuant to paragraph (c) above;	10 Annex G Section 6 of the CNMP (Annex C) Section 4 and 6 of the FERP (Annex D) Section 8 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 8 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;	10 Section 6 of the CNMP (Annex C) Section 8 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);	10.3 Section 6 of the CNMP (Annex C) Appendix B of the CTPMP (Annex E)
C1(g)	ii. complaint;	10.4 Section 6 of the CNMP (Annex C)

C1(g)	iii. failure to comply with statutory requirements; and	10.6 Section 6 of the CNMP (Annex C)
C1(h)	a protocol for periodic review of the plan.	11 Section 6.8 of the CNMP (Annex C) Section 6.3.4 of the FERP (Annex D) Section 8 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;	9.2 10.4 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.	10.3.2
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.	10.3.2
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.	10.3.2
C13	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	10.3.2
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: (a) make the following information and documents (as they are obtained or approved) publicly available on its website: 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.	9.2.9

2.2 Consultation

In accordance with SSD 10459, consultation has been undertaken with the applicable stakeholders. All evidence of consultation related to the specialist sub-plans which form part of this CEMP is included in the relevant sub-plan.

3 PROJECT MANAGEMENT FRAMEWORK

The Downer project management framework aligns and integrates the project functions which define the project's delivery methodologies and processes. The Project Management Plan (PMP), as a key element of the project management framework, is the integration document which identifies and details both the standard Downer project management practices, structure, and execution methods and any project specific requirements for the project.

The PMP incorporates a number of subordinate management plans which provide the specific functional detail required to successfully deliver the project. The relationship between the Downer IMS, the PMP and subordinate management plans is illustrated in the following figure.

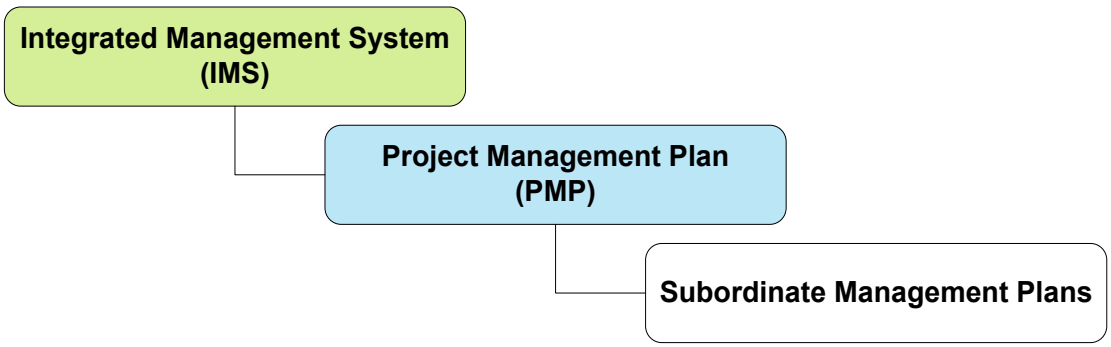

Figure 1: Project Management Plan Structure

The plans reference any IMS documents (including but not limited to, procedures, work instructions, and forms), customer specific requirements, and project specific documents required to execute the project.

The PMP provides project specific details including, but not limited to, the following:

- Project information, i.e. background, project location, and project description
- Scope of work, i.e. scope of work narrative, basis of design, battery limits, and scope of services; and
- Project objectives and values, i.e. objectives, overarching principles, values, and key performance indicators (KPIs) for the project.

All positions in the project team have a clearly defined role and set of responsibilities that are included either in the PMP or relevant subordinate management plan. All members of the project team are made aware of and understand their responsibilities prior to commencing work on the project. Refer to *Annex I – Project Roles & Responsibilities* for the roles and responsibilities for environmental management.

The PMP and subordinate management plans are audited throughout the duration of the project to maintain compliance and updated as required. Updates to the PMP and subordinate management plans are subject to the document review and approval process detailed in the project's Document Control Plan.

3.1 CEMP Structure

The CEMP comprises two components:

1. The CEMP (this document) which:
    - provides background information and strategic and broad environmental management considerations for the project; and
    - includes procedures and processes for environmental management during project delivery; and

2. A series of environmental management sub-plans, which detail current controls and mitigation measures to manage specific key project environmental risks or customer/ stakeholder concerns.

4 DEFINITIONS

The following terms are used in this document and are included in ***Definitions Register***.

Downer Worker	All individuals working for Downer as: employees, contingent labour hire, contractors, subcontractors, apprentices, trainees, and work experience students.
Integrated Management System (IMS)	A document library controlled by Downer that: ▪ is designated as the IMS repository(s) for the single source of truth for all business processes ▪ is designed to provide consistent process controls, meet the requirements of external standards, and link and integrate core business processes; and ▪ requires documents to be version controlled and identified by a document code and approved prior to releasing or removing from the document library.
INX	The Zero Harm database used to record, investigate and follow-up events, including audits, hazards, incidents, inspections, meetings, observations, risk assessments, reviews, and suggestions.
Subcontractor	An individual or organisation that signs a contract with Downer to perform part or all of the obligations of a Downer contract, including the performance of work, i.e. provision of labour and/ or labour services. Examples of subcontractors include contingent labour hire, independent contractors, consultants and cartage contractors.
Task-based Risk Assessment	A risk assessment for a specific task or work activity, e.g. Safe Work Method Statement (SWMS), Job Hazard Analysis (JHA), and Job Safety and Environmental Analysis (JSEA).
Zero Harm (ZH)	Health, safety and environment and community.

5 STANDARDS & LEGISLATION

5.1 Legislation & Regulatory Requirements

Downer is aware of the importance of complying with all applicable environmental measures, and where practicable, exceeds the minimum legislative and regulatory requirements. Downer's obligations include conditions of regulatory approvals as well as the generally applicable Environmental Acts and their subsidiary legislation. Downer 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.

The environmental authorisations, resource consents and permits in the following table are required for the project.

Authorisation/ Permit	Authority	Responsibility	Due
Approval under NSW *Environmental Planning and Assessment Act 1979*	DPIE	VE Property Pty Ltd	Prior to commencement of construction

Authorisation/ Permit	Authority	Responsibility	Due
Environment protection license under NSW *Protection of the Environment Operations Act 1999*	EPA	Downer EDI Works Pty Ltd	Prior to commencement of operations of scheduled activity

Development consent SSD 10459 was granted to VE Property on 31 January 2021 for the project described in Chapter 6. A copy of the development consent is attached as Annex A.

The conditions relevant to the construction of the project are outlined in Chapter 2.

5.2 Compliance Tracking

Compliance tracking is undertaken on a continuous nature during execution using Downer's compliance management system **INX**, which allows authorised users to:

- access the Compliance Tracking Database, Incident Reporting Database, and Complaints Register; and
- sort and evaluate the compliance status of all conditions at any time.

The Compliance Tracking Database includes a protocol to address:

- auditing requirements
- reporting requirements; and
- incident response mechanisms.

5.3 Australian & 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.

5.4 Other Standards

The following 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).

5.5 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.

6 PROJECT DESCRIPTION

Refer to the PMP for the project details relevant to all subordinate management plans, including but not limited to:

- Scope of Work
- Project Extents Boundary
- Exclusions; and
- Location. etc

6.1 Description

6.1.1 Location and access

The site address is 9 Devon Street, Rosehill and is part of lot 100 in deposited plan 1168951 and covers 35.068 ha. The project will be on the newly created 6.998 ha Lot 6 shown in Annex A.

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. The proposed use (general industry and waste or resource management facility – resource recovery facility) is permitted with consent in this zone.

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

6.1.2 Project summary

The Sustainable Road Resource Centre will be positioned in the southern part of Lot 6 and an elevated pad (front block) will form the northern part of the lot. The front block will be used as a laydown area during

construction then possibly used by another Downer business unit, leased or sold. The final operational use of the front block would be subject to a future development application.

Asphalt plant

A fixed Ammann Universal HRT Stationary asphalt plant will be constructed on Lot 6, which will produce up to 550,000 tonnes per annum (tpa) of asphalt. The maximum height of fixed equipment will be 41 m. Approximately two thirds of the outside of the asphalt plant will be clad.

Reclaimed asphalt pavement facility

Up to 250,000 tpa of RAP will be cold planed from pavements with specialist equipment and transported in tip trucks to the site. It will then be stored in the dedicated RAP stockpile areas.

The RAP will be granulated and screened on an as required basis for use in the production of asphalt (as a substitute for aggregates and bitumen) or for pavement materials. The RAP plant will be inside a shed that will be enclosed on the north, west and south sides. The east side will be open in parts so the front-end loader can feed the RAP plant and remove the finished products.

Up to 90,000 tpa of RAP will be stored on site at any one time. Stockpiles will be a maximum 10 m high.

Bitumen Products Facility

A next generation, co-located emulsion plant is proposed on Lot 6, which will manufacture approximately 15,000 tpa using a purpose-built plant and will involve careful formulation of the products to produce chemically stable and well performing materials.

Reconomy facility

Downer proposes to construct and operate a new Reconomy facility on Lot 6. The Reconomy facility will provide a recycling option for the following wastes which are traditionally landfilled:

- Street sweeper/stormwater pit waste.
- Non-destructive digging mud.

Reconomy uses a customised material screening and processing plant and water treatment to recover materials, which are used in the manufacture of asphalt and other road products. The facility will process up to 40,000 tpa of road sweepings, gully waste and mud from non-destructive excavation.

Material will be separated during the recovery process and temporarily stockpiled adjacent to the recovery plant at the separation points and removed as required. Recovered aggregates and sand will be beneficially reused almost immediately in the adjacent asphalt plant and will require temporary storage bays as a collection point prior to transport to the asphalt plant.

Vehicle generation

Construction of all aspects of the project will generate an estimated peak of 105 heavy and 88 light vehicles per day.

6.2 Construction activities

Construction of the project is proposed to commence in January 2021 and conclude in December 2021 (11 months). The first stage of construction will be site establishment, demolition, bulk earthworks, drainage and utilities, to prepare Lot 6 for construction of the project components described as various stages below.

The project will be constructed with staggered durations for the completion of each stage (each location and facility), proposed to allow time for subsequent mechanical and plant installers to mobilise and construct their specialist work. The construction of the Rosehill Sustainable Road Resource Centre can be simplified into two civil phases (pre-mechanical installation and post-mechanical installation); and a mechanical plant installation phase.

6.2.1 Pre-mechanical installation

Stage 1a – Site Establishment & Demolition

The start of this phase is the establishment of the site compound in the north east section of the site, construction of hardstand laydown areas and the establishment of subsequent environmental controls.

Stage 1b – Bulk Earthworks, Drainage & Utilities

The first stage of construction involves preliminary clearing works, including demolition of existing structures and infrastructure on the site. Dewatering will be carried out concurrently (if required). Subsequently, there will be construction of a retention basin, located at the south west corner of the site, which will be used to capture onsite water runoff and bulk earthworks will be carried out simultaneously to level out the site to the designated levels. The cut and fill volumes are approximately balanced, and as such, the import of materials into the site will be relatively limited. The installation of utilities will be carried out following this, including stormwater drainage (150-1050dia. pipes, pits, headwalls, sediment forebay, dish drains, bio-retention basin and subsoil drains), electrical, communications, water (potable and recycled), sewer and gas.

Stage 2 - Pavement Works (subgrade & subbase)

The flexible pavement to be constructed in this project include heavy duty asphalt pavement, RAP stockpile asphalt pavement and carpark asphalt pavement. Once bulk earthworks have been completed, the construction of pavements can commence. This includes the treatment of subgrade and placement of select fill/SMZ. Asphalt work will not commence until a later stage of the project.

Stage 3 – Footings & Slabs

Once bulk earthworks are complete, piling works will be carried out. Piling will be required for the following:

- Asphalt plant superstructure and vertical bitumen tank farm.
- Conveyor belt structures.
- RAP cold feeder bins.
- Control room offices and laboratory.
- Vertical aggregate bunker.
- Aggregate tipping culvert.
- IBC storage.
- Emulsion tank farm.
- RAP plant structure.
- RAP workshop and asphalt plant laydown areas.
- Reconomy plant structure.

The footings and slabs will be subsequently constructed once piling is complete. The typical construction methodology for these would be to install formwork, install reinforcement and pour concrete.

Stage 4 – Above Ground Structures

Following the completion of footings and slabs, the above ground concrete structures can then be constructed, including walls, columns, culvert roof slabs and bunker structures can then be constructed.

Stage 5 – Pavement Works (subbase & base)

Subbase and base will be placed in specified layers and compacted, following the construction of the slabs, plinths and bund walls for the asphalt plant, tank farm and diesel tank.

Stage 6 – Buildings, Sheds, Warehouse & Workshop Installation

Upon the completion of above ground structures, the installation of buildings can commence, which would include the following:

- Plant workshop.
- Shelter for IBC storage.
- Laboratory.
- Control & production room.
- Driver lounge.
- Reconomy Amenities/Office.
- Security Hut

Stage 7 - Post-mechanical installation

Final pavement works and finishing works can be carried out at the last stage of the project, which includes activities such as adjustment of drainage pits, kerb & gutter, placement of asphalt layers, installation of barriers, signage & line marking installation and landscaping works.

6.2.2 Mechanical plant installation

During the construction of facilities, areas will progressively be handed over to the mechanical installers, who will then install and commission the various components of the project.

Asphalt Plant

A fixed asphalt plant will be delivered and assembled on Lot 6 and will comprise of the following:

- Cold feed bins to receive aggregate, sand and RAP.
- Conveyors to transport aggregates to a dryer.
- Conveyors to transport RAP to a mixer.
- Hot aggregate storage bins.
- Hot RAP storage bins.
- A mixer for mixing materials in weighted proportions.
- A batch tower with a screen deck for sizing the hot aggregates.
- Weigh hoppers for aggregates, bitumen, lime baghouse fines and RAP weighing.
- Enclosed bucket elevator for elevating the heated aggregates to the top of the batch plant.
- Eight hot bitumen storage tanks with bitumen pumped from these to the batch plant.
- Lime filler silo to receive lime and pneumatic conveyors to convey lime to the batch plant.
- Fabric filter baghouse for cleaning exhaust gases from the dryer.
- Fan and stack for exhausting the gases from the baghouse.
- Recycled filler silo for storage of baghouse reclaimed fines and pneumatic conveyors to convey recycled filler to the batch plant.
- Control room containing plant switchboard and controls.
- Soap spray station for lining truck trays with an anti-stick film.

The above plant components will be delivered to site in modules as large sections and as small parts within shipping containers across 50 separate deliveries. The duration of the works is to be approximately 22 weeks consisting on Amman plant super structure and commissioning of asphalt plant. See Figure 7.1 below for site arrangement during this time.

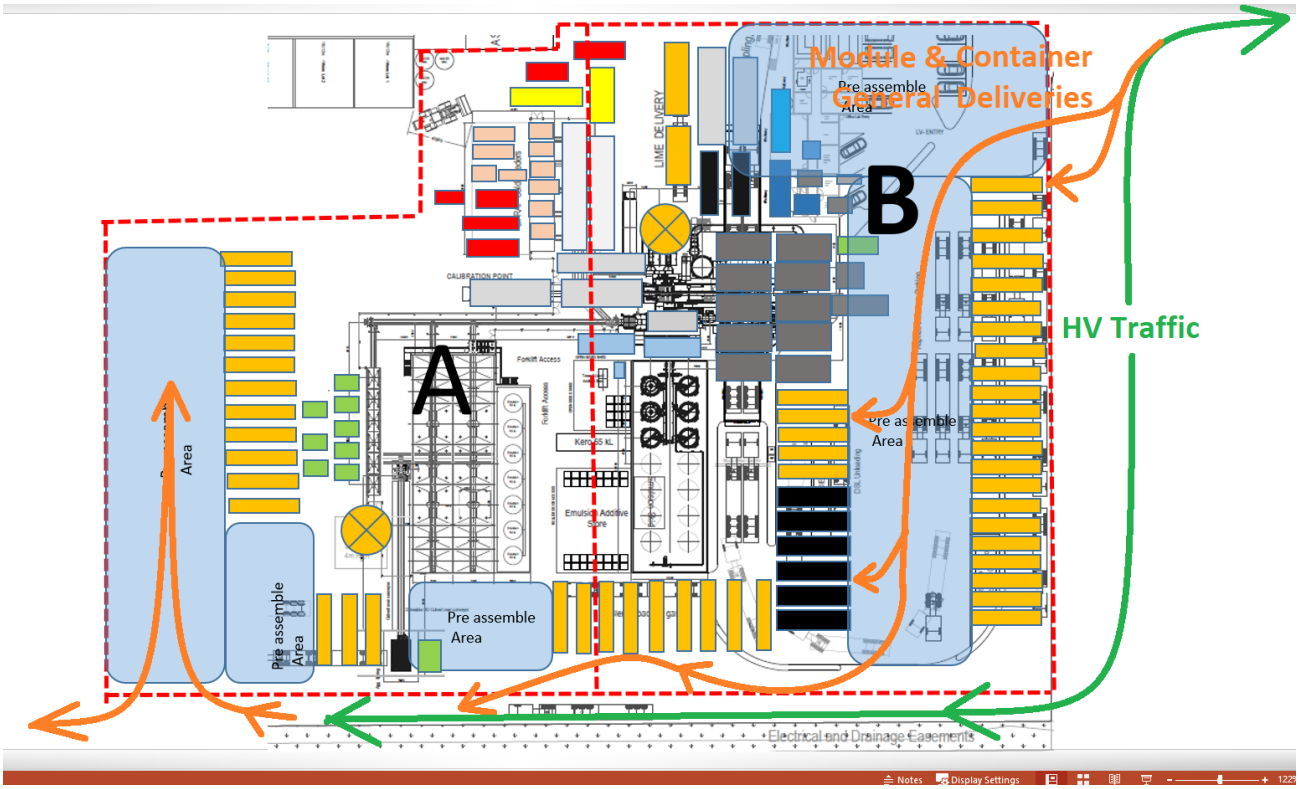

Figure 7.1 Site arrangement – asphalt plant installation

RAP Plant

- The RAP plant will be inside a shed that will be enclosed on the north, west and south sides. The east side will be partly open.
- The works will consist of placement of the RAP conveyors and shaker screens into the prepared footings and bins then a shed installer will be engaged to erect the shed roof and walls.
- The RAP plant will be delivered in 20 shipping containers. Construction will be within the RAP shed footprint however deliveries and lifting will be conducted on the surrounding pavement. This does not interfere with the proposed one-way ring road.
- The duration of the works is planned to be 19 weeks consisting of the assembly and wiring, commissioning and shed installation.

Bitumen Products Plant

- The bitumen products plant is nestled between the vertical aggregate silos and the asphalt plant. While the bitumen tanks will be lifted and installed vertically adjacent to the aggregate silos, blending and mixing will be undertaken in the emulsion additive store shed. The following plant will be located within the shed:
    - Control room (PLC)
    - Emulsifier mill
    - Blending tank
    - Additive weighting systems
    - Additive tanks
    - Associated emulsion pumps and pipelines
- The bitumen products will be delivered in eight truckloads.
- The duration of the works is planned to be 36-44 weeks.

Reconomy facility

The Reconomy facility will comprise of the following:

- Conveyors.
- Hoppers.
- Trommel.
- Log washer.
- Clarifier.
- Water tanks.
- Water pumps.
- Centrifuge.
- Screen deck (with vibrator).
- Wash screens (with vibrator).
- Eddy current separator.
- Hydro cyclone and ferromagnetic separator.

The Reconomy facility will be covered by a roof with the waste receivals area on the southern end and the recovered materials storage bunkers on the northern end largely enclosed on three sides.

The Reconomy plant will be delivered predominantly in 20 shipping containers, with a few large modules delivered on flatbed trays and Skel trucks. The works will consist of delivery and direct placement of tanks, centrifuges and decks on the prepared footings and slabs before conveyor connections and plumbing. Then a shed installer will be engaged to erect the roof and walls.

The deliveries and construction will be within the Reconomy slab footprint. This does not interfere with the proposed one-way ring road.

The duration of the works is planned to be 18 weeks consisting of assembly, plumbing, wiring and commissioning. Shed installers will be also working alongside the mechanical installers erecting a roof over the entire Reconomy facility and walls on the three sides of the waste receivals area and recovered materials storage bunkers.

Ancillary infrastructure

The Sustainable Road Resources Centre will also comprise the following ancillary infrastructure to facilitate the above land uses:

- 34 car parking bays.
- 18 truck parking bays.
- Site offices.
- Laboratory.
- Workshop building.
- Weighbridges.
- Stormwater management infrastructure.
- Services and utilities including an electrical substation.
- Landscaping, fencing and signage.

6.2.3 Hours of construction

The project will generally be constructed between 7am-6pm Monday-Friday and 8am-1pm Saturday. Construction outside of these hours will be required on both weekdays and weekends including Sundays and will only be undertaken in the following circumstances. Construction on public holidays will be avoided.

- 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 and reproduced in Table 3.3 of the Construction Noise Management Plan (Annex C); or
- works agreed to in writing by the Planning Secretary; or
- for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
- where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

6.3 Construction contacts

The key construction contacts are:

Role	Name	Details
Project Director	Jason Hearn	**T** | 02 8748 3200 **M** | 0427 330 053 **E** | ***Jason.Hearn@Downergroup.com***
Project Manager	Sam Far	**T** | 0403 550 384 **E** | ***Sam.Far@downergroup.com***
Senior Project Engineer	Bradley Dentice	**M** | 0447 049 490 **E** | ***Bradley.Dentice@downergroup.com***
Project Engineer	Ibrahim Habib	**M** | 0417 429 864 **E** | ***ibrahim.habib@downergroup.com***
Site Engineer	Kallen Doong	**T** | 0456 754 942 **E** | **kallen.doong@Downergroup.com**
Zero Harm Advisor	Andrew McSorley	**T** | 0438 735 231 **E** | ***Andrew.McSorley@Downergroup.com***

6.4 Environmental Control Map

The Environmental Control Map for the project is included in *Annex J – Environmental Control Map* and details the environmental sensitivity of the proposed project area, including but not limited to:

- Endangered and Threatened Ecological Communities
- watercourses
- project boundaries and work locations
- environmental protection boundaries; and
- designated “No-Go Zones”.

7 ENVIRONMENTAL MANAGEMENT

7.1 Objectives & Targets

Downer has developed a standard set of objectives and targets that are applicable to all projects, as per the following table. These objectives and targets are managed to ensure that all identified, as well as potential environmental impacts that could reasonably be expected to occur during the works, fall within acceptable and agreed limits. This is achieved through pro-active environmental management planning prior to carrying out particular elements of work.

Focus Area	Objective	Target
Legal Compliance	▪ Compliance with all legal requirements. ▪ Undertake the project in accordance with environmental approvals.	▪ 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 entered into **INX**. Ensure actions are closed out by the nominated due dates.	0 actions arising from incident overdue >30 days.
Planning	Ensure that Downer 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 Downer workers and others.
Risk Management	Ensure that Downer workers are familiar with hazards and risks associated with the execution of the scope of work (work under contract).	Work in accordance with SWMS, JHA and JSEA.
Consultation	Ensure that Downer workers are regularly consulted on matters that affect the environment.	Conduct pre-start meetings (daily), and toolbox meetings (monthly).
Training	Ensure Downer workers are provided with training to enable work practices to be undertaken that are safe and minimise risk to the environment.	All Downer workers undertake, as a minimum, the two levels of induction training, i.e. project specific induction and Downer site specific induction.

7.2 Risk Management

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

The identification of environmental activities and the respective potential impact to the environment is determined following a review of the:

- contract and its associated environmental conditions;
- consent conditions as applied by the regulatory bodies and detailed in the associated Environmental Impact Assessment (EIA) document or similar; and
- actual scope of work and consideration of all applicable legislation, standards, and other conditions.

The following table 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: Residual and unexpected contamination management plan RUCMP).
- 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).

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
	▪ Downer 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

Aspect	Measure	Timing/ frequency
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. 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.	Construction
	▪ 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
▪ Visual monitoring of activities is to be undertaken 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. 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.	Construction
▪ 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
▪ 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, Downer will consult with NRAR regarding acquisition of a license under the NSW *Water Management Act 2000*.	Prior to groundwater dewatering works
▪ 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: – 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: – 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 virgin excavated natural material (VENM), excavated natural material (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
▪ Downer 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 rainfall
▪ All cut and fill slopes will be seeded and hydromulched.	Construction – within 10 days of completion of formation
▪ Access and exit areas will include 'truck shaker', or other approved methods, for the removal of soil materials from motor vehicles.	Construction
▪ Downer 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.	Prior to construction and ongoing
▪ 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.	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, the Applicant is to engage an AQF Level 5 Arborist to prepare 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 – 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.	Prior to installation of services

Aboriginal heritage unexpected finds protocol	
The following procedure will be implemented if a suspected Aboriginal or historic heritage object is identified during construction of the project: ▪ 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 advise 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 *National Parks and Wildlife Act 1974*.	Construction
Historic heritage unexpected finds protocol	
▪ 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.	Construction

Human skeletal remains	
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: 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. Subsequent management actions will be dependent on the findings of the inspection under Point 3 above: ▪ 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.	Ongoing
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
▪ 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
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 Downer where feasible and practical.	Construction

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: ▪ 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; and ▪ 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 within the site will be in accordance with the landscape design report and landscaping plans in Annex F.	Construction
The use of highly reflective elements materials on the tallest components should be minimised and limited to those components that require unpainted steel/stainless steel finished surfaces as they need to withstand high temperatures.	Pre-construction/ design and construction
Colour the tallest, most visible components of the project a light/mid-grey tone similar to that shown in illustrations.	Pre-construction/ design and construction
Paint or colour-treat the lower elements of the project to blend with the surroundings and decrease their visibility and contrast. Choose a colour two to three shades darker than the background colour such as mid/dark grey.	Pre-construction/ design and construction
Do not paint components white or brightly coloured unless there is a safety or functional requirement to do so.	Pre-construction/ design and construction
Ensure all external structures have a non-reflective finish. Avoid highly reflective elements (such as glossy silver/steel) except where unavoidable (note with time any glossy steel components would weather to more of a matt grey).	Pre-construction/ design and construction
Use semi-gloss finish rather than flat or gloss finish.	Pre-construction/ design and 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

7.3 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.

7.4 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 Downer.

Subcontractor personnel adopt the same responsibilities as outlined for Downer 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.

8 TRAINING & AWARENESS

Downer 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.

Downer 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.

Downer 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 Downer ensures that these responsibilities are communicated to all personnel via appropriate environmental management training, including the initial environment induction.

8.1 Environmental Principles

The Environmental Principles are prominently displayed on-site in communal areas, on notice boards and the Downer **IMS**.

8.2 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.

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 7.2 and Annex H).
    - Restricted access to the Duck River riparian corridor (Section 7.2).
    - 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 7.2).
    - Noise management controls (Annex C) and air quality management controls (Section 7.2).
    - 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 10).

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 7.2).

8.2.1 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.

8.3 Training

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

Downer maintains 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 Downer, in addition to the environmental induction.

9 COMMUNICATIONS

9.1 General Communication

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

Downer uses 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 Downer 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.

9.2 External Communication

9.2.1 Community Liaison Manager

The Community Liaison Manager will:

- lead a program of communication activities for informing the community on construction activities and potential disturbances
- manage the handling of enquiries and complaints in line with the complaint handling procedure
- work closely with the technical streams and construction management team to ensure known stakeholder requirements are proactively considered when developing program sequencing, design and construction methodology and operations interfaces
- manage the maintenance of stakeholder database and contribute to reporting requirements.

The Community Liaison Manager will lead communication and engagement activities with support and guidance from the from the Project Manager, Senior Project Engineer, Site Supervisor and other resources as required.

9.2.2 Stakeholders

Primary community stakeholders during construction will comprise the following:

- Immediate neighbours:
  - Viva Energy.
  - Goodman Property.
  - Charter Hall Rosehill Distribution Centre.
  - Rosehill Gardens.
- Properties along the construction access/egress routes between James Rouse Drive and the site and Parramatta Road and the site.
- Residences in Silverwater to the south of Duck River.

9.2.3 Communications Management System (CMS)

The Project will use Downers Communication Management System, Consultation Manager (CM). CM will be used to collect and record details of all project contact and correspondence with stakeholders and the community. The CM will be updated by a member of the communications team to:

- record all contacts with stakeholders and the community, and the actions resulting from these contacts
- track the progress and closeout of enquiries and complaints
- identify trending issues and opportunities, enabling the implementation of mitigation strategies and continual improvement
- maintain accurate contact details of stakeholders
- prepare monthly reports to the Downer management on communications activities.

9.2.4 Communications information

Downer will provide accurate communications information to relevant stakeholders and the community regarding current and upcoming construction activities and possible disturbances, including:

- prior to site establishment: a program of construction activities, scheduling and details of mitigation measures to minimise community impacts.
- monthly updates: detailing Project status including completed works and upcoming works, including any associated community impacts and mitigation measures.

Downer's 24-hour contact is Sam Far mobile 0403 550 384, email ***sam.far@downergroup.com***. The secondary contact on the project is Bradley Dentice mobile 0447 049 490, email ***bradley.dentice@downergroup.com***.

9.2.5 Information channels

The Project phone number, email and direct mail address will provide the community 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.

9.2.6 Meetings with stakeholders

Downer will coordinate engagement activities with key stakeholders and the community if required. Meetings or briefings with stakeholders may be organised to discuss construction activities including scope, out of hours works, disruption to traffic or access and any other issues as a result of the Project. Suitable or specialist people will be available to attend these meetings.

Relevant material will be presented and/or distributed at these meetings.

9.2.7 Notifications

Notifications will provide details on construction activities with the potential to impact stakeholders and the community including: commencement of construction, significant milestones, changes to scope, night works,

changes to traffic conditions, pedestrian routes, cycle ways and public transport routes, out of hours works, disruption to accesses or utilities, and any investigation activities.

All community notifications will include the Project's 24-hour telephone number, website, postal and email addresses.

9.2.8 Media and government relations

Downer 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 Downer executive management
- do not permit media or government representatives onsite without prior written approval from Downer executive management.

9.2.9 Access to information

At least 48 hours before the commencement of construction Downer will:

(a) make the following information and documents (as they are obtained or approved) publicly available on its website:

i. the documents referred to in condition A2 of the consent;

ii. all current statutory approvals for the development;

iii. all approved strategies, plans and programs required under the conditions of the 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 the 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;

xii. any other matter required by the Planning Secretary; and

(b) keep such information up to date, to the satisfaction of the Planning Secretary.

9.2.10 Monitoring, evaluation and reporting

Monitoring and evaluation of the effectiveness of the communications activities for the project will be undertaken on a monthly basis. The CMS database management system and CMCG meeting minutes will be used as the main reporting and monitoring tool for the communication activities. The following table provides the frequency of the reporting activity to be undertaken.

Frequency	Monitoring, evaluation and reporting
Monthly	▪ Community construction updates ▪ Monthly report to Downer PM team
As required	▪ Community and stakeholder meetings and minutes ▪ Surveys and feedback received from the community and stakeholders

10MONITORING & CORRECTIVE ACTION

10.1 Audit & Inspection

Downer conducts internal environmental audits to ensure the ongoing adequacy and effectiveness of the CEMP and **IMS**, and to facilitate continuous improvement.

Environmental audits are planned and scheduled with all other project audits, and detail the type of audit, duration, auditors (including the Lead Auditor), and dates.

The findings from internal audits on the implementation of the CEMP and **IMS** for the project are provided to the Project Manager. The Project Manager will hold regular discussions with the project team to identify changes to construction activities that will address audit findings and facilitate continual improvement throughout the construction phase of the project.

Audits are conducted by personnel with the relevant expertise.

In addition to planned internal audits, the project team verifies environmental conformance to the Environmental Management Plan as per the reviews in the following table.

Type of Review	Goal	Frequency
Meteorology	▪ Meteorological data including rainfall will be monitored.	▪ Daily
Solid Wastes	▪ Recycling where practical and economically feasible. ▪ Appropriate use of landfill site for disposal. ▪ Appropriate placement and use of site amenities.	▪ Spot checks of recycling facilities. ▪ Informal daily, formal weekly inspections using the Environmental Inspection Checklist Temporary Site.
Biodiversity	▪ Compliance with the project's biodiversity management measures (Section 7.2). ▪ 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 Temporary Site.
Erosion and Sediment Control Measures	▪ Implementation, monitoring, and maintenance of all soil erosion and sediment control measures defined in Section 7.2 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.	▪ Informal daily, formal weekly inspections using the Environmental Inspection Checklist Temporary Site. ▪ 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 Temporary Site.

Type of Review	Goal	Frequency
Hydrocarbon and Oil Spills	▪ 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 Temporary Site.
Air Quality and Dust Management	▪ No visible dust off-site. ▪ No dust complaints. ▪ Compliance with the management measures.	Continuous monitoring by Environmental Advisor and/ or Site Supervisor. Spot checks of sites and weekly inspections using the Environmental Inspection Checklist Temporary Site.
Noise	▪ No noise complaints.	Following a complaint: ▪ 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. ▪ 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	▪ 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.	Continuous monitoring by Environmental Advisor and/ or Site Supervisor. Weekly inspections using the Environmental Inspection Checklist Temporary Site.
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 Temporary Site.

Type of Review	Goal	Frequency
Housekeeping	▪ 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 Temporary Site.

Whenever practicable, personnel conducting an audit address identified deficiencies during the course of the inspection. In all other cases the Supervisor is responsible for ensuring action and a date for completion is assigned to each outstanding action. The Environmental Advisor 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.

10.2 Subcontractor Audits

Subcontractors are required to undertake audits of their workspace, as communicated to the subcontractor through the tender and contract. Compliance with this requirement is a contract deliverable and is defined in the Vendor Data Requirements. Refer to the project's Procurement & Supply Management Plan for further information. The environmental audit requirements are communicated to the procurement team for inclusion in the tender documents.

The reviews listed in the table in section *10.1 Audit & Inspection* also apply to subcontractor activities and workspaces.

10.3 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); and
- damage to heritage items or protected flora and fauna.

Possible non-compliances include non-compliance with the management measures outlined in this Environmental Management Plan, and mitigation strategies/ management measures outlined in the Environmental Management Plan 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.

10.3.1 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; and
- 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 9 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.

10.3.2 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:

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.

The following table 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; and
- Details of any required assistance.

Authority	Contact	Details
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 NSW Fire and Rescue NSW Ambulance Service	131 444 1300 729 579 Emergency: 000

Once becoming aware of an incident, Downer 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.

10.3.3 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 the above table.

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; and
- Identify a project contact for further communication regarding the incident.

Non-compliances will be notified in accordance with Section 10.3.2.

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; and
- 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.

10.3.4 Incidents and non-compliance register

An Incidents and Non-Compliance Register will be maintained during construction and will contain the following:

- 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 listed in Section 6.3 and the contact details for the regulatory authorities listed in Section 10.3.2;
- Blank hard copies of the Incident Report; and
- Copies of all completed Incident Report which are to be maintained for at least five years after the event to which they relate.

10.3.5 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 outlined in Section 10.3.3 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.

10.4 Environmental Complaints

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

- records complaints as an incident in **INX.**
- investigates and verifies complaints, and assesses if excessive off-site impacts have occurred.
- implements corrective measures including modification of execution methods and operational techniques to avoid recurrence or minimise ongoing adverse impacts.
- completes monitoring/ additional investigations to verify the adequacy of the recommendations, as required.
- notifies the complainant of actions taken; and
- continues to monitor activity, if required.

10.4.1 Responsibility

The Community Liaison 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.

10.4.2 Procedure

1. Record and acknowledge

Any employee who receives a complaint, either verbal or written, is to immediately notify the Community Liaison 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 Community Liaison 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 10.3 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 Community Liaison Manager will assess whether the complaint is founded or unfounded and delegate the remediation, as required.

5. Respond to complainant

The Community Liaison 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.

10.4.3 Dispute Resolution

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

If there is a dispute arises between Downer 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 Downer 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.

10.5 Environmental Breach

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

Employees who breach the requirements of this Environmental Management Plan 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.

10.6 Reporting

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

Monthly reporting for Downer includes:

- greenhouse gas and energy data; and
- waste generation and water consumption data, gathered using the Subcontractor Envizi Data Collection Record.

Other Reporting Requirements

Requirement	Timing/ frequency	CoA/ 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 10.3.4 and 10.4.2
Downer will record environmental performance during regular management meetings and/or 'toolbox talks'. Items to be discussed and recorded include: ▪ Results of any monitoring activities undertaken; ▪ Any environmental incidents that have occurred during the previous period, including the management/ corrective actions taken; ▪ Any complaints that have been received during the previous period, including any management/ corrective actions taken.	Weekly	CEMP Section 8.2

A copy of all environmental records will be maintained, including: ▪ 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 10.1, 10.2, 10.3.4, 10.7, 8.2 and 8.3
A Waste Management Register will be maintained and will include: ▪ 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; and ▪ Name and waste transport licence (if applicable) of the transporter used.	Ongoing	Section 7.2

10.7 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 7.2 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.

11 DOCUMENT CONTROL & MANAGEMENT REVIEW

All project documents are generated, numbered, approved, revised, transmitted, and stored in accordance with the project's Document Control Plan.

The Environmental Management Plan review ensures the suitability, effectiveness, and adequacy of the plan. The Environmental Management Plan 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 Environmental Management Plan with respect to incident trends and findings from internal and external audits.

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

ANNEX A – DEVELOPMENT CONSENT SSD 10459

ANNEX B – RESIDUAL AND UNEXPECTED CONTAMINATION MANAGEMENT PLAN

ANNEX C – CONSTRUCTION NOISE MANAGEMENT PLAN

ANNEX D – FLOOD EMERGENCY RESPONSE PLAN

ANNEX E – CONSTRUCTION TRAFFIC AND PEDESTRIAN MANAGEMENT PLAN

ANNEX F – LANDSCAPE MANAGEMENT PLAN

ANNEX G – CONTINGENCY MANAGEMENT PLAN

Item	Trigger/ response	Condition		
		Green	Amber	Red
Noise impacts at sensitive receiver locations	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.	Undertake all feasible and reasonable mitigation and management measures to minimise noise impacts.	Undertake 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	Daily inspections show that there is no visible dust leaving the site.	Daily inspections show that there is visible dust leaving the site.	Daily inspections show that 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.	Undertake an investigation of the dust generating activities, and if necessary, temporarily halt the dust generating activities.
Queuing	Trigger	No queuing identified	Queuing identified within site.	Queuing identified on the public road.
	Response	No response required.	Review the construction delivery schedule. If drivers are not following the	Review and investigate construction activities. If it is concluded that

		Continue monitoring program.	correct schedule, then they should be provided with additional training and an extra copy of the Driver Code of Conduct.	construction activities are directly responsible for queuing on public roads, implement additional control measures such as: ▪ Put a temporary hold on incoming heavy vehicle deliveries. ▪ Review CTMP and update where necessary. ▪ Provide additional training.
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	Stop work and implement the unexpected finds protocol in Section 7.2. Heritage item

			unexpected finds protocol in Section 7.2.	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).

ANNEX H – CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN

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.

Refer to the PMP for further information.

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 Environmental Management Plan.
- 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 Environmental Management Plan and applicable sub-plans, and Downer 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 Downer 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 Environmental Management Plan and the respective sub-plans, and Downer procedures.
- Conducting periodic reviews and audits 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 Downer procedures.
- Providing technical support to site staff.
- Assisting in the investigation of any incidents.
- Maintaining effective Zero Harm systems in the field by developing maximum employee and subcontractor participation.
- Participating actively in project team Zero Harm 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.
- Undertaking regular system/ project environmental audits and producing high quality environment audit reports.
- Provide environmental guidance in resolving 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.

Community Liaison Manager

The Community Liaison Manager will:

- lead a program of communication activities for informing the community on construction activities and potential disturbances
- manage the handling of enquiries and complaints in line with the complaint handling procedure
- work closely with the technical streams and construction management team to ensure known stakeholder requirements are proactively considered when developing program sequencing, design and construction methodology and operations interfaces
- manage the maintenance of stakeholder database and contribute to reporting requirements.

The Community Liaison Manager will lead communication and engagement activities with support and guidance from the Project Manager, Senior Project Engineer, Site Supervisor and other resources as required.

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.

Downer Worker

- 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 Downer prior to execution.
- Undertaking induction(s) as defined by this CEMP and complying with project environmental instructions.
- Providing to Downer details of all hazardous substances, contained within Safety Data Sheets (SDS), proposed for use in subcontractor scope.
- Providing other environmental related data to Downer 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 (Zero Harm Advisor)

Typical Responsibilities

- 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:
    - **INX** administration
    - inductions and registrations
    - audit and inspection results
    - incident reports; and

verification of competency (VOC) and training record updates.

ANNEX J – ENVIRONMENTAL CONTROL MAP