Construction Environmental Management Plan – Addendum

Moorebank Intermodal Precinct – West Precinct South

16 JUNE 2025

MOOREBANK INTERMODAL PRECINCT- PRECINCT WEST- SOUTH

EPBC 2011/6086 Approval

Construction Environmental Management Plan - Addendum

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
01	25/01/2024	Draft for client review	[redacted]	
02	28/02/2024	Final		
03	16/06/2025	Update following CDC approval of Warehouse S4		

CONTEXT

This Construction Environmental Management Plan (CEMP) – Addendum (Addendum) applies to construction activities being undertaken at the Moorebank Precinct West (MPW) South Site, in Moorebank, New South Wales, and addresses:

- The relevant conditions of the 2011/6086 Approval issued under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- The relevant conditions of the MPW – Concept and Stage 1 State significant development (SSD 5066) Development Consent
- The Revised Environmental Management Measures (REMM) presented in the MPW Concept Plan Supplementary Response to Submission (RtS) (August 2017)
- The applicable complying development conditions issued with the following Complying Development Certificates (CDC) in accordance with Chapter 6 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP):
  - CDC 230736/01
  - CDC 250077/01.

The MPW Stage 2 CEMP was originally approved by the (then) Department of Planning, Industry and Environment prior to the commencement of construction, in accordance with Condition of Consent (CoC) C2 of the MPW Stage 2 (State significant development (SSD) 7709) Development Consent.

The MPW Stage 3 (SSD 10431) Development Consent was issued by the Independent Planning Commission on 11 May 2021. CoC B17 required a CEMP to be approved by the Planning Secretary prior to commencement of construction. CoC B19 allows the Applicant to prepare standalone CEMP and relevant sub-plan documents or update versions of CEMP documents already approved by the Planning Secretary as part of the MPW Stage 2 (SSD 7709) Development Consent. The MPW Stage 2 CEMP and sub-plans were subsequently updated to include the requirements of the MPW Stage 3 (SSD 10431) Development Consent and approved by the Planning Secretary.

The EPBC 2011/6086 Approval for the MPW Concept was granted by the Commonwealth Department of the Environment and Energy (now the Department of Climate Change, Environment, Energy and Water (DCCEEW (Cth)) in September 2016. The MPW Stage 2 CEMP addresses the relevant conditions of approval (CoA) and commitments required by the EPBC 2011/6086 Approval.

This document forms an addendum to the MPW Stage 2 CEMP, and has been prepared to apply environmental management measures, where relevant, consistently for the construction of the MPW South development. The addendum meets the requirements of the relevant conditions under the following applicable approval instruments:

- EPBC 2011/6086 Approval
- MPW Concept and Stage 1 (SSD 5066) Development Consent

- CDC 230736/01
- CDC 250077/01.

ACRONYMS AND DEFINITIONS

Acronym / Term	Meaning
Addendum	Construction Environmental Management Plan – Addendum
AS/NZS	Australian Standard/New Zealand Standard
CAQMP	Construction Air Quality Management Plan
CCS	Community Communication Strategy
CDC	Complying Development Certificate issued by the Certifier under the TISEPP
CDWMP	Construction Demolition and Waste Management Plan
CEMP	Construction Environmental Management Plan
CERP	Construction Emergency Response Plan
CERP – Addendum	Construction Emergency Response Plan – Addendum Moorebank Intermodal Precinct – Precinct West South
CFFMP	Construction Flora and Fauna Management Plan
CFFMP – Addendum	Construction Flora and Fauna Management Plan – Addendum Moorebank Intermodal Precinct – Precinct West South
CMP	Contamination Management Plan
CNVMP	Construction Noise and Vibration Management Plan
CNVMP – Addendum	Construction Noise and Vibration Management Plan – Addendum Moorebank Intermodal Precinct – Precinct West South
CoA	Condition(s) of approval
CoC	Condition(s) of consent
Contractor's CM	Contractor's Construction Manager
Contractor's EM	Contractor's Environmental Manager
COOHWP	Construction Out of Hours Work Protocol
CSWMP	Construction Soil and Water Management Plan
CSWMP – Addendum	Construction Soil and Water Management Plan – Addendum Moorebank Intermodal Precinct – Precinct West South
CTAMP	Construction Traffic and Access Management Plan
CTAMP – Addendum	Construction Traffic and Access Management Plan – Addendum Moorebank Intermodal Precinct – Precinct West South
DCCEEW (Cth)	Commonwealth Department of Climate Change, Environment, Energy and Water (formerly Department of Agriculture, Water and the Environment)
DECC	Department of Energy and Climate Change
ECM	Environmental control map
EIFR	Environmental Incident Frequency Rate
EIS	Moorebank Intermodal Terminal Project, Environmental Impact Statement (Parsons Brinckerhoff, October 2014)
EMS	Environmental Management Systems
ENM	Excavated natural material – naturally occurring rock and soil (including materials such as sandstone, shale, clay and soil) that has: a) Been excavated from the ground b) Contains at least 98 per cent (by weight) natural material c) Does not

	meet the definition of Virgin Excavated Natural Material (VENM).
Environmental Emergency	Any event that causes or has the potential to cause material harm to the environment. An environmental emergency is a Class 3 incident.
Environmental Incident	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. Environmental incidents include pollution incidents and environmental emergencies. Environmental incidents may arise from natural (e.g. storm, wind or bushfire) or human factors.
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPBC 2011/6086 Approval	Commonwealth Approval (No. 2011/6086) granted in September 2016 under the EPBC Act, for the impact of the MPW Project on listed threatened species and communities (sections 18 and 18A of the EPBC Act) and Commonwealth action (sections 28 of the EPBC Act).
EPL	Environment Protection Licence
ESCP	Erosion and Sediment Control Plan
GHG	Greenhouse gases
HSE	Health, safety and environment
ICAM	Incident Cause Analysis Method
IMEX	Import-Export Terminal Facility
IMT	Intermodal freight terminal
ISO	International Organisation for Standardisation
LTEMP	Long Term Environmental Management Plan
Material harm	Harm that involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
MPW South site	The Project area, as defined within Figure 1-1 and sitting outside the footprint of SSD 7709, but within SSD 5066
MPW Stage 2/3	Moorebank Precinct West Stage 2 and Stage 3
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with the CDC, EPBC 2011/6086 Approval or the SSD 5066 Development Consent but is not an incident.
Non-conformance	Observations or actions that are not in strict accordance with this Addendum or the Sub-Plan – Addenda
OEH	Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
PFAS	Per- and Poly-Fluoroalkyl Substances
POEO Act	Protection of the Environment and Operations Act 1997
Principal's	The Logos Project Management Team including environmental specialists and the

Representative	Communications Manager
The Project	The construction of four warehouses ('S1', 'S2', 'S4' and 'S5') and associated landscaping and infrastructure on the MPW South Site, as defined within Figure 1-1
Project personnel	All persons listed in Section 2.4 including sub-contractors working on the Project site
Project site / Project footprint	The MPW South Site which includes all areas to be disturbed by the Project during construction
REMM	Revised Environmental Management Measures. These are the management and mitigation measures presented in the MPW Concept Plan Supplementary RtS (August 2017).
RtS	Response to Submissions
UFP	Unexpected Finds Protocol
SIMTA	Sydney Intermodal Terminal Alliance
SSD	State significant development
SSFL	Southern Sydney Freight Line
TEUs	Twenty-foot equivalent units
TISEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
VENM	Virgin excavated natural material – material that has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, commercial, mining or agricultural activities.
WHS	Work health and safety
WMS	Work Method Statement

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1. Introduction

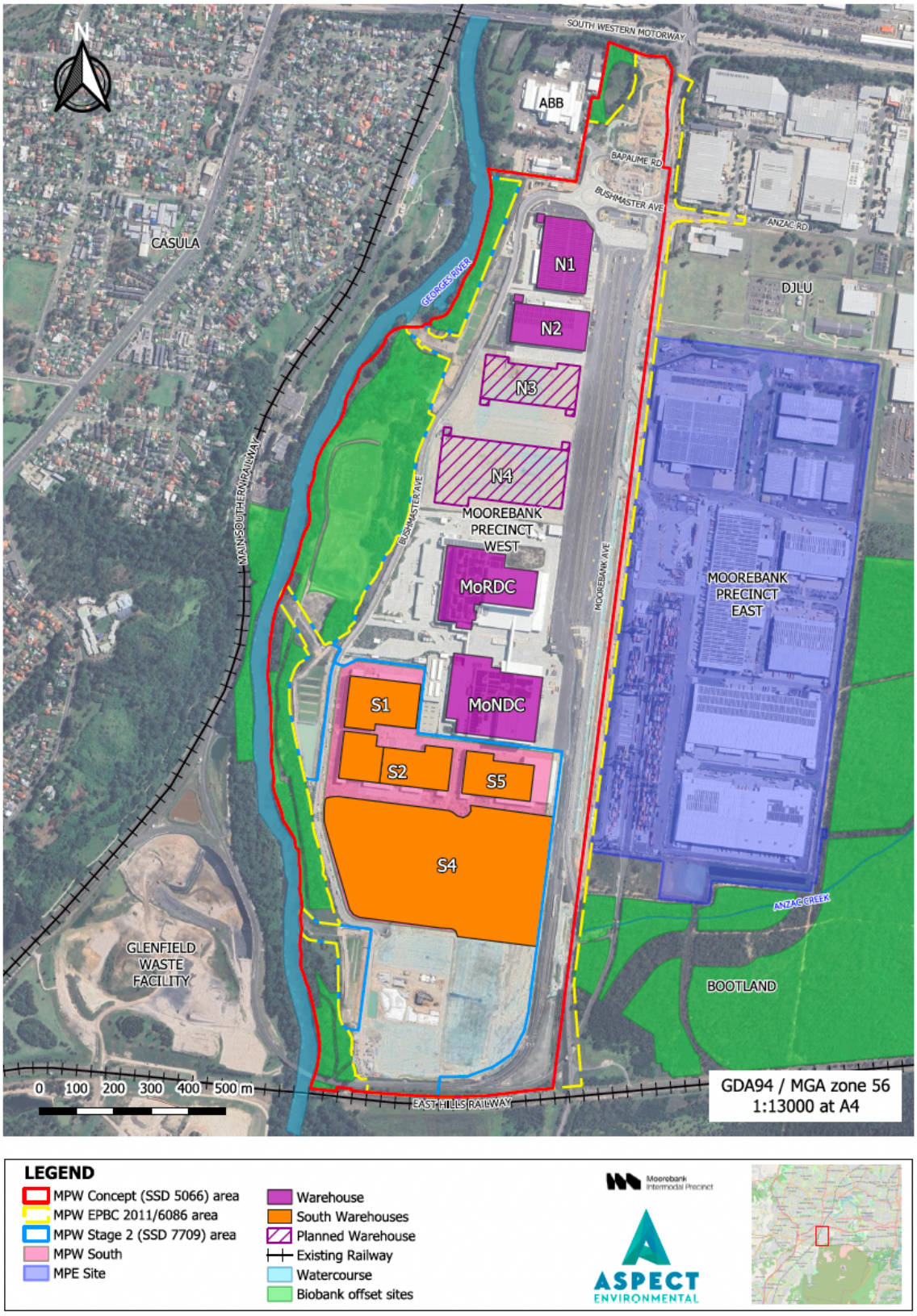
This Construction Environmental Management Plan – Addendum (Addendum) defines the environmental management framework for construction of the MPW South Warehouses (the Project) and addresses:

- The relevant CoA of the EPBC 2011/6086 Approval
- The relevant conditions of the MPW – Concept and Stage 1 (SSD 5066) Development Consent
- The relevant complying development conditions issued under:
  - CDC 230736/01
  - CDC 250077/01.

The location of the Project site is shown in Figure 1-1.

The Project involves the construction and operation of warehouses (‘S1’, ‘S2’, ‘S4’ and ‘S5’) on the MPW South Site, as well as ancillary works including landscaping and infrastructure.

Figure 1-1 MPW South Site location



1.1. Addendum Purpose and Context

This Addendum is the overarching plan for construction environmental management of the Project. It has been developed to align with the MPW Stage 2/3 CEMP and to address the requirements of the relevant approval and consents.

This Addendum is relevant during construction of the Project as detailed in Section 1.2.

The objectives of this Addendum are:

- Identify and implement relevant environmental legal and other regulatory requirements applicable to the construction works
- Identify the environmental management measures which will enable the Project to minimise and manage impacts on the environment and community
- Assign roles and responsibilities for the implementation, management and review process
- Provide a consistent and uniform approach to environmental management
- Provide all personnel working on the Project with sufficient information to undertake their works in accordance with the development consent conditions, contractual, legal and other relevant environmental requirements
- Provide a framework for training, development and support (systems, procedures and documentation) necessary to undertake the works
- Enable the commitments within the Moorebank Intermodal Terminal Project, Environmental Impact Statement (EIS) (Parsons Brinckerhoff, October 2014) to be captured and implemented onsite.

1.1.1. Stakeholder Consultation

Consultation with DCCEEW (Cth) was undertaken prior to the initial preparation of this Addendum to confirm post-approval documentation requirements for the Project. A meeting was held with DCCEEW (Cth) representatives on 5 September 2023 and DCCEEW (Cth) subsequently confirmed (14 September 2023) that management plans for the Project should be submitted under Condition 21 of the EPBC 2011/6086 Approval as a revision to previously approved management plans (the MPW Stage 2/3 CEMP and sub-plans).

No other stakeholder consultation was required for the preparation of this Addendum and associated Sub-Plan Addenda.

1.1.2. Structure of Addendum and Sub-Plan Addenda

This Addendum is structured as follows:

- **Section 1 Introduction** – Details the purpose and context of this Addendum, describes the Project and its objectives and targets.
- **Section 2 Environmental Framework** – Outlines the:
  - ESR Management Systems
  - requirements of legislation, development approvals, permits and licences
  - roles and environmental responsibilities for the construction of the Project
  - communications
  - environmental training and competence
  - emergency preparedness and response.
- **Section 3 Implementation** – Describes the aspect, impacts and risk management for the construction of the Project and the environmental management activities and controls.
- **Section 4 Monitor and Review** – Details the
  - environmental monitoring, observations, inspections and auditing required during the construction of the Project
  - management of non-conformance and non-compliance
  - management review of this Addendum
  - environmental reporting requirements.
- **Appendices** –
  - Appendix A – Compliance and Obligations Registers
  - Appendix B – Aspect and Impacts Register
  - Appendix C – Unexpected Finds Protocol.

This Addendum and sub-plans provide the environmental management framework applicable to the Project. These sub-plans, including addenda to the MPW Stage 2/3 sub-plans, and the requirements that they address are detailed in Table 1-1.

Unless otherwise outlined within addenda documents, the relevant measures within the following MPW Stage 2/3 sub-plans will be implemented during the construction of the Project:

- Construction Air Quality Management Plan (CAQMP) (Appendix H of the MPW Stage 2/3 CEMP)
- Construction Heritage Management Plan (CHMP) (Appendix J of the MPW Stage 2/3 CEMP)

- Contamination Management Plan (CMP) (Appendix L of the MPW Stage 2/3 CEMP)
- Acid Sulphate Soils Management Plan (ASSMP) (Appendix M of the MPW Stage 2/3 CEMP)
- Construction Demolition and Waste Management Plan (CDWMP) (Appendix O of the MPW Stage 2/3 CEMP)
- Light Spill Management Plan (LSMP) (Appendix P of the MPW Stage 2/3 CEMP).

Table 1-1 Sub-plans and development approval requirements

Sub-plans	EPBC 2011/6086 Approval	MPW – Concept and Stage 1 (SSD 5066) Development Consent	REMM	CDC Condition
Community Communications Strategy (CCS) – Moorebank Intermodal Precinct – Precinct West South	-	-	REMM 2A and 2B	-
Construction Flora and Fauna Management Plan (CFFMP) – Addendum	CoA 7	-	REMM 6A, 6H, 6L, 6O, 6R, 6T and 6 Xi	-
Construction Noise and Vibration Management Plan (CNVMP) – Addendum Construction Out of Hours Work Protocol – Moorebank Intermodal Precinct – Precinct West South (COOHWP)	CoA 6	-	REMM 5A-5P, 5R, 5S, 5AK and 17A	14
Construction Soil and Water Management Plan (CSWMP) – Addendum	CoA 8 and 9	-	REMM 8I-8L, 8Q, 8R, 8T, 8U, 8W-8Y, 9A-9C, 9E, 9K-9S and 18Z	15 and 16
Construction Traffic and Access Management Plan (CTAMP) – Addendum	CoA 5	CoC E12 and E13	REMM 4L	-
Construction Emergency Response Plan (CERP) – Addendum	-	-	REMM 4N, 7T and 9Q	-
Unexpected Finds Protocols (UFP – Appendix C)	CoA 8, 11 and 12	-	REMM 8D, 12F and 13K	-

1.1.3. Distribution and availability

In accordance with Condition 21 of the EPBC 2011/6086 Approval, DCCEW (Cth) will be provided copies of this Addendum and the sub-plan addenda.

In accordance with Condition 27 of the EPBC 2011/6086 Approval, the current version of this Addendum and the sub-plan addenda will be uploaded to the project website within one month of being submitted to DCCEEW (Cth) under CoA 21.

1.1.4. Revision of this Addendum

The review and revision of this Addendum will be generally consistent with the process detailed in the MPW Stage 2/3 CEMP. This Addendum will be reviewed annually or when triggered by:

- Changes to the project approvals
- Opportunities for improvement identified as part of inspections (either internal or by external parties)
- Changes to ESR management systems
- Changes to procedures and/or scope of works after an incident or potential incident
- Design or construction methodology changes
- Complaints.

1.1.4.1. Project Changes

Proposed changes to the Project (i.e. to the design, construction methodology or location) will be assessed to determine the appropriate approval pathway. Classification of a proposed change will be determined through an “Accordance assessment” process undertaken by the Principal’s Representative for due diligence purposes.

Accordance assessments will be undertaken generally as described in Section 1.2.4.1 of the MPW Stage 2/3 CEMP to determine whether the proposed change would result in “new or increased impact” and “minor environmental impact” and would be “in accordance with” the planning approval documentation.

A modification may be necessary where:

- Changes in the project are in direct conflict with a CoA or CoC
- Change of the construction footprint is beyond the site boundary detailed in the EIS or Supplementary Response to Submissions (RtS)
- Changes in the design are not generally in accordance with the EIS or CoA or CoC
- Changes result in impacts that are inconsistent with, or greater than those identified in the approvals documentation.

In some instances, a project change may proceed as exempt or complying development under Chapter 6 of the TISEPP. This Addendum and relevant sub-plan addenda will be updated to reflect any new or modified conditions, as applicable.

1.1.4.2. Submission of revised plans

This Addendum and sub-plan addenda will be submitted to DCCEEW under CoA 21 of the EPBC 2011/6086 Approval. If this Addendum and sub-plan addenda are revised, the revised documents will also be submitted to DCCEEW in accordance with CoA 21.

1.2. Project Description

The Project site is located approximately 27km south-west of the Sydney Central Business District and approximately 26km west of Port Botany. It is situated within the Liverpool Local Government Area, in Sydney's South West Sub-Region, approximately 2.5km from the Liverpool City Centre and sits entirely within the boundaries of the development footprint described in the EPBC 2011/6086 Approval and SSD 5066 Development Consent.

The Project comprises the development of Warehouses 'S1', 'S2', 'S4', and 'S5', within the southern portion of the MPW footprint (see Figure 1-1). The existing Bushmaster Avenue provides heavy and light vehicle access to the western side of the Project site. This Addendum covers the construction of the warehouses, and also ancillary infrastructure, including offices, hardstands areas, car parking, landscaping, signage and lighting.

1.2.1. Construction Activities

Construction of the Project is currently ongoing. Construction works have been divided into phases which are interrelated and may overlap. The terminology for the construction phases is outlined in Table 1-2 and detailed in the following sub-sections. This list of works does not represent the sequencing of activities.

Table 1-2 Project construction phases

Construction Activity	Construction Phase
Pre-Construction	Site Preparation
Construction	Warehouses
	Ancillary Works

1.2.1.1. Pre-construction activities

The pre-construction activities include, but are not limited to:

- Site surveying including, but not limited to, the installation of survey equipment such as survey controls, repeater stations, environmental monitoring equipment and construction monitoring equipment
- Relocation and connection of utilities
- Maintenance of existing structures including pre-established erosion and sediment controls
- Establishment of exclusion zones
- Installation of temporary sediment and erosion control measures where required to undertake pre-construction activities (pre-construction stockpiling and filling is not a pre-construction activity)
- Installation of temporary construction compounds, including office, site amenities and temporary fencing/hoardings.

1.2.1.2. Warehouses

Construction and fit-out of the warehouses includes, but is not limited to:

- Excavation, foundation and floor slab installation
- Erection of framework and structural walls, including use of cranes
- Installation of roof, including use of cranes
- Internal fit out.

1.2.2. Ancillary works

Construction of ancillary works includes, but is not limited to:

- Landscaping
- Warehouse road and carpark works including:
  - preparation of warehouse access road subgrade
  - forming of new kerbs, gutters, medians and other structures
  - placement of asphalt and concrete pavement
  - new line marking, lighting and sign posting
  - removal of construction traffic management and opening of the warehouse road and carparking to traffic.
- Miscellaneous structural construction and finishing works, including:
  - decommissioning/demobilisation of the construction area
  - removal of construction environmental controls
  - removal of construction ancillary facility related traffic signage
  - post-construction condition surveys

- post-construction site survey
- commissioning of operational facilities.

1.2.3. Construction hours

Construction works will generally be undertaken during standard daytime construction working hours:

- 7:00 am to 5:00 pm Monday to Saturday
- No works on Sunday or public holidays.

Highly noise intensive works (including impulsive or tonal noise emissions) will only be undertaken as follows (except where permitted by the Environmental Protection Licence (EPL)):

- Between the hours of 8:00 am to 5:00 pm Saturday
- In continuous blocks not exceeding three hours each, with a minimum respite from those activities and works of not less than one hour between each block.

Construction outside of the hours nominated above may be undertaken in the following circumstances:

- Works that are inaudible at the nearest sensitive receivers
- Where a negotiated agreement has been arranged with affected receivers
- For the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons
- Where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm
- Where they are undertaken in accordance with the COOHWP.

No blasting is permitted on the Project. Further details are provided in the CNVMP – Addendum.

1.3. Project Objectives and Key Targets

Project objectives and targets have been developed incorporating the governance, social and environmental aspects of sustainable development. These objectives and targets, with corresponding reporting and monitoring requirements, have been adapted from the MPW Stage 2/3 CEMP and are detailed in Table 1-3.

Table 1-3 Project objectives and targets

Objective	Indicator	Target	Reporting/Monitoring	Responsibility	Timing for Compliance	Reference
Governance and Management						
Construct the Project in accordance with environmental approvals	# non-compliances	Zero non-compliances at each quarterly construction compliance reporting stage	Audits Construction compliance reporting Management review	Construction Contractor	Quarterly	Section 2.8 Section 4
Compliance with all relevant legislative requirements	# of infringements # of formal regulatory warnings	Zero regulatory infringements (penalty notices or prosecutions) Zero formal regulatory warnings	Audits Construction compliance reporting Management review	Construction Contractor	End of Project	Section 2.4 Section 4
Minimise the potential for environmental incidents	Environmental Incident Frequency Rate (EIFR)	Class 2 or Class 3 EIFR of <1	Monthly reports	Construction Contractor	Monthly	Section 2.8
Manage the impacts of our supply chain	Supplier evaluations	Supplier evaluation through use of multi-criteria analysis or other scored means	Monitoring of supply contracts Monthly reports	Construction Contractor	Monthly	Section 2.5.4
Minimising Social Impacts						
Proactively engage with the Project team	# inspections accompanied by	50% of project environmental inspections accompanied by	Monthly reports Weekly environmental inspections	Contractor's EM	Weekly	Section 4.2

	supervisory or engineering personnel	Contractor's Environmental Manager (EM)				
	# of inspections signed off	100% of weekly environmental inspections signed off	Monthly reports Weekly environmental inspections	Contractor's Project Manager	Weekly	Section 4.2
	# of environmental toolbox talks per month	Minimum one environmental tool box per month	Training records	Construction Contractor	Monthly	Section 2.7
Support local health and amenity	# of environmental complaints per month Actual response time for each complaint # of complaints resolved as a % of # complaints received	Receive less than three substantiated environmental complaints per month Complainant contacted within four hours of receiving complaint Complainant concerns adequately resolved such that prevention of perceived or potential human health and/or environmental impacts are achieved	Complaints form Incident register	Construction Contractor Communications Manager	Monthly	CCS
Minimising Environmental Impacts						
Protect biodiversity	# of environmental incidents relating to threatened species	No harm to any threatened species	Weekly environmental inspections	Construction Contractor	Daily	CFFMP – Addendum
Minimise waste production	% of total construction waste recycled	90% of construction waste to be recycled	Waste tracking spreadsheet	Construction Contractor	Monthly	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)

	% of spoil beneficially re-used on site % of spoil beneficially reused locally	100% of spoil beneficially reused onsite or locally (not including contaminated material)	Waste tracking spreadsheet	Construction Contractor	Monthly	CDWMP
	% of office waste recycled	>60% of office waste recycled	Waste tracking spreadsheet	Construction Contractor	Monthly	CDWMP
Minimise energy consumption and emission of greenhouse gases	Business as usual defined Greenhouse Gases (GHG) Scope 1 and Scope 2 emissions % reduction of Scope 1 and Scope 3 GHG emissions against defined benchmark	>15% reduction of Scope 1 and Scope 2 GHG emissions against a modelled business as usual scenario	Monthly online reporting of energy and fuel usage	Construction Contractor	Monthly	NA
	% renewable energy used on site	>20% renewable energy usage on site	Monthly online reporting of energy and fuel usage	Construction Contractor	Monthly	NA
Use of sustainable materials	% reduction in embodied energy in construction materials used achieved against defined benchmark	>15% reduction in embodied energy in construction materials based on a business as usual scenario	Concrete specifications Energy consumption register	Construction Contractor	Monthly	NA
Effectively manage water consumption	% reduction achieved against defined benchmark	>10% reduction in water usage against a modelled business as usual scenario	Water consumption register Weekly environmental inspection Monthly reports	Construction Contractor	Monthly	CSWMP – Addendum

	% non-potable use achieved against defined benchmark	>33% non-potable water usage against a modelled business as usual scenario	Weekly environmental inspection Monthly reports	Construction Contractor	Monthly	CSWMP – Addendum
Minimise visual impacts	Number of complaints during construction regarding light spill from temporary lighting	Receive no substantiated environmental complaints	Daily inspections (during out of hours works) Weekly inspections at all other times	Construction Contractor	Daily	Light Spill Management (Appendix Q of the MPW Stage 2/3 CEMP) CCS

2. Environmental Framework

2.1. Management Systems

The Environmental Management System (EMS) comprises the Work Health and Safety (WHS) Management System and Sustainability Framework for environmental management and includes of various procedures and policies to facilitate the identifying, managing and reporting of environmental risks. The EMS is aligned to Australian Standard/New Zealand Standard (AS/NZS) ISO 14001 (2015) and this Addendum will be implemented in a manner that is consistent with the requirements of EMS.

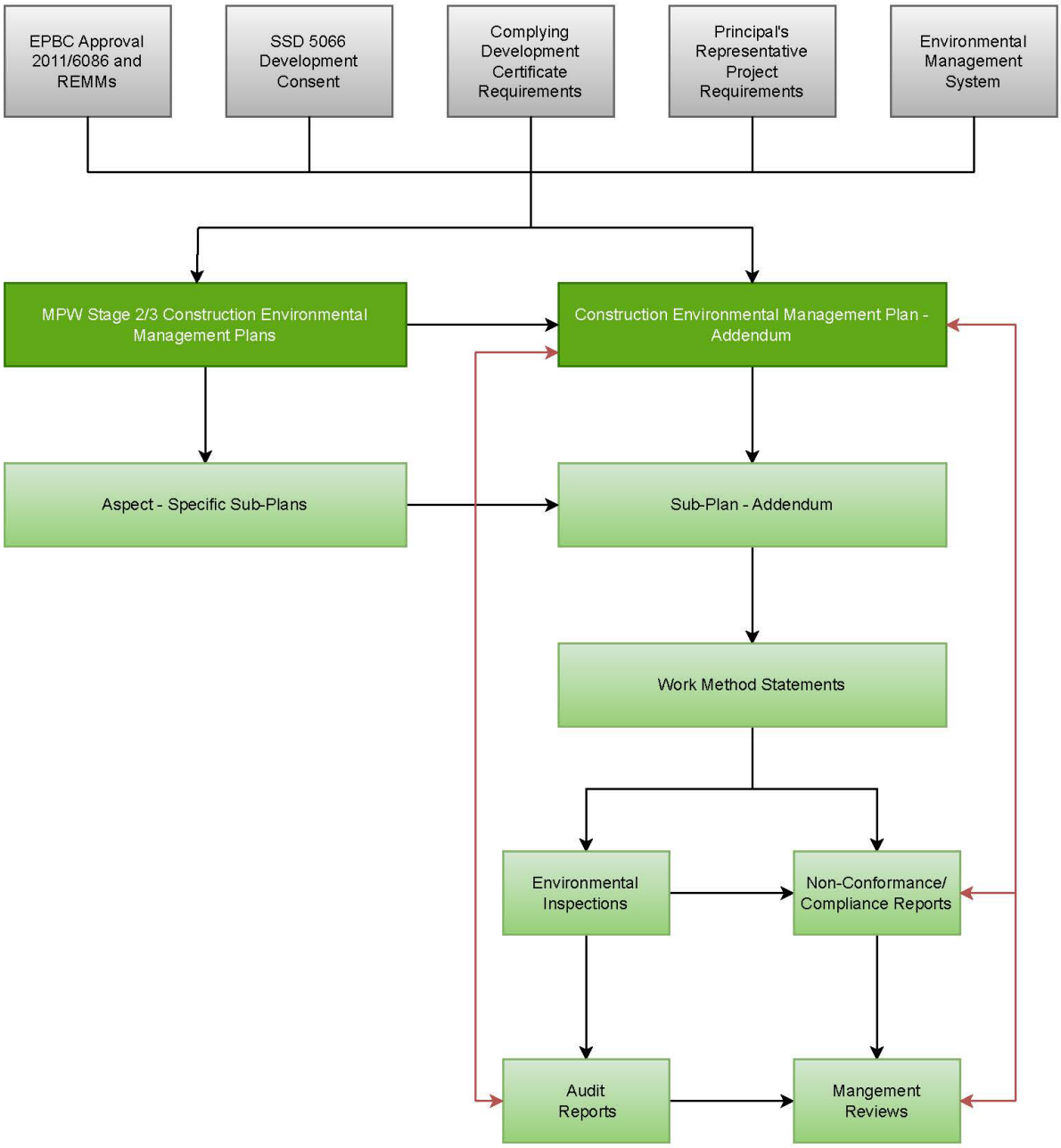
A description of the Sustainability Policy, sustainability framework and WHS Management Systems are provided in Section 2.1 of the MPW Stage 2/3 CEMP.

2.2. Environmental Management Documentation

This Addendum is the overarching management plan for a suite of environmental management documents for the Project. It provides a structure and systematic approach to environmental management and aligns to the EMS.

Figure 2-1 shows the structure of the suite of environmental management documents that are applicable to the construction of the Project.

Figure 2-1 Environmental management documentation



2.3. Document Control and Records

All Project documentation, including environmental records, will be controlled in accordance with the requirements of Section 2.3 of the MPW Stage 2/3 CEMP.

2.4. Legislative Requirements

The regulatory framework for the Project is outlined within the Compliance and Obligations Registers (Appendix A of the MPW Stage 2/3 CEMP and this Addendum). These registers identify relevant requirements as detailed in Table 2-1.

Table 2-1 Compliance and obligations registers

Requirement	MPW Stage 2/3 CEMP	This Addendum
Legislation	Appendix A1 – Legislation Register	-
Permits and licences	Appendix A2 – Permits and Licences	-
Standards and guidelines	Appendix A3 – Standards and Guidelines	-
EPBC 2011/6086 Approval	-	Appendix A1 – EPBC Act Approval
SSD 5066 Development Consent	-	Appendix A2 – EP&A Act Development Consent
Complying Development Certificate (CDC)	-	Appendix A3 – EP&A Act Complying Development Certificate
REMM	-	Appendix A4 – Revised Environmental Management Measures

Where updated or revised versions of guidelines, protocols, standards or policies, or a replacement of them are available, the most recent versions would be applicable to this Addendum.

2.4.1. Development Approvals

The Project was approved under both the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and the Environmental Planning and Assessment Act 1979 (EP&A Act). These approvals have environmental conditions relevant to construction. Compliance with the relevant conditions of the approvals is outlined in Appendix A.

2.4.1.1. EPBC Act Approval

The EPBC 2011/6086 Approval for the MPW Concept was granted by the Commonwealth Department of the Environment and Energy (now the Department of Climate Change, Environment, Energy and Water, DCCEEW) in September 2016. The construction of the Project has been designed to be consistent with the EPBC 2011/6086 CoA, where relevant.

EPBC 2011/6086 Approval CoA include specific conditions and commitments that are required to be addressed in this Addendum. These conditions are identified within Appendix A, along with where they have been addressed in preparing this Addendum. In particular, this Addendum has been prepared under CoA 21 as a revision to an approved management plan for an action that would not be likely to have a new or increased impact.

REMM are presented in the Moorebank Intermodal Terminal Final EIS (December 2015) prepared to satisfy the Commonwealth approval process. These REMM are generally the same as the REMM presented in the Supplementary Response to Submissions Report for the MPW Concept Proposal MOD 1and Stage 1 Early Works (Arcadis, 4 August 2017). The REMM were presented in the Supplementary Response to Submissions Report (Parsons Brinckerhoff, August 2015). The REMM relevant to this Addendum are identified in Appendix A.

2.4.1.2. EP&A Act Development Consent

The MPW Concept and Stage 1 (SSD 5066) Development Consent was granted on 29 September 2014. The construction of the Project has been designed to be consistent with the SSD 5066 Development Consent CoC, where relevant.

Schedules 2 and 4 of the Development Consent includes specific CoC and commitments that are required to be addressed in this Addendum. These conditions are identified within Appendix A, along with where they have been addressed in preparing this Addendum.

As noted above the REMM detailed in the Moorebank Precinct West – Concept Modification – Supplementary Response to Submissions Report (Arcadis, 4 August 2017) are relevant to this Addendum. These REMM are identified in Appendix A.

2.4.1.3. Complying Development Certificates

CDC 230736/01 was issued on 27 February 2024, granting approval for the construction and operation of Warehouses S1, S2, S3, S5 and S6. CDC 250077/01 was subsequently issued on 29 May 2025, granting approval for the construction and operation of Warehouse S4 and modifying CDC 230736/01 as Warehouse S3 and S6 would no longer be developed. The CDC Conditions required under these approvals are consistent with those required under Part 2 of Chapter 6 of the TISEPP. No additional conditions have been identified.

CDC Conditions are identified within Appendix A, along with where they have been addressed in preparing this Addendum.

2.4.2. Permits and Licences

Permits and licences relevant to operations are detailed in Appendix A. This register is to be revised and updated in conjunction with the management review outlined in Section 4.5, or when there has been a change to relevant legislation.

Compliance conditions relating to items listed on this register are incorporated into this Addendum and where relevant in the sub-plan addenda.

A summary of the key permits and licences applicable to operations is provided below.

2.4.2.1. Environmental Protection Licence

Construction of the Project will be undertaken in accordance with the requirements of the Protection of the Environment and Operations Act 1997 (POEO Act). An EPL (21054) is currently held for the Moorebank Precinct, which includes the Project site, and the construction of the Project will comply with the relevant conditions of this EPL.

If the EPL is varied, this Addendum will be reviewed and updated as necessary to address the revised EPL.

2.4.2.2. Other requirements

The MPW Stage 2/3 CEMP has been prepared in accordance with the Guidelines for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004) as detailed in Section 2.4.3 of the CEMP. This Addendum follows these guidelines where relevant.

Compliance with relevant legislation and industry best practice is often achieved through adherence to relevant guidelines and standards. Guidelines and standards used during the preparation of the MPW Stage 2/3 CEMP and Sub-Plans are detailed within these documents.

2.5. Roles and Environmental Responsibilities

2.5.1. Addendum Management Hierarchy

All Project personnel are responsible for the implementation of this Addendum and have the responsibility to stop works if there is potential for a safety or environmental incident to occur.

The interaction between the key organisations involved in environmental management is shown in Figure 2-2.

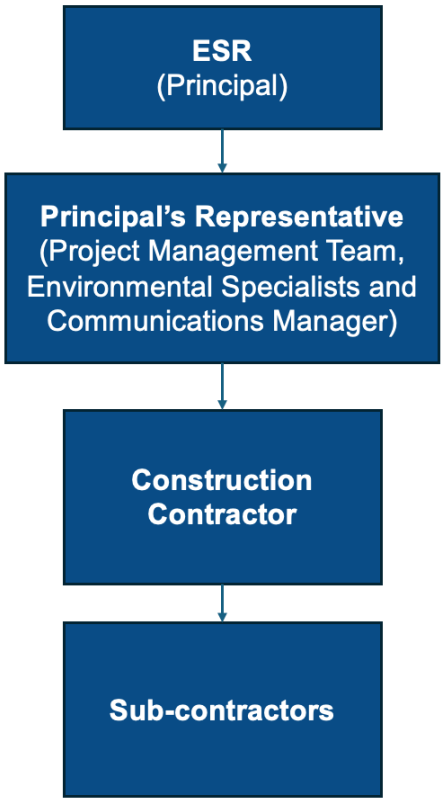
2.5.2. Principal's Representative and Communications Manager

For the purposes of this Addendum, the Principal's Representative is considered to consist of both the Project Management Team and a team of environmental specialists. The Principal's Representative is responsible for reviewing and assessing conformance and compliance of the construction contractors' works with the Project requirements.

The Project Management Team also includes a Communications Manager who will act as the 'control tower' for all public communications and will be the central contact to keep nearby residents informed of the progress of the Project.

General responsibilities of the Principal's Representative and the Communications Manager are outlined in Table 2-8 of the MPW Stage 2/3 CEMP.

Figure 2-2 Organisation chart



2.5.3. Construction Contractor

The indicative roles and responsibilities of Project personnel are outlined in Table 2-9 of the MPW Stage 2/3 CEMP. The Construction Contractors engaged for the Project are listed in Table 2-2. The contractors will provide roles and responsibilities to the Principal's Representative prior to the commencement of construction.

Table 2-2 Construction contractors

Warehouse	Construction Contractor
S1, S2 and S5	FDC Construction and Fitout
S4	Richard Crookes Construction

2.5.4. Sub-contractors

All sub-contractors are required to attend Project and/or site inductions where the requirements and obligations of the Addendum will be communicated.

In addition to project wide monitoring, sub-contractors will manage, monitor and report on their environmental performance in accordance with the requirements of this Addendum.

2.5.5. Environmental Representative

Although an Environmental Representative (ER) was required for MPW Stage 2 and Stage 3, in accordance with SSD 7709 and SSD 10431 respectively, there is no requirement for an ER for construction activities within MPW South.

As outlined above, the Principal's Representative comprises the Project Management Team, including environmental specialists. These environmental specialists will be independent of the construction contractors and sub-contractors and will provide oversight of the construction works and advise on the implementation of this Addendum and the sub-plan addenda.

2.6. Communication

Internal and external communications and complaints management for the Project will be undertaken as detailed in the MPW South CCS. The CCS will be implemented for external communications and complaints management.

2.7. Environmental Training and Competence

As detailed in Section 2.7 of the MPW 2 Stage 2/3 CEMP, all Project personnel will undergo general environmental awareness training and training relevant to their responsibilities under the CEMP. Records of Project environmental induction and other environmental training will be maintained and readily accessible. Specific training will include:

- Project environmental induction
- Pre-start and toolbox talks
- Environmental training for construction personnel including emergency spill response and erosion and sediment control.

The Contractor's EM is responsible for identifying additional environmental training requirements in response to changes in the Project environmental management documentation, site conditions or review of this Addendum.

As detailed in Section 2.7 of the MPW 2 Stage 2/3 CEMP, the Contractor's Construction Manager (CM) is responsible for identifying the competency needs for the Project and allocating resources for training.

Records of licences, training and verification of competencies will be documented in a training register and maintained on the Project site.

Evidence of training and competency is to be provided prior to commencement of works by site personnel and contractors, applicable to the tasks to be undertaken.

2.8. Emergency Preparedness and Response

The Construction Emergency Response Plan (CERP) – Addendum provides specific detail on emergency response. This plan is consistent with the Pollution Incident Response Management Plan, required under EPL 21054 which applies to the Project. Construction contractors must operate in accordance with the plan.

The CERP – Addendum addresses the planning and preparation for emergency scenarios and detailed emergency procedures for responding to emergencies including bushfires, flooding and environmental emergencies (i.e. any event that causes or has the potential to cause material harm to the environment).

Each Construction contractor must nominate a Site Emergency Contact and an alternate contact that will be available 24-hours a day, seven days a week. The Site Emergency Contact has the authority to stop and direct works. The site notice board displays the current site emergency contacts and these are also listed in the CERP – Addendum.

A 24-hour hotline number (1800 986 465) is maintained for the Project to enable reporting of any emergency conditions.

2.8.1. Incident Classification and notification

An environmental incident is defined as ‘an occurrence or a set of circumstances that causes or threatens to cause material harm’. Environmental incidents include pollution incidents and environmental emergencies and may arise from natural (e.g. storm, wind or bushfire) or human factors. Note that non-conformances and non-compliances are addressed separately in Section 4.4.

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

The process that will be followed for environmental incident classification and notification is detailed in the flowchart shown in Figure 2-3. Additional clarifications on the environmental incident classification and notification process for the construction contractors are as follows:

- Incidents will be classified into one of three classes as per Table 2-3. The Contractor’s EM is responsible for the classification of incidents in consultation with the Principal’s Representative.
- For actual or potential Class 2 and 3 environmental incidents the Contractor’s EM will immediately inform the Principal’s Representative.
- An Incident Cause Analysis Method (ICAM) certified person must complete a detailed ICAM investigation for actual or potential Class 2 and 3 environmental incidents.

- Designated personnel to implement corrective and preventative actions.

Figure 2-3 Environmental incident classification and notification flowchart

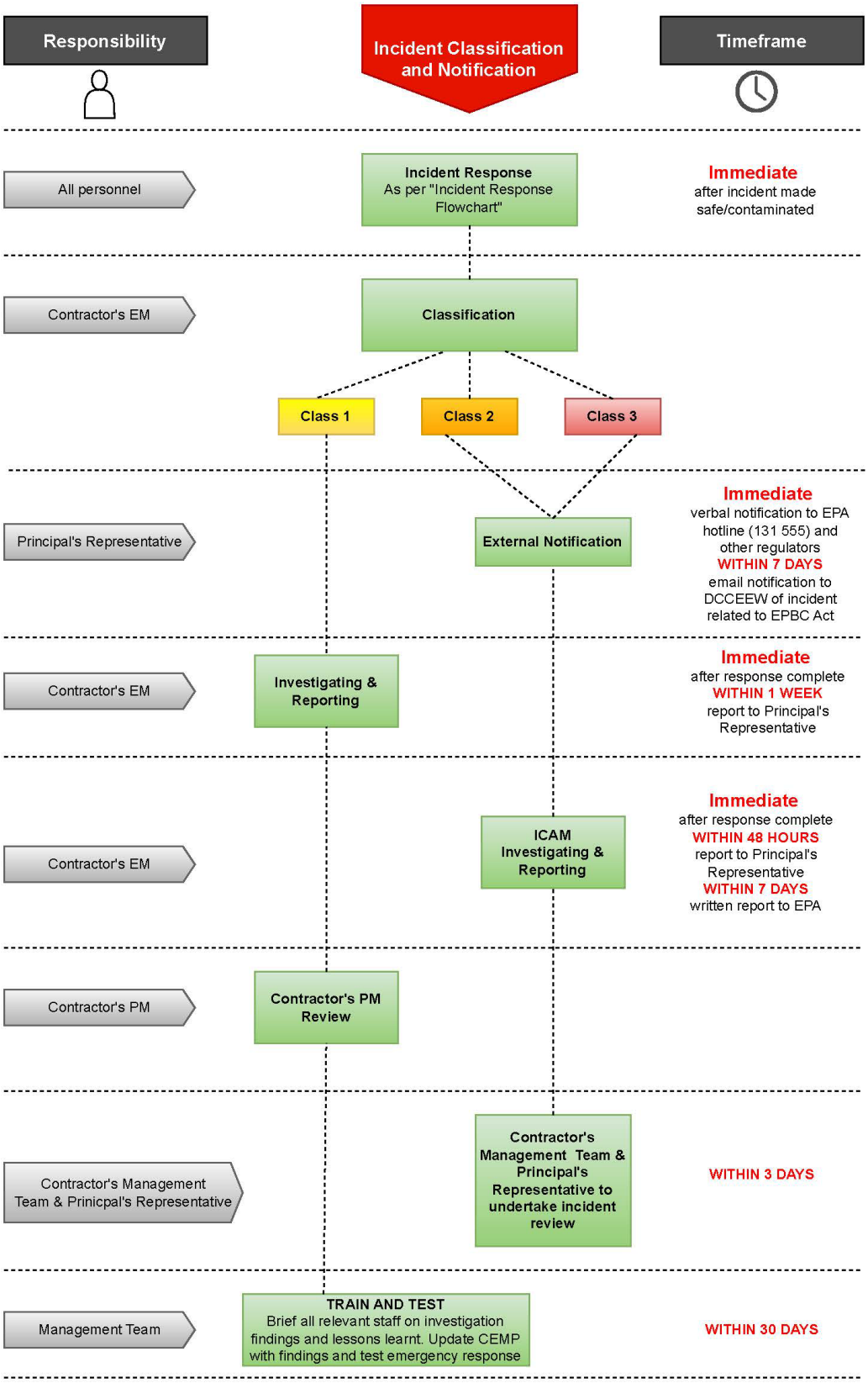


Table 2-3 Environmental incident classification

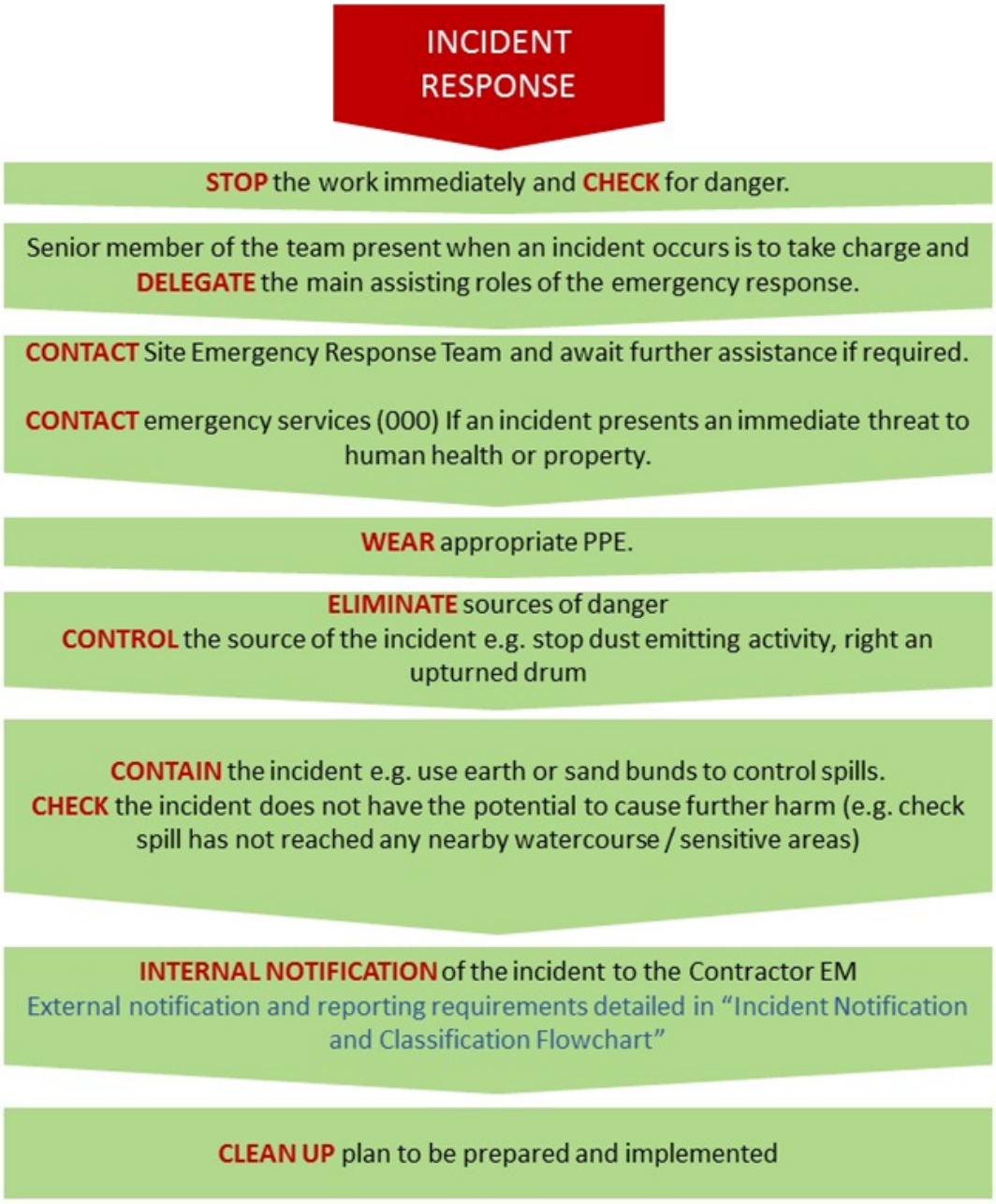
Classification	Direct costs including clean-up	Description of impact
Class One	Up to $10,000	Potential or actual material harm such as: • Pollution or degradation which has low severity impacts on the community and/or environment in the short-term (<1 month duration) and is fully reversible with no residual impacts • Harming a protected animal that is not vulnerable or threatened • Discarding a lit cigarette.
Class Two (including potential)	$10,000 to $100,000	Material harm such as: • Pollution or degradation which has moderate severity impacts on the community and/or environment (1-3 months duration) but is fully reversible with no residual impacts • Harming an animal that is (or is part of) a vulnerable species or vulnerable ecological community • Picking a plant that is (or is part of) a vulnerable species or vulnerable ecological community • Discarding a lit cigarette during a total fire ban.
Class Three (including potential)	More than $100,000	Material harm such as: • Pollution or degradation which has high severity impacts on the community and/or environment and may have irreversible residual impacts • Harming an animal that is (or is part of) a threatened species or threatened ecological community (other than a vulnerable species or community) • Picking a plant that is (or is part of) a threatened species or threatened ecological community (other than a vulnerable species or community)

- Damaging a declared area of outstanding biodiversity value
- Knowingly damaging any habitat of a threatened species or threatened ecological community
- Contravention of a stop work order
- Permitting a fire to escape causing injury or damage to person, land or property of the Crown or a public authority.

2.8.2. Incident responses

All environmental incidents will be managed in accordance with the flowchart shown in Figure 2-4.

Figure 2-4 Environmental incident response flowchart



2.8.3. External notification of incidents

Regulatory authorities will be notified of actual or potential Class 2 and 3 environmental incidents as detailed in Figure 2-3, with additional details provided below. Records of contact with, and details of the information provided to external authorities will be maintained by ESR's Site Health, Safety and Environment (HSE) Manager.

2.8.3.1. NSW EPA

In accordance with POEO Act, the Principal's Representative Project Management Team will immediately, after becoming aware of the incident, notify the EPA of all actual or potential Class 2 and 3 environmental incidents via the EPA Environment Line (131 555).

The notification to the EPA needs to include information on:

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

2.8.3.2. DCCEEW

Environmental incidents relating to the EPBC Act must be notified to the Secretary of the DCCEEW by the Principal's Representative within seven days of the event (EPBCmonitoring@environment.gov.au).

These types of incidents are the death or injury to the following:

- Listed Migratory bird species
- Listed marine species
- Threatened species or listed ecological community (includes taking of listed plants and animals).

2.8.3.3. Other relevant authorities

In addition to notifying the EPA and DCCEEW (Cth) of pollution incidents, the Principal's Representative is also required to notify other regulatory authorities as outlined below:

- Ministry of Health (via the local Public Health Unit – 02 9391 9000)
- Safework NSW – 13 10 50
- Liverpool City Council – 1300 36 2170
- Campbelltown City Council – 02 4645 4000
- Fire and Rescue NSW – 000
- NSW Environment and Heritage – 1300 361 967

- Third party land holders (where appropriate).

These authorities must be notified for all notifiable pollution incidents under Section 148 of the POEO Act 1997. Further information in relation to the incident must be provided immediately if it becomes available after the initial notification.

Note that incident notification to DPHI is not required for the Project.

2.8.4. Incident Review

Actual and potential Class 1 incidents will be reviewed by the Contractor's EM and notified to the Principal's Representative.

Actual or potential Class 2 or 3 incidents will be reviewed by the Contractor's Management Team and the Principal's Representative.

Actual or potential Class 2 or 3 incidents will be reviewed by the Contractor's EM who will immediately notify the Principal's Representative. The Principal's Representative will undertake external notification as required.

Within three days of a potential or actual Class 2 or 3 incident, the Contractor's EM will convene a briefing with the Contractor's Management Team and Principal's Representative to provide an update on the incident investigation.

The following information relating to the incident will be documented:

- Condition of the environment and the status of any rectification or remediation works
- Completed Incident Cause Analysis Method (ICAM) report, including appropriate causal analysis and corrective actions
- Program for the implementation of the corrective actions and any maintenance activities
- Incorporation of any requirements of regulatory agencies as a result of external notification
- Any other relevant information.

Any written requirements of a relevant public authority that may be given to address the cause or impact of an incident will be complied with and within any circumstances specified by the relevant public authority.

ESR will keep evidence to show the recommendations from the ICAM have been undertaken.

3. Implementation

This section addresses the key risks and environmental performance issues associated with the Project and the environmental controls to manage the key risks.

3.1. Aspect, Impacts and Risk Management

Project-wide environmental aspects and impacts have been identified and assessed in the *Exempt and Complying Development Assessment – Warehouse S1, S2, S3, S5 and S6* (Aspect Environmental, 18 December 2023) and *Exempt and Complying Development Assessment- Warehouse S4* (Aspect Environmental, 5 May 2025).

The key environmental aspects and impacts for the Project are:

- Construction traffic impacts on local roads surrounding construction worksites
- Noise and vibration impacts on surrounding residents and businesses
- Pollution of adjacent waterways from water discharge and/or spills from worksites
- Adverse flood impacts and increases in stormwater discharge
- Erosion and sedimentation due to ground disturbance, temporary stockpiling and construction of internal roads and structures
- Visual impacts of temporary construction worksites on surrounding residences and businesses.

3.1.1. Aspects and impact assessment

The range of construction activities to be undertaken for the Project are generally consistent with those undertaken for MPW Stage 2. The nature, scale and extent of likely impacts associated with the Project are therefore generally consistent with those predicted for MPW Stage 2. Therefore, the Aspects and Impacts Register (Appendix B of the MPW Stage 2/3 CEMP) has been reviewed and updated for relevance to the Project and is provided in Appendix B.

The Aspects and Impacts Register identifies the actual or potential environmental impact and provides a reference to relevant management documentation where control measures can be found.

Environmental impacts will be controlled to a level that is commensurate with the level of risk, with greater emphasis on managing impacts with ‘moderate’ and ‘high’ risks. These will be detailed within the management measures of this Addendum and the sub-plan addenda.

The Aspects and Impacts Register will be updated on an annual basis with the review of this Addendum or where additional aspects, impacts or opportunities are identified during construction of the Project and specific site conditions are encountered and documented.

3.2. Objectives and Targets

Environmental management measures to be implemented during construction of the Project to ensure compliance with relevant statutory requirements, limits, performance measures and criteria are documented in this Addendum and the sub-plan addenda. Other measures to manage environmental impacts include environmental control maps (ECMs), environmental hold points, work method statements (WMSs) and environmental forms.

3.2.1. Environmental control maps

The key environmental constraints for the Project are identified in this Addendum and the sub-plan addenda and captured spatially in Environmental Control Maps (ECMs). The ECMs will be prepared by the construction contractors prior to the commencement of construction and updated, when necessary, during construction. Key environmental constraints include:

- Project boundaries
- Heritage (European and Indigenous)
- Endangered ecological communities, threatened flora and fauna species and habitat vegetation
- Sensitive receivers (e.g. watercourses)
- Weeds
- Location of site offices
- Riparian corridor.

The ECMs must be available in hard copy format at a construction contractor's site office. The content of the ECMs must be included in the site induction and covered in pre-starts prior to works adjacent to identified environmental values, including the riparian corridor.

3.2.2. Hold points

The ability to proceed with works requires process steps, relevant to site environmental values, to be followed. These process steps are included within this Addendum and the sub-plan addenda and must be complied with and are detailed in Table 3-1.

Table 3-1 Summary of hold points

Item	Activity	Process	Plan Reference
Dewatering	Dewatering / pumping water off the site	Verification that water quality criteria set-out in the CSWMP – Addendum have been met	CSWMP – Addendum

Sediment and erosion control measures	Commencement of ground disturbing activities in the new works area	Progressive Erosion and Sediment Control drawings have been developed, reviewed and approved	CSWMP – Addendum
Unexpected finds including threatened species, heritage item and contamination.	Recommencement of works in the affected area	Refer to aspect specific sub-plan	CFFMP – Addendum UFP (Appendix C)
Dangerous goods	Transport of dangerous goods	Transport of dangerous goods must be in accordance with the Dangerous Goods (Road and Rail Transport) Regulation 2014	CTAMP
Dangerous goods	Storage of dangerous goods*	Verification that bunded storage is provided and that offset distances are maintained for the storage area	CDWMP (Appendix P of the MPW Stage 2/3 CEMP)
Controlled / hazardous waste	Transport of controlled/ hazardous waste from the site	Verification that the waste has been classified in accordance with the guidelines, transport licensing in place and landfill can lawfully receive the waste	CWDMP
Spoil transport	Removal of spoil from site	Verification that the spoil has been classified and the disposal location can lawfully receive the waste Obtain Approved Form Under Section 143 of the POEO Act from location owner (if not a NSW EPA licensed facility)	CWDMP
Spoil transport	Import of spoil to site	Waste classification of imported spoil as either ENM, VENM, or other material approved by the EPA prior to spoil entering the site Visual check and confirmation Supply Approved Form Under Section 143 of the POEO Act from Logos to spoil owner and transporter	CWDMP CSWMP – Addendum

* The total quantities of dangerous goods present at any time during construction and transport movements to and from the Project will be kept below the screening threshold quantities and movements listed in the Department's Hazardous and Offensive Development Guidelines Applying SEPP 33 (January 2011).

3.2.3. Works method statements

WMSs will be prepared by the Construction Contractors to manage and control activities that have the potential to impact on the community, safety or environment where relevant prior to the commencement of relevant construction activities.

3.2.4. Environmental forms

Each construction contractor is required to prepare environmental monitoring or management forms and checklists, relevant to their works. Where forms or checklists have been included within this Addendum or sub-plan addenda, these are indicative and can be replaced with contractor-specific forms. The relevant contractor must provide environmental and sustainability forms, registers and/or checklists to the Principal's Representative for review prior to commencement of works. The contractor-specific forms, registers and/or checklists must include the relevant minimum specific content.

At a minimum, the following are to be developed:

- Project induction and training register / records
- Weekly environmental inspection
- Water discharge permit
- Noise and vibration monitoring form
- Air quality monitoring form
- Water quality monitoring form
- Waste tracking spreadsheet
- Energy consumption register
- Water consumption register
- Materials register (including material specifications)
- Corrective actions register
- Incident register
- Complaints form.

4. Monitor and Review

4.1. Environmental Monitoring

The development approvals for the Project do not require specific environmental monitoring. Nonetheless, environmental monitoring will be undertaken as detailed in the sub-plan addenda to determine the effectiveness of their implementation.

4.2. Observations and Inspections

4.2.1. Daily observations

A daily pre-start on plant and equipment will be undertaken and any leaks, fauna relocation or excessive emissions reported to the Contractor's EM.

Site environmental controls will be inspected daily by the Contractor's EM or their delegate. Each work team must inspect the environmental controls as relevant to their work area.

4.2.2. Inspections

Table 4-1 provides a summary of the minimum inspections that will be undertaken for the Project.

Table 4-1 Inspection Summary

Inspection Type	Frequency	Focus	Responsibility	Record
Environment site inspection	Weekly	Relevant social and environmental aspects related to works period	Contractor's EM	Inspection log/report
Pre and post rainfall and pre-shutdown inspection	Detailed within CSWMP – Addendum	Erosion and sediment controls	Contractor's EM	Inspection log/report

The weekly environment inspections, undertaken by the Construction Contractor, will cover the environmental aspects of the Project which are relevant to the stage of works being undertaken. The purpose of these inspections is to:

- Determine compliance with the development approvals
- Determine conformance with management measures detailed within the sub-plan addenda
- Review the performance and effectiveness of environmental controls
- Identify non-conformance to expected performance levels or implementation of controls expected under this Addendum and the sub-plan addenda
- Document observations and track performance.

The Construction Contractor will develop and use an environmental inspection checklist to document performance and identify potential issues on site. Any corrective actions undertaken are required to be documented, in accordance with the requirements described in Section 4.4.

Weekly inspection checklists will be forwarded to the Principal's Representative upon request.

4.3. Environmental Auditing

Auditing will be undertaken in accordance with ISO19011:2014 – Guidelines for Quality and/or Environmental Management Systems Auditing by an ISO14001 accredited lead auditor.

The results of the audits will be communicated to the Project team during the audit close out meeting and audit reports will be issued to management for action and to inform the review of this Addendum (refer to Section 4.5). A follow up/close out verification inspection and meeting will occur within one month of the issue of the audit report.

Corrective action requests can be issued as part of the audit process as outlined in Section 4.4.

External audits, if required, and internal audits will be undertaken for the Project as detailed below.

4.3.1. External audits

Under CoA 20 of the EPBC 2011/6068 Approval, ESR must ensure that an independent audit of compliance with the conditions of the EPBC 2011/6086 Approval is conducted upon the direction of the Minister (responsible for the administration of the EPBC Act). CoA 20 also requires that the independent auditor and audit criteria be approved by the Minister. An audit report must be submitted to the Minister and must address the audit criteria to the satisfaction of the Minister.

4.3.2. Internal audits

The first internal audit of each Construction Contractor will be undertaken by the Principal's Representative within six months of the commencement of construction.

Internal audits will be undertaken annually thereafter on a rolling schedule. The audit scope will be determined by the auditor based on current site activities.

4.4. Non-conformance, Non-compliance and Actions

4.4.1. Non-conformances

Non-conformances are observations or actions that are not in accordance with this Addendum and the sub-plan addenda. These are not recorded as non-compliances as there may be activity-specific justification for a change in implementation of the requirements of the management plan.

Where a non-conformance is also considered to represent a possible non-compliance, it will be recorded as a potential non-compliance. Depending upon the nature of the non-conformance, the non-conformance may require reporting to DCCEEW.

It is the responsibility of all personnel to report non-conformances to their Site Supervisor and/or the Contractor's EM. The Contractor's EM will investigate non-conformances, log corrective actions, and delegate responsibility for corrective actions within assigned timeframes.

Non-conformances with the implementation of this Addendum and sub-plan addenda will be investigated to determine the root cause and any corrective and/or preventative actions arising. This will be reported to the Principal's Representative in a Non-Conformance Report and any corrective and/or preventative actions will be recorded within the Project Corrective Actions Register to be developed by each construction contractor.

4.4.2. Non-compliances

A non-compliance is defined as an occurrence, set of circumstances or development that is considered to be in non-accordance with the EPBC 2011/6086 Approval CoA, SSD 5066 Development Consent CoC, requirements of the CDC or REMM. An incident may or may not cause a non-compliance, however, if reported as an incident it does not require reporting as a non-compliance. Incident response, classification and notification requirements are outlined in Section 2.8.

Potential non-compliances can be identified by anyone and will be reported to the Contractor's EM as a potential non-compliance. Whether the occurrence, set of circumstances, or development requires notification to external regulators as a non-compliance is the responsibility of the Principal's Representative.

Non-compliances will be investigated to determine the root cause and any corrective and/or preventative actions arising. This will be reported to the Principal's Representative in a Non-Compliance Report (NCR) and any corrective and/or preventative actions will be recorded within the Project Corrective Actions Register to be developed by each Construction Contractor. Non-compliances shall be recorded and addressed through Aconex.

Under CoA 19 of the EPBC 2011/6086 Approval, documentary evidence providing proof of the date of publication and non-compliance with any of the CoA must be provided to DCCEEW at the same time as the compliance report (see Section 4.6) is published.

The MPW Stage 2/3 CEMP Appendix A1 – Legislation Register and Appendix A2 – Permits and Licences provide further detail on notification requirements related to failures to comply with statutory requirements.

4.4.3. Corrective and preventative actions register

As described in Section 4.5 of the MPW Stage 2/3 CEMP, corrective and preventative actions will be logged in a register and implemented to respond to or anticipate environmental incidents, non-compliances or non-conformances.

4.5. Management Review

Construction Contractor Management Teams and the Principal's Representative will annually review the adequacy of the environmental controls and procedures within this Addendum as detailed in Section 4.5 of the MPW Stage 2/3 CEMP.

4.6. Environmental Reporting

Reporting requirements for the project include but are not limited to:

- Incident reports
- NCR
- Compliance reports
- Inspection reports
- Internal and external audit reports
- Independent audit report responses.

Compliance reports are required under CoA 19 of the EPBC 2011/6086 Approval. Unless otherwise agreed in writing by the Minister, these reports will:

- Address compliance with each of the CoA, including implementation of any management and strategies required
- Be published on the Moorebank Intermodal Precinct website within three months of every twelve-month anniversary of the commencement of construction.

Documentary evidence providing proof of the date of publication and non-compliance with any of the CoA must also be provided to DCCEEW at the same time as the compliance report is published. The reports must remain published for the life of the EPBC 2011/6086 Approval.

APPENDIX A. COMPLIANCE AND OBLIGATIONS REGISTERS

Appendix A1 – EPBC Act Approval

The EPBC 2011/6086 Approval for the MPW Concept was granted by the Commonwealth Department of the Environment and Energy (now DCCEEW (Cth)) in September 2016. This Addendum addresses the relevant CoA and commitments required under the EPBC 2011/6086 Approval.

The construction of the Project will be consistent with the relevant CoA conditions and they are addressed by this Addendum as identified in Table A-1.

Table A-1 EPBC 2011/6086 Approval CoA requirements

Condition	Requirement	Reference
1	The person taking the action must not undertake (or permit to be undertaken) any construction activities or operations outside the development footprint as depicted in Annexure 1.	Section 1.2
2	For the protection of the environment, including listed threatened species and communities, the person taking the action must prepare a construction environmental management plan (CEMP) addressing at least the elements outlined in Conditions 5 to 13. Apart from early works as described in Condition 3, construction must not commence until all specified CEMP approvals have been obtained in writing, and once approved, the CEMP must be implemented. The CEMP may be prepared in stages, in which case the corresponding stage must be clearly defined, and construction of that stage must not commence until all specified approvals have been obtained in writing.	This Addendum
3	For the protection of the environment, including listed threatened species and communities, the person taking the action must ensure that early works are undertaken in accordance with SSD 5066 and comply with the measures described in Condition 8 wherever perfluoroalkyl substance (PFAS) contamination is identified.	NA
4	For the protection of the environment, including listed threatened species and communities, the person taking the action must prepare an operational environmental management plan (OEMP) addressing at least the elements outlined in Conditions 5 to 13. Operations must not commence until all specified OEMP approvals have been obtained in writing, and once approved, the OEMP must be implemented. The OEMP may be prepared in stages, in which case the corresponding stage must be clearly defined, and operations of that stage must not commence until all specified approvals have been obtained in writing.	NA
5	Sections of the CEMP and OEMP relating to traffic must be prepared by a suitably qualified expert and must:	CTAMP – Addendum

	a) be consistent with the Traffic, Transport and Access Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 4A to 4Q from Table 7.1 of the finalised EIS that are described as 'mandatory c) explain how all measures 4A to 4Q from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	
6	Sections of the CEMP and OEMP relating to noise and vibration must be prepared by a suitably qualified expert and must: a) be consistent with the Noise and Vibration Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 5A to 5T (CEMP only) and 5U to 5AJ (OEMP only) from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 5A to 5T (CEMP only) and 5U to 5AJ (OEMP only) from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	CNVMP – Addendum
7	Sections of the CEMP and OEMP relating to biodiversity must be prepared by a suitably qualified expert and must: e) be consistent with the Biodiversity Provisional Environmental Management Framework (3 July 2014), provided at Appendix O to the finalised EIS f) incorporate all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'mandatory' g) explain how all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed h) include detailed biosecurity protocols, prepared in consultation with relevant New South Wales and Commonwealth biosecurity agencies, in relation to international and interstate container movement i) be approved by the Minister.	CFFMP – Addendum
8	Sections of the CEMP and OEMP relating to contamination and soils must be prepared by a suitably qualified expert and must: a) be consistent with the Soils and Contamination Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 7A to 7K, and 8A to 8AA, from Table 7.1 of the finalised EIS that are described as 'mandatory'	UFP (Appendix C) CMP (Appendix L of the MPW Stage 2/3 CEMP)

c) explain how all measures 7A to 7K, and 8A to 8AA, from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed

d) in relation to management of PFAS

i) be consistent with:

- National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013)
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality (under the National Water Quality Management Strategy) including the draft default guideline values for perfluorooctanoic acid (PFOS) and perfluorooctane sulfonic acid (PFOA) in freshwater as applied by the state government
- relevant Commonwealth environmental management guidance on PFOS and PFOA

ii) detail implementation and operational procedures, appropriate to the risk posed by any contamination, including:

- roles and responsibilities
- management of potential PFAS contaminated sites as yet un-investigated management of areas of known PFAS contamination, including strategies to reduce runoff, dewatering and migration of contamination across and off the proposed site
- a contingency action plan for unexpected PFAS contaminant discoveries

iii) detail soil, groundwater and surface water PFAS contamination monitoring requirements and testing and disposal procedures appropriate to the risk posed by any contamination

iv) include requirements for site validation reports appropriate to the risk posed by any contamination

v) include requirements for remedial action plans appropriate to the risk posed by any contamination

vi) detail review procedures appropriate to the risk posed by any contamination

vii) impose the following performance measures for managing earthworks and the potential for effects to occur due to disturbance of PFAS contaminated soils during construction:

- contaminated sediment to be discharged outside the site of the action to be minimised
- contaminated waste material, including excavated soil, to be released through dewatering to be handled appropriately to the risk posed by the contamination and disposed of in an environmentally sound manner such that potential for the PFAS content to enter the environment is minimized
- contaminated waste material, including excavated soil, with a PFOS or PFOA content above 50 milligrams per

	kilogram (mg / kg) to be stored or disposed of in an environmentally sound manner, such that PFAS content does not enter the environment • all soil remaining at the site of the action to be suitable for purpose, e) be approved by the Minister.	
9	Sections of the CEMP and OEMP relating to water must be prepared by a suitably qualified expert and must: a) be consistent with the Water Quality, Stormwater and Flooding Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 9A to 9AG from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 9A to 9AG from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	CSWMP – Addendum
10	Sections of the CEMP and OEMP relating to air quality must be prepared by a suitably qualified expert and must: a) be consistent with the Air Quality Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 10A to 10U (CEMP only) and 10V to 10AH and 11A to 11H (OEMP only) from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 10A to 10U (CEMP only) and 10V to 10AH and 11A to 11H (OEMP only) from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	MPW Stage 2/3 CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
11	Sections of the CEMP and OEMP relating to Aboriginal heritage must be prepared by a suitably qualified expert and must: a) be consistent with the Aboriginal Heritage Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	UFP (Appendix C)
12	Sections of the CEMP and OEMP relating to European heritage must be prepared by a suitably qualified expert and must:	UFP (Appendix C)

	a) be consistent with the European Heritage Provisional Environmental Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	
13	Sections of the CEMP and OEMP relating to visual impacts (including light spill) must be prepared by a suitably qualified expert and must: a) be consistent with the Light Spill Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 14A to 14H from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 14A to 14H from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	MPW Stage 2/3 Light Spill Management (Appendix P of the MPW Stage 2/3 CEMP)
14	To address residual impacts on protected biodiversity values, including listed threatened species and communities, the person taking the action must finalise a biodiversity offset strategy (BOS). The BOS must be approved in writing within twelve (12) months of commencement of early works, by a relevant New South Wales regulator, and once approved must be implemented. The BOS must be prepared by a suitably qualified expert and must: a) be consistent with the biodiversity offsets strategy provided at Appendix E to the finalised EIS b) incorporate all measures 6S, 6U, 6W and 6Y to 6AA from Table 7.1 of the finalized EIS that are described as 'mandatory' c) incorporate all measures 6S, 6U, 6W and 6Y to 6AA from Table 7.1 of the finalized EIS that are described as 'subject to review' or justify any alternative protocols d) offset impacts on protected biodiversity values including listed threatened species and communities in accordance with the FBA e) include map(s) and shapefiles that identify the location and boundaries of all offset sites f) be approved by a relevant New South Wales regulator, and also by the Minister if the BOS does not involve the protection and management in perpetuity of the 'Casula', 'Moorebank' and 'Wattle Grove' Offset Areas identified at Annexure 2.	NA
15	Until the BOS described in Condition 14 is approved, the person taking the action must manage the 'Casula', 'Moorebank' and	NA

	'Wattle Grove' Offset Areas identified at Annexure 2, for the protection of native vegetation, and in particular the vulnerable Small-Flower Grevillea (Grevillea parviflora subsp. parviflora) and endangered Nodding Geebung (Persoonia nutans).	
16	Within ten (10) days after the commencement of construction, the person taking the action must advise the Department in writing of the actual date of commencement.	NA
17	The person taking the action must provide the Department with copies of all management plans or strategies required by this approval within one (1) month of their approval.	Section 1.1.3
18	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement any management plans or strategies required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Departments website. The results of audits may also be publicised through the general media.	Section 2.3
19	Unless otherwise agreed in writing by the Minister, within three (3) months of every twelve (12) month anniversary of the commencement of construction, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management and strategies as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. Reports must remain published for the life of this approval. The person taking the action must continue to publish these reports each year until such time as agreed in writing by the Minister.	Section 4.6
20	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor, and audit criteria, must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	Section 4.3
21	The person taking the action may choose to revise a management plan or strategy approved by the Minister under Conditions 2, 4 or 14 without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan or strategy would not be likely to have a new or increased impact. If the person taking the action makes this choice they must: a) notify the Department in writing that the approved plan or strategy has been revised and provide the Department with an electronic copy of the revised plan or strategy	This Addendum

	b) implement the revised plan or strategy from the date that the plan or strategy is submitted to the Department c) for the life of this approval, maintain a record of the reasons the approval holder considers that taking the action in accordance with the revised plan or strategy would not be likely to have a new or increased impact. Note: Condition 21 does not affect any obligation to consult or seek approval from a relevant New South Wales regulator when revising a management plan or strategy.	
22	The person taking the action may revoke their choice under Condition 21 at any time by notice to the Department. If the person taking the action revokes the choice to implement a revised plan or strategy, without approval under section 143A of the EPBC Act, the plan or strategy approved by the Minister must be implemented.	NA
23	Condition 21 does not apply if the revisions to the approved plan or strategy include changes to environmental offsets provided under the plan or strategy in relation to a matter protected by a controlling provision for the action, unless otherwise agreed in writing by the Minister. This does not otherwise limit the circumstances in which the taking of the action in accordance with a revised plan or strategy would, or would not, be likely to have new or increased impacts.	NA
24	If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised plan or strategy would be likely to have a new or increased impact, then: a) Condition 21 does not apply, or ceases to apply, in relation to the revised plan or strategy b) the person taking the action must implement the plan or strategy approved by the Minister. To avoid any doubt, this condition does not affect any operation of Conditions 21, 22 or 23 in the period before the day the notice is given. At the time of giving the notice the Minister may also notify that for a specified period of time, Condition 21 does not apply for one or more specified plans or strategies required under the approval.	NA
25	Conditions 21 to 24 are not intended to limit the operation of section 143A of the EPBC Act which allows the person taking the action to submit a revised plan or strategy to the Minister for approval.	NA
26	If, at any time after five (5) years from the date of this approval, the person taking the action has not commenced construction, then the person taking the action must not commence construction without the written agreement of the Minister.	NA
27	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans and strategies referred to in these conditions of approval (including	Section 1.1.3

	the finalised EIS) on their website. Each management plan and strategy must be published on the website within one (1) month of being approved by the Minister or being submitted under Condition 21.

Appendix A2 – EP&A Act Development Consent

The MPW Concept and Stage 1 (SSD 5066) Development Consent covers the Project. This Addendum addresses the relevant CoC and commitments required under the SSD 5066 Development Consent.

The construction of the Project will be consistent with the relevant CoC and they are addressed by this Addendum as identified in Table A-2.

Table A-2 MPW Concept and Stage 2 (SSD 5066) CoC requirements

Condition	Requirement	Reference
Schedule 1		
Applicant:	Sydney Intermodal Terminal Alliance (SIMTA) as Qube Holdings Limited	NA
Consent Authority	Minister for Planning	NA
Land:	Moorebank Precinct West Intermodal Site (MPW): Land generally described as being located on the western side of Moorebank Avenue, between the M5 Motorway and the East Hills Passenger Line, Moorebank, comprising: • Lot 1 DP 1197707 - Lot 101 DP 1049508 • Lot 100 DP 1049508 - Lot 2 DP 1197707 • Part Lot 3 DP 1197707 • Part Anzac Road and Moorebank Avenue public road reserves Rail Corridor: Land generally described as being located between the intermodal site and the East Hills Passenger Line to the south, and the northern portion of the Glenfield Waste Disposal Facility to the west comprising: • Lot 5 DP 833516 • Lot 51 DP 515696 • Lot 104 DP 1143827 • Lot 103 DP 1143827 • Lot 102 DP 1143827 • Lot 4 DP 1186349	Section 1.2
Development	Concept Proposal The Concept involves: • the use of the site as an intermodal facility for intrastate, interstate and port shuttle freight, including a rail terminal, rail link to the Southern Sydney Freight Line and warehouse estate (including a freight village) servicing the intermodal terminal facility.	Section 1.2

	• Importation of up to 1.6 million cubic metres of uncompacted fill to raise the site by up to 3.6 metres. Early Works (Stage 1) involves: • the demolition of buildings, including services termination and diversion; • rehabilitation of the excavation/ earthmoving training area; • remediation of contaminated land; • removal of underground storage tanks; heritage impact remediation works; and • the establishment of construction facilities and access, including site security.	
Schedule 2 – Terms of Approval		
1	Except as amended by the conditions of this consent, development consent is granted only to the Concept Proposal and Early Works as described in Schedule 1 and the Environmental Impact Statement dated October 2014, as amended by the Response to Submissions, dated May 2015 (as further amended by the Supplementary Response to Submissions dated August 2015), subsequent modifications as outlined in Condition 4 below and the conditions contained in this development consent.	Section 2.4.1.3
2	In accordance with section 4.22 of the EP&A Act, all future development under the Concept Proposal (for the avoidance of doubt, excluding the Early Works) shall be the subject of future development application(s).	Section 2.4.1.3
3	The determination of the future development application(s) are to be generally consistent with the terms of this development consent as described in Schedule 1, and subject to the conditions in Schedule 4	Section 2.4.1.3
4	The applicant shall carry out the development generally in accordance with the: a) Environmental Impact Statement titled Moorebank Intermodal Terminal Project Environmental Impact Statement, prepared by Parsons Brinckerhoff Australia Pty Limited, dated October 2014; b) Response to Submissions report titled, Moorebank Intermodal Terminal Response to Submissions Report, prepared by Parsons Brinckerhoff Australia Pty Limited, dated May 2015; c) Supplementary Submissions report titled, Moorebank Intermodal Terminal Supplementary Response to Submissions Report, prepared by Parsons Brinckerhoff Australia Pty Limited, dated August 2015; d) MOD 1 Report titled, Moorebank Precinct West Intermodal Terminal Facility Concept Plan Approval (SSD 5066) Modification, prepared by Arcadis, dated June 2016;	Section 2.4.1.2

	e) MOD 1 Response to Submissions report titled, Moorebank Precinct West – Concept Modification Response to Submissions – SSD 5066 MOD 1, prepared by Arcadis, dated December 2016; f) MOD 1 Supplementary Response to Submission report titled, Moorebank Precinct West – Concept Modification Supplementary Response to Submissions – SSD 5066 MOD 1, prepared by Arcadis, dated August 2017; and g) the conditions of this consent.	
5	In the event of an inconsistency between: a) the conditions of this approval and any document listed from condition 4(a) to 4(f) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and b) any document listed from condition 4(a) to 4(f) inclusive, and any other document listed from condition 4(a) to 4(f) inclusive, the most recent document shall prevail to the extent of the inconsistency.	NA
6	Projects carried out under this staged development consent are to be assessed with the objective of not exceeding the capacity of the transport network, including the local, regional and State road network	NA
7	Concept approval is granted for a container throughput of up to 500,000 TEU p.a. (excluding IMEX freight) if the combined movement of container freight on the Subject Site does not exceed 1.05 million TEU p.a. The consent authority must also be satisfied that the Traffic Impact Assessment demonstrates that the container throughput would not exceed the capacity of the transport network with or without mitigation measures/upgrades.	NA
8	For IMEX freight, concept approval is granted for container throughput: a) initially, 250,000 TEU p.a. if the consent authority is satisfied that the Traffic Impact Assessment demonstrates the proposal would not exceed the capacity of the transport network with or without mitigation measures/upgrades; b) after the facility has been in operation, an increase of up to an additional 300,000 TEU p.a. if the consent authority is satisfied that monitoring and modelling of the operation of the intermodal terminal facility demonstrates that traffic movements resulting from the proposed increase in TEU will achieve the objective of not exceeding the capacity of the transport network. The combined movement of container freight on the Subject Site must not exceed 1.05 million TEU p.a.	NA
9	Concept approval is granted for an intermodal terminal facility incorporating either: a) the rail link; or	NA

	b) if a rail link is under construction or has been constructed associated with the SIMTA development as identified in development application MP10_0193, then only a short connection from the intermodal terminal facility to the SIMTA rail connection on the eastern side of the Georges River.	
10	Port shuttle operations must use: a) Locomotives that incorporate available best practice noise and emission technologies. Prior to construction of the rail link connecting to the site, the Applicant is to submit a report to the Secretary for consideration and approval that has been prepared in consultation with TfNSW and the EPA that justifies the technology proposed and how it meets the objective of best practice noise and emission technologies; and b) Wagons that incorporate available best practice noise technologies including as a minimum, permanently coupled 'multi-pack' steering wagons using Electronically Controlled Pneumatic (ECP) braking with a wire based distributed power system (or better practice technology). Prior to the commencement of operation, the Applicant is to submit a report to the Secretary for consideration and approval that has been prepared in consultation with TfNSW and EPA that justifies the technology proposed and how it meets the objective of best practice noise technologies.	NA
11	The Applicant shall install and maintain a rail noise monitoring system on the rail link at the commencement of operation to continuously monitor the noise from rail operations. The system shall capture the noise from each individual train passby noise generation event, and include information to identify: a) Time and date of freight train passbys; b) Imagery or video to enable identification of the rolling stock during day and night; c) LAeq(15hour) and LAeq(9hour) from rail operations; and d) LAF(max) and SEL of individual train passbys, measured in accordance with ISO3095; or e) Other alternative information as agreed with, or required by, the Secretary. The results from the noise monitoring system shall be publicly accessible from a website maintained by the Applicant. The noise results from each train shall be available on the website within 24 hours of it passing the monitor, unless unforeseen circumstances (ie a system malfunction) have occurred. The LAeq(15hour) and LAeq(9hr) results from each day shall be available on the website within 24 hours of the period ending. Prior to the commencement of operation, the Applicant shall submit for the approval of the Secretary, justification supporting the appropriateness of the location for rail noise monitoring, including details of any alternative options considered and reasons for these being dismissed. The rail	NA

	noise monitoring system shall not operate until the Secretary has approved the proposed monitoring location. The Applicant shall provide an annual report to the Secretary with the results of monitoring for a period of 5 years, or as otherwise agreed with the Secretary, from the commencement of operation of intermodal terminal facility. The Secretary shall consider the need for further reporting following a review of the results for year 5.	
12	Prior to submitting any Development Application for the intermodal terminal facility, the Applicant shall convene a meeting with regard to proposed traffic assumptions and mitigation measures. The Applicant must: a) Invite SIMTA, TfNSW, RMS, Liverpool City Council and Campbelltown City Council. Each Council may also invite a maximum of two community representatives to attend. b) At the meeting, present the scope and assumptions of the mesoscopic/microsimulation traffic modelling, the draft Traffic Impact Assessment and any proposed mitigation measures including timing on the delivery of any proposed measures; c) Publish the meeting minutes and a schedule of action items arising from the meeting, including responsibilities and timeframes on its website; d) Prepare a written report responding to the action items and consult with RMS on the action items and final mitigation measures; and e) Provide details of the undertaking and outcomes of this condition in the EIS.	NA
13	Containers must be transferred from Port Botany to the site and from the site to Port Botany by rail, unless there is planned track maintenance or where unforeseen circumstances have occurred (eg an incident, breakdown, derailment or emergency maintenance on the rail line). The Secretary may at any time request the Applicant to demonstrate that the transport of containers between the site and Port Botany container terminals is by rail. This is to be demonstrated upon request by the Secretary for the prior 12 month period.	NA
14	Operations on the Subject Site cannot commence until a rail connection to the SSFL is operational.	NA
15	The warehousing and distribution facilities must only be used for activities associated with freight using the intermodal terminal facility unless otherwise approved in a subsequent Development Application.	NA
15A	Warehousing associated with Stage 2 of the development is to be limited to the area identified in the plan titled ‘Precinct Modification Plan – Proposed’ (Drawing No JR-SK-A-0-9402, (Revision G), prepared by Bell Architecture and dated 16 October 2020).	NA

16	Building heights are to be a maximum of 21 metres above finished surface levels which must be in accordance with Condition 19B and other structures are to be generally consistent with Appendix D Landscape and Visual Impact of the Response to Submissions dated May 2015, except where otherwise permitted under condition 16A.	NA
16A	Notwithstanding condition 16, the following maximum building heights are permitted for warehouse buildings in the following areas: a) maximum 39 metres above finished surface levels in the shaded area marked warehouse 5 in the plan titled 'Precinct Modification Plan – Proposed' (Drawing No JR-SK-A-0-9402, (Revision G), prepared by Bell Architecture and dated 16 October 2020). b) maximum 43.25 metres above finished surface levels in the shaded area marked warehouse 6 in the plan titled 'Precinct Modification Plan – Proposed' (Drawing No JR-SK-A-0-9402, (Revision G), prepared by Bell Architecture and dated 16 October 2020).	NA
17	Building setbacks are to be generally consistent with Appendix D Landscape and Visual Impact of the Response to Submissions dated May 2015 and allow for stabilised fill batters.	NA
17A	The maximum GFAs for the following uses apply: a) 300,000m^2 for the warehousing and distribution facilities; and b) 800m^2 for the freight village.	MA
18	The layout of the site shall not prevent a possible future pedestrian connection to Casula Railway Station across the Georges River.	NA
18A	The layout of the site must not prevent the provision of vegetated wildlife corridors linking the Georges River riparian corridor and Moorebank offset area with the Wattle Grove offset area as shown in the Appendix.	NA
18B	The site must include provision of a riparian corridor, comprising the following: i) a buffer zone to the most inland of: • 40 metres from the top of bank, as surveyed by a registered surveyor, or • the 1% AEP flood extent, excluding the localised depression at the existing major east-west drainage channel, and ii) an additional 10 metre extension to the buffer zone established in (i) above, where native vegetation is located on or within 10 metres east of the buffer.	NA

19	The layout of the site shall be designed to ensure heavy vehicles associated with the operation of the intermodal terminal facility can be accommodated on site in the event of an incident blocking access to the M5 Motorway/ Moorebank Avenue to avoid queuing on public roads.	NA
19A	Only VENM, ENM, or other material approved in writing by the EPA is to be brought onto the site.	NA
19B	The total volume of uncompacted fill to imported must not exceed 1,600,000m^3 unless it can be demonstrated in a future development application that the proposed finished surface level of any filled section of the site does not exceed 16.6 m AHD.	NA
19C	Clearing native vegetation and earthworks including fill importation and placement for a future Development Application must be undertaken in a phased manner to minimised dust and native fauna impacts, with no long term stockpiling of imported fill and no stockpiling of imported material for use as part of a subsequent future Development Application.	NA
20	This approval will lapse ten years from the date of this approval unless works the subject of Early Works (Stage 1) or any related application are physically commenced, on or before that lapse date.	NA
21	In the event of a dispute between the Applicant and a public authority, in relation to this approval, either party may refer the matter to the Secretary for resolution. The Secretary's resolution of the matter shall be binding on the parties.	CCS
22	Any advice or notice to the consent authority shall be served on the Secretary	NA
Schedule 3 – Conditions to be met for Early Works (Stage 1)		
A1	The land subject to this part relates to the intermodal site (Lot 1 DP 1197707, Lot 100 DP 1049508, Lot 101 DP 1049508 and Lot 2 DP 1197707).	NA
A2	The Applicant shall prepare and implement a Compliance Tracking Program, to track compliance with the requirements of this approval. The Program shall be submitted to the Secretary for approval prior to the commencement of construction and operate for the duration of the Early Works stage. The Program shall include, but not be limited to: a) provision for the notification to the Secretary prior to the commencement of construction; b) provision for periodic review of the compliance status of the SSD against the requirements of this approval; c) provision for periodic reporting of compliance status to the Secretary, including but not limited to:	NA

	i) Pre-Construction Compliance Report prior to the commencement of early works, ii) Six-monthly, or other timing as agreed by the Secretary, Early Works Compliance Reports, for the duration of early works, and iii) a Completion Compliance Report within one month of completion of the early works stage; d) a program for independent environmental auditing in accordance with AS/NZS ISO 19011:2014 - Guidelines for Auditing Management Systems; e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents; f) provision for reporting environmental incidents to the Secretary during construction, in accordance with conditions A3 and A4; g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and h) provision for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	
A3	The applicant shall notify the Secretary and Relevant public authorities of any incident with actual or potential significant on-site or offsite impacts on human health or the biophysical environment within 24 hours of becoming aware of the incident. The Applicant shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred	NA
A4	The Applicant shall meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A3, within such period as the Secretary may require.	NA
B1	The Applicant shall ensure that all demolition work is carried out in accordance with; Australian Standard AS 2601:2001: The Demolition of Structures, or its latest version.	NA
B2	The approved works (including any excavation required for remediation) must not occur below 5 metres AHD and lower the water table below 1m AHD on adjacent class 1, 2, 3, 4 land in accordance with the Liverpool Local Environmental Plan 2008	NA
B3	The subject site is to be remediated in accordance with: a) The approved Remedial Action Plan; b) State Environmental Planning Policy No. 55 – Remediation of Land; and	NA

	c) The guidelines in force under the Contaminated Land Management Act. Amendments to the approved Remedial Action Plan required as a result of further site investigations must be approved by the site auditor, in consultation with the EPA. Within 3 months after the completion of the remediation works, a notice of completion, including a validation and/or monitoring report is to be provided to the Secretary. This notice must be consistent with State Environmental Planning Policy No. 55 – Remediation of Land. The validation and/or monitoring report is to be independently audited and a Site Audit Statement Issued. The audit is to be carried out by an independent auditor accredited by the Environment Protection Authority. Any conditions recorded on the Site Audit Statement are to be complied with.	
B4	The Early Works shall be undertaken to comply with section 120 of the Protection of the Environment Operations Act 1997, which prohibits the pollution of waters.	NA
B5	All activities taking place in, on or under waterfront land, as defined in the Water Management Act 2000 should be conducted generally in accordance with the NSW Office of Water's Guidelines for Controlled Activities	NA
B6	The Applicant shall not harm, modify or otherwise impact any heritage items outside the subject site.	NA
B7	Prior to the commencement of Early Works affecting Aboriginal sites MA1, MA2, MA3, MA4, MA5 and MA9, the Applicant shall: a) develop a detailed salvage strategy, prepared in consultation with the OEH (Aboriginal heritage) and the Aboriginal stakeholders. The investigation program shall be prepared to the satisfaction of the Secretary; and b) undertake any further archaeological excavation works recommended by the results of the Aboriginal archaeological investigation program. Within twelve months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall submit a report containing the findings of the excavations, including artefact analysis and Aboriginal Site Impacts Recording Forms (ASIR), and the identification of final storage location for all Aboriginal objects recovered (testing and salvage), prepared in consultation with the Aboriginal stakeholders, the OEH (Aboriginal heritage) and to the satisfaction of the Secretary.	NA
B8	Prior to the commencement of Early Works affecting non-Aboriginal sites MHPAD1 and MHPAD2, the Applicant shall undertake any further archaeological excavation works recommended by the results of the non-Aboriginal archaeological investigation program. Within 12 months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall submit a report containing the findings of the excavations, including artefact analysis, and	NA

	the identification of a final repository for finds, prepared in consultation with the OEH (Heritage branch) and to the satisfaction of the Secretary.	
B9	Prior to the commencement of Early Works affecting the CUST Hut, RAAF STRARCH Hangar, the Dog Cemetery and Commemorative Gardens, the Applicant shall prepare a report in consultation with the Heritage Council of NSW, the local Council and the local Historical Society which considers the options for mitigation of these items. In relation to the Dog Cemetery, consultation should also occur with the School of Military Engineering's Explosive Detection Dog's Unit. The report shall include the archival recordings and the historical research, where required, to the Secretary, the Heritage Council of NSW, the local Council and the local Historical Society.	NA
B10	Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with: a) all relevant Australian Standards; b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997). In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.	NA
B11	The Applicant shall carry out all feasible and reasonable measures to minimise dust generated by the Development	NA
B12	During Early Works, the Applicant shall ensure that: a) all vehicles on site do not exceed a speed limit of 30 kilometres per hour; and b) all loaded vehicles entering or leaving the site have their loads covered; and all loaded vehicles leaving the site are cleaned of dirt, sand and other materials before they leave the site, to avoid tracking these materials on public roads.	NA
B13	The reuse and/or recycling of waste materials generated on site shall be maximised as far as practicable, to minimise the need for treatment or disposal of those materials offsite.	NA
B14	All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with Waste Classification Guidelines (Department of Environment, Climate Change and Water 2009).	NA
B15	All waste materials removed from the subject site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.	NA

B16	Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the Early Works shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Applicant, or as otherwise agreed between the parties.	NA
B17	The Applicant shall prepare dilapidation surveys and reports on the condition of local roads, footpaths, services and utilities affected by Early Works. The Applicant shall carry out rectification work at the Applicant's expense and to the reasonable requirements of the owners for damage resulting from the completion of Early Works.	NA
B18	The Applicant shall ensure that the construction and operation of the proposed development will not prevent the existing use of Moorebank Avenue as a public road to a standard commensurate to its current use prior to the development.	NA
C1	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Community Communication Strategy to the satisfaction of the Secretary. The Strategy shall provide mechanisms to facilitate communication between the Applicant (and its contractor(s)), the Environmental Representative (see condition D1), the relevant Council and community stakeholders (particularly adjoining landowners) on the design and construction environmental management of the Early Works. The Strategy shall include, but not be limited to: a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners, key community and business groups, and community and social service organisations; b) procedures and mechanisms for the regular distribution of accessible information to community stakeholders on construction progress and matters associated with environmental management, including provision of information in appropriate community languages; c) procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Applicant and/or Environmental Representative in relation to the environmental management and delivery of the SSD; d) procedures and mechanisms through which the Applicant can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the SSD; and e) procedures and mechanisms that would be implemented to resolve issues/disputes that may arise between parties on the matters relating to environmental management and the delivery of the SSD, including but not limited to disputes	NA

	regarding rectification or compensation for impacts to third party property and infrastructure. These procedures and mechanisms may include the use of a suitably qualified and experienced independent mediator.	
C2	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall ensure that the following are available for community enquiries and complaints for the duration of Early Works: a) a 24 hour telephone number(s) on which complaints and enquiries about the SSD may be registered; b) a postal address to which written complaints and enquires may be sent; c) an email address to which electronic complaints and enquiries may be transmitted; and d) a mediation system for complaints unable to be resolved. The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.	NA
C3	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Construction Complaints Management System consistent with AS ISO 10002-2006 Customer satisfaction – Guidelines for complaints handling in organisations (ISO 10002:2004, MOD) and maintain the System for the duration of Early Works and up to 12 months following completion of this stage. Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System shall be made available to the Secretary on request.	NA
C4	Prior to commencement of the Early Works, or as otherwise agreed by the Secretary, the Applicant shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSD, for the duration of Early Works. The Applicant shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to: a) information on the current implementation status of the SSD; b) a copy of the documents listed in condition 4, and any documentation supporting modifications to this approval that may be granted from time to time;	NA

	c) a copy of this approval and any future modification to this approval; d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSD; e) a copy of each current report, plan, or other document required under this approval; f) the outcomes of compliance tracking in accordance with condition A2 of this approval; and g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.	
D1	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary, the Applicant shall appoint a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel, and that has been approved by the Secretary. The Applicant shall employ the Environmental Representative(s) for the duration of construction of this stage, or as otherwise agreed by the Secretary. The Environment Representative(s) shall: a) be the principal point of advice in relation to the environmental performance of the Early Works; b) monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Applicant upon the achievement of these plans/programs; c) have responsibility for considering, and advising the Applicant on, matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the Early Works; d) ensure that environmental auditing is undertaken in accordance with the Applicant's Environmental Management System(s); e) be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan; f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts; and g) be consulted in responding to the community concerning the environmental performance of the Early Works where the resolution of points of conflict between the Applicant and the community is required.	NA
D2	The Environmental Representative shall prepare and submit to the Secretary a three monthly report on the Environmental Representative's actions and decision on matters specified in condition D1 for the preceding month. The reports shall be submitted within seven (7) days for the end of each month for the duration of Early Works, or as otherwise agreed by	NA

	the Secretary. Notwithstanding, the Environmental Representative shall be given the independence to report to the Secretary at any time and/or at the request of the Secretary	
D3	Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition (Landcom, 2004) shall be employed during Early Works to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.	NA
D4	The Applicant shall store all chemicals, fuels and oils used on-site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's Storing and Handling Liquids: Environmental Protection – Participants Handbook.	NA
D5	Early works shall be undertaken during the following standard construction hours: a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and b) 8:00am to 1:00pm Saturdays; c) at no time on Sundays or public holidays.	NA
D6	Activities resulting in impulsive or tonal noise emissions shall only be undertaken: a) between the hours of 8:00 am to 5:00 pm Monday to Friday; b) between the hours of 8:00 am to 1:00 pm Saturday; and c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block. For the purposes of this condition, 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.	NA
D7	Notwithstanding conditions D5 and D6, works may be undertaken outside the hours specified under those conditions in the following circumstances: a) construction works that cause LAeq (15 minute) noise levels that are: i) No more than 5 dB above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and ii) No more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC, 2009) at other sensitive landuses; or b) for the delivery of materials required by the police or other authorities for safety reasons; or	NA

	c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or d) construction works approved through an Out-Of-Hours Work Protocol prepared as part of the Construction Noise and Vibration Management Plan required by condition D21(b), provided the relevant Council, local residents and other affected stakeholders and sensitive receivers are informed of the timing and duration at least 48 hours prior to the commencement of the works; or e) identified works approved by the Secretary.	
D8	The Applicant shall implement all feasible and reasonable noise mitigation measures with the aim of achieving the following construction noise management levels and vibration criteria: a) construction noise management levels established using the Interim Construction Noise Guideline (DECC 2009); b) vibration criteria established using the Assessing Vibration: a Technical Guide (DECC 2006) (for human exposure); and c) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage). Any construction activities identified as exceeding the construction noise management levels and/or vibration criteria shall be managed in accordance with the Construction Noise and Vibration Management Plan required by condition D22(b).	NA
D9	The Applicant is to ensure that construction vehicle contractors operate so as to minimise any construction noise impacts from the subject site. Measures that could be used include toolbox talks, contracts that include provisions to deal with unsatisfactory noise performance for the vehicle and/or the operator, and specifying non-tonal movement alarms in place of reversing beepers or alternatives such as reversing cameras and proximity alarms, or a combination of these, where tonal alarms are not mandated by legislation.	NA
D10	No use of compression brakes shall be permitted for construction vehicles associated with the Early Works in the vicinity of the subject site.	NA
D11	Construction heavy vehicle access to and from the site via Moorebank Avenue (south) / Cambridge Avenue during Early Works is not permitted, with the exception of heavy vehicles travelling to and from the Glenfield Waste Facility.	NA
D12	The Early Works shall be carried out to, where feasible and reasonable, to avoid the use of local roads (through residential streets) by heavy vehicles to gain access to the site and/or ancillary facilities.	NA
D13	Construction vehicles (including staff vehicles) associated with the Early Works shall bemanaged to: a) minimise parking or queuing on public roads;	NA

	b) minimise idling and queuing in local residential streets where practicable; c) adhere to the nominated haulage routes identified in the Construction Traffic and Access Management Plan required under condition D22(a); and d) ensure access and egress from construction compounds is undertaken in a safe and lawful manner.	
D14	Safe pedestrian and cyclist access through or around worksites shall be maintained during early works. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and signposted, including provision of permanent footpaths where pedestrian access is reliant on grassed verges.	NA
D15	Access to all properties affected by the carrying out of Early Works shall be maintained, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by the carrying out of Early Works shall be reinstated to at least an equivalent standard, unless agreed with by the property owner	NA
D16	Upon determining the haulage route(s) for construction vehicles associated with subject site, and prior to Early Works, a suitably qualified and experienced independent expert shall prepare a Road Dilapidation Report. The Report shall assess the current condition of roads and describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the Early Works. The Report shall be submitted to the Secretary for information and the relevant Council for review prior to the commencement of haulage. Following completion of Early Works, a subsequent Report shall be prepared to assess any damage to the road that may have resulted. Measures undertaken to restore or reinstate roads affected by the Early Works shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant Council, and at the full expense of the Applicant.	NA
D17	Within 12 months of the commencement of Early Works, the Applicant shall develop and implement a Biodiversity Offset Package for the approval of the Secretary. The Package shall detail how the ecological values lost as a result of the SSD will be offset. The Package shall be consistent with the NSW Biodiversity Offsets Policy for Major Projects (OEH 2014), unless otherwise agreed by the Secretary. The Package shall include, but not necessarily be limited to: a) the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the SSD; b) the objectives and biodiversity outcomes to be achieved;	NA

	c) the final suite of the biodiversity offset measures selected and secured in consultation with OEH; d) the management and monitoring requirements for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including: e) the monitoring of the condition of species and ecological communities at offset (including translocation) locations; f) the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites; g) provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the OEH; and h) timing and responsibilities for the implementation of the provisions of the Package. Where land offsets cannot solely achieve compensation for the loss of habitat, additional measures shall be provided to collectively deliver an improved or maintained biodiversity outcome for the region. Where monitoring referred to in (e) above indicates that biodiversity outcomes are not being achieved, remedial actions shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved to the satisfaction of the Secretary. Such remedial actions shall be documented under an addendum to the Biodiversity Offset Package and the addendum be submitted for the approval of the Secretary, prior to the implementation of that addendum.	
D18	Subject to future Development Applications, no threatened species or communities can be cleared other than that required for Early Works. Any hollow bearing trees shall be relocated to areas to be determined by a suitably qualified ecologist in areas identified for conservation.	NA
D19	The Applicant shall prepare and implement a 'Threatened Dragonfly Species Survey Plan' to determine the presence or absence of threatened dragonfly species listed under the Fisheries Management Act 1994 on the Georges River, adjacent to the development site. The plan, including survey methodology, shall be prepared in consultation with DPI Fisheries prior to the commencement of Early Works. On implementing the plan, the survey results are to be forwarded onto DPI Fisheries. Should threatened dragonfly species be found at this site, DPI Fisheries should be Contacted to agree on possible mitigation measures to avoid impacts in accordance with NSW DPI Policy and Guidelines for Fish Habitat Conservation and Management (2013).	NA
D20	Prior to the commencement of Early Works, or as otherwise agreed by the Secretary the applicant shall prepare and implement a Construction Environmental Management Plan (CEMP). The CEMP is to be prepared in consultation with the EPA, OEH, DPI Water, DPI Fisheries, and the relevant	NA

Council, for approval of the Secretary. The CEMP shall outline the environmental management practices and procedures that are to be followed during construction. The CEMP is to be prepared in accordance with the Guideline for the preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004)

a) a description of activities to be undertaken during the Early Works

b) statutory and other obligations that the applicant is required to fulfil during Early Works, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies

c) a description of the roles and responsibilities for relevant employees, including contractors and sub-contractors, are aware of their environmental and compliance obligations under these conditions of approval.

d) an environmental risk analysis to identify the key environmental performance issues associated with the early works; and

e) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the CEMP:

    i) measures to monitor and manage dust emissions including dust from stockpiles, traffic on unsealed roads and materials tracking from construction sites onto public roads

    ii) measures for the handling, treatment and management of hazardous and contaminated materials (including asbestos)

    iii) measure to monitor and manage waste generated during construction but not necessarily limited to: general procedures for waste classification, handling reuse, disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealings with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins)

    iv) measures to monitor and manage hazards and risks

    v) measures to monitor and rectify any impacts to third party property and infrastructure, including details of the process of rectification or compensation of affected landowners, and timeframes for rectification works or compensation processes and

    vi) the issues identified in condition D21.

	The CEMP shall include procedures for its periodic review and update (including the sub-plans required under condition D21), as necessary (including where minor changes can be approved by the Environmental Representative). The CEMP shall be submitted for the approval of the Secretary no later than one month prior to the commencement of Early Works, or as otherwise agreed by the Secretary. The CEMP may be prepared in stages; however, Early Works shall not commence until written approval of the relevant stage has been received from the Secretary. The approval of a CEMP does not relieve the Applicant of any requirement associated with this approval. If there is an inconsistency with an approved CEMP and the conditions of this approval, the requirements of this approval shall prevail.	
D21	As part of the CEMP for the SSD, the Applicant shall prepare and implement: a) Construction Traffic and Access Management Plan b) Construction Noise and Vibration Management Plan c) Construction Heritage Management Plan d) Construction Flora and Fauna Management Plan e) Construction Air Quality Management Plan f) Construction Soil and Water Management Plan [Note: Detailed requirements for these plans have not been included in this table.]	NA
Schedule 4 – Conditions to be met in Future Development Applications		
E1	To ensure the operational noise impacts are appropriately managed, the following measures must be considered in future Development Applications: a) Best practice plant for the intermodal facility, including electronic automated container handling equipment or equipment with equivalent sound power levels; b) The use of automatic rail lubrication equipment in accordance with ASA Standard T HR TR 00111 ST Rail Lubrication and top of rail friction modifiers; c) Measures to ensure the rail cross sectional profile is maintained in accordance with ETN–01-02 Rail Grinding Manual for Plain Track to ensure the correct wheel / rail contact position and hence to encourage proper rolling stock steering; d) A noise barrier on the western side of the haul road; e) A detailed assessment of sleep disturbance impacts, including: how often noise events occur; the time of day when the occur; and whether there are any times of day when there is a clear change in the noise environment; and f) A risk assessment to determine if non-tonal reversing alarms can be fitted as a condition of site entry.	NA

	Alternatively, site design may include traffic flow that does not require or precludes reversing of vehicles.	
E2	Development Applications for intermodal terminal facility shall include a report to identify: a) The extent of brake squeal across the fleet of rail vehicles that will frequently use the terminals. This should identify the number of occurrences of brake squeal, the typical noise levels associated with brake squeal (including the frequency content), and the operational conditions under which brake squeal occurs (e.g. under light braking, hard braking, low / medium / high speed, effects of temperature and weather, etc.); b) The root cause of brake squeal, including the influence of the design, set-up and maintenance of both brake shoes and brake rigging; c) Possible solutions to mitigate or eliminate brake squeal, including modifications to brake rigging and alternative brake shoe designs and compounds; and d) Any monitoring system proposed to capture brake squeal.	NA
E3	Development Applications for the intermodal terminal facility shall detail how the expected port shuttle locomotives incorporate available best practice technologies.	NA
E4	Development Applications for the intermodal terminal facility shall consider the effect of headlight glare on surrounding sensitive receivers.	NA
E5	Any Development Application comprising the rail link must consider maximising curve radii of the rail connection, particularly the southern tie-in to the SSFL, to minimise the potential for wheel squeal.	NA
E6	Any Development Application comprising the rail link shall ensure the width of the rail link corridor is no greater than 20 metres in the Riparian Corridor.	NA
E7	Any Development Application comprising the rail link shall consider fauna movement in the bridge design.	NA
E8	Any Development Application comprising the rail link shall consider minimising potential impacts to the aquatic environment, aquatic habitats and fish passage, both in the design and construction of the bridge.	NA
E9	Any Development Application comprising the rail link shall include an assessment of the impacts of the rail link on the Glenfield Waste Facility, including: a) Targeted intrusive investigations to determine contamination pathways and to develop mitigation, management and/or remediation options based on those investigations; b) details of the quantity of landfilled waste to be removed, the location from where it will be removed, the methodology to	NA

	be utilised and the estimated timeframe for the removal and reburial; c) proposed measures to mitigate odour impacts on sensitive receivers, including an undertaking to apply daily cover to any exposed waste in accordance with benchmark technique 33 of the document Environmental Guidelines: Solid Waste Landfills, NSW EPA 1996; d) details of impacts on pollution control and monitoring systems including existing groundwater and landfill gas bores and their subsequent repair/ replacement; e) the methodology proposed to ensure that the landfill barrier system disturbed in the removal process is replaced/ repaired to ensure its ongoing performance. The Applicant shall detail matters such as sub grade preparation and specifications, liner installation/ reinstallation procedures and construction quality assurance (CQA) procedures; f) a commitment to providing the EPA with a construction quality assurance report within 60 days of the completion of the works referred to in (d) above; and g) an overview of any access and/or materials/ equipment storage arrangements with Glenfield Waste Facility in relation to the construction of the rail link. h) details of any other expected or potential impacts to the licensed area and options for management and mitigation of those impacts (i.e. leachate management and surface water runoff, potential impacts on the Georges River during works, dust etc); and i) details of and proposed mitigation measures for the long term management of the rail link.	
E10	Development Applications for the intermodal terminal facility shall include documentation demonstrating how Condition 14 of this approval has been satisfied.	NA
E11	All future Development Applications shall include a Traffic Impact Assessment based on background growth models developed by RMS for the Liverpool/Moorebank area (if applicable).	NA
E11A	All future Development Applications must assess traffic impacts associated with fill importation and identify management measures.	NA
E12	All future Development Applications must include adequate measures to prevent heavy vehicles associated with the construction or operation of the facility from using Cambridge Avenue.	CTAMP – Addendum
E13	All future Development Application shall include: a) an assessment of the impacts of the project on local infrastructure, having regard to any relevant Council's Developer Contributions Plan (or equivalent document requiring developer contributions);	NA

	b) a commitment to pay developer contributions to the relevant consent authority or undertake works-in-kind towards the provision or improvement of public amenities and services. Note: This requirement may be satisfied subject to the terms of any applicable Voluntary Planning Agreement; and c) a commitment to undertake vehicle monitoring on Cambridge Avenue. Should any monitoring reveal the need for improvement works within the Campbelltown LGA as a result of the proposal, the Applicant may be required to contribute towards local road maintenance or upgrades.	
E14	All future Development Applications shall consider the need for a bus stop on Moorebank Avenue (including direct pedestrian access from the warehousing to the bus stop), and associated turnaround facility suitable for a 14.5 metre long non-rear steer bus.	NA
E15	All future Development Applications shall consider measures to improve the condition of the riparian corridor along the western bank of the Georges River (known as the 'hourglass land').	NA
E16	All future Development Applications shall include the following vegetated riparian corridor widths (measured landward from the top of bank) and provide detailed drawings demonstrating compliance with this requirement: a) a minimum of 50 metres wide associated with the rail corridor; b) a minimum of 40 metres wide along the terminal site; and c) compliance with condition 18B.	NA
E16A	All future Development Applications must demonstrate that onsite detention basins are located outside the riparian corridor and the outlets have been designed to minimise impacts on the riparian corridor.	NA
E16B	All future Development Applications must include an assessment of the impact of the development on core Koala habitat and provide a detailed assessment of options to manage and minimise impacts.	NA
E17	All future Development Applications for new built form must include detailed landscape plans identifying the vegetation to be removed or relocated and the location of replacement and additional landscaping.	NA
E17A	All future Development Applications must include: a) an assessment of the visual impact of the raised landform, built form (materials and finishes) and urban design (height, bulk and scale) including lighting and signage when viewed from residential areas; and b) details of measures to mitigate impacts.	NA

E17B	All future Development Applications must present designs that incorporate the principles of: a) Water Sensitive Urban Design (WSUD) and Urban Heat Island Mitigation (UHIM); and b) NSW Government Architect's "Greener Places" policy.	NA
E18	All future Development Applications shall include detailed landscape plans including relevant details of the species to be used in the various landscaped areas (preferably species indigenous to the area), including details of the informal native and cultural avenue plantings, and other soft and hard landscape treatments, including any pavement areas and furniture.	NA
E19	All future Development Applications relevant to MA6 and MA7 (Scarred Trees) shall include a consideration of Aboriginal cultural value of the trees and options for avoiding impacts and ongoing conservation measures, including evidence of consultation with Aboriginal community representatives.	NA
E20	All future Development Application shall assess heritage impacts of the proposal. The assessment shall: a) consider impacts to Aboriginal heritage (including cultural and archaeological significance), in particular impacts to Aboriginal heritage sites identified within or near the project should be assessed. Where impacts are identified, the assessment shall demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures (including the final proposed measures); b) consider impacts to historic heritage. For any identified impacts, the assessment shall: i) outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the measures). Mitigation measures should include (but not be limited to) photographic archival recording and adaptive re-use of buildings or building elements on site); ii) be undertaken by a suitably qualified heritage consultant(s); and iii) include a statement of heritage impact.	NA
E21	All future Development Application shall include an assessment of soil and water impacts. The assessment shall (where relevant): a) assess impacts on surface and groundwater flows, quality and quantity, with particular reference to any likely impacts on Georges River and Anzac Creek; b) assess flooding impacts and characteristics, to and from the project (including rail link), with an assessment of the	NA

	potential changes to flooding behaviour (levels, velocities and direction) and impacts on bed and bank stability, through flood modelling, including: i) hydraulic modelling for a range of flood events; ii) description, justification and assessment of design objectives (including bridge, culvert and embankment design); iii) an assessment of afflux and flood duration (inundation period) on property; and iv) consideration of the effects of climate change, including changes to rainfall frequency and/or intensity, including an assessment of the capacity of stormwater drainage structures. c) identify and assess the soil characteristics and properties that may impact or be impacted by the project, including acid sulfate soils; d) include a contamination assessment in accordance with the guidelines made under the Contaminated Land Management Act 1997 and in consultation with the EPA for the subject site including the Glenfield Waste Facility.	
E22	All future Development Application which includes construction in the vicinity of Amiens Wetland shall include advice from an independent wetland expert to determine whether it is artificial or a natural lake basin, its significance, and any recommendations on mitigation measures (if appropriate).	NA
E22A	All future Development Applications must demonstrate that the proposed development, including the importation and placement of fill, will not adversely impact on or be adversely impacted by long term management or monitoring of remediation required under the Stage 1 Early Works in relation to contaminated land management.	NA
E23	All future Development Application shall be accompanied by a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the proposal. Should preliminary screening indicate that the proposal is 'potentially hazardous,' a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DoP 2011) and Multi-Level Risk Assessment (DoP 2011). The PHA should: a) Estimate the risks from the facility; b) Be set in the context of the existing risk profiles for the intermodal facility and demonstrate that the proposal does not increase the overall risk of the area to unacceptable levels; and	NA

	c) Demonstrate that the proposal complies with the criteria set out in the Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning.	
E24	All future Development Application shall be accompanied by an assessment against the Planning for Bushfire 2006 (NSW Rural Fire Service).	NA
E24A	All future Development Applications must demonstrate that bushfire asset protection zones do not impact on biodiversity offset areas and the Georges River riparian corridor.	NA
E25	All future Development Applications shall demonstrate compliance with the Building Code of Australia, as relevant.	NA
E26	Any future Development Application for subdivision must: a) demonstrate compliance with the minimum lot size specified in the Liverpool Local Environmental Plan; b) demonstrate compliance with Condition 15 of this consent; c) include a subdivision plan showing completed estate works including but not limited to site services, internal roads, maintenance access roads, pedestrian paths, landscaping, lighting of common areas, provision for emergency services including for firefighting, onsite detention basins and stormwater treatment systems; d) include a detailed management and maintenance program for estate infrastructure; and e) nominate a single entity responsible for implementation of the management and maintenance program.	NA
E27	Any future Development Applications that propose staging of construction must provide details of staging which: a) describes how the development will relate to other future development stages including those on the MPE site; b) describes how estate infrastructure will be delivered in conjunction with warehouse construction; c) includes an indicative construction program for both MPW and MPE; d) documents how compliance with the requirements of conditions in this Schedule (Schedule 4) will be achieved; and e) demonstrates that estate infrastructure will be delivered prior to operation of the intermodal terminal facility, warehousing delivered in each stage, and the freight village.	NA
E28	All future Development Applications must provide the timing for construction and operation on both the MPW and MPE sites and provide cumulative assessments for construction and operation on the MPW and MPE sites including, but not limited to: a) traffic and access impacts;	NA

	b) noise and vibration impacts; c) air quality impacts; d) stormwater drainage impacts; and e) ecological impacts.	
E29	Any future Development Application that proposes the use of infrastructure on the MPE site or integration of operations across the MPW and MPE sites must: a) demonstrate that there will be no overall increase in cumulative construction and operational environmental impacts; b) describe the relationship between similar facilities on each site such as the intermodal terminal facilities and freight villages; c) provide a mechanism to record the TEUs supplied and received at each of the MPW and MPE intermodal terminal facilities to demonstrate compliance with conditions 7 and 8 of this consent and conditions 1.6 and 1.7 of the MPE Concept Plan (MP 10_0193) approval; d) provide an overall Precinct (MPW + MPE) layout and design drawings, including for: i) access to the Precinct, ii) internal access and connections for pedestrians and vehicles including for the transfer of containers between intermodal terminal facilities and warehouses, iii) public access including vehicle access between Anzac Road and Cambridge Avenue, public transport and pedestrian/cyclist connections, iv) stormwater infrastructure including stormwater treatment and detention, and v) landscaping and directional signage; and e) outline management and maintenance arrangements for the use of infrastructure on the other site.	NA

Appendix A3 – EP&A Act Complying Development Certificates

CDC 230736/01 – S1, S2 and S5

CDC 230736/01 approves the construction and operation of Warehouses S1, S2 and S5. This Addendum addresses the relevant conditions and commitments required under that Development Certificate.

The construction of the Project will be consistent with the relevant conditions of the CDC and they are addressed by this Addendum as identified Table A-3.

Table A-3 MPW South CDC Conditions

Condition	Requirement	Reference
14	**Hours of construction work** Construction may be carried out only between 7.00am and 5.00pm Monday to Saturday, unless construction cannot be heard at the nearest residence.	Section 1.2.3 CNVMP Addendum
15	**Dust emissions** To control dust emissions from the site, suitable measures must be taken to suppress dust or mitigate the effect of dust emissions prior to demolition, excavation or building work.	CSWMP Addendum
16	**Earthworks** (1) Earthworks, including a structural retaining system or other related structure, must not - (a) cause a danger to life or property or damage to any adjoining buildings or structures on the land comprising the lot on which the earthworks are carried out or to any building or structure on land comprising an adjoining lot, or (b) redirect the flow of any surface or ground water, or cause sediment to be transported, onto an adjoining property. (2) Excavated soil found to be contaminated, as classified under guidelines made under the Contaminated Land Management Act 1997, must be - (a) removed from the site in accordance with any requirements of the Protection of the Environment Operations Act 1997, or (b) appropriately remediated or managed on site. (3) Fill brought to the site must be appropriate fill. (4) Excavation must be carried out in accordance with Excavation Work: Code of Practice, published by SafeWork NSW in January 2020.	CSWMP Addendum
17	**Development on land containing containment cell** (1) This section applies to complying development carried out on land containing a containment cell if the development is likely to -	MPW Long Term Environmental Management Plan (LTEMP)

	(a) cause the cell to be breached or otherwise damaged, or (b) reduce the effectiveness of the cell. (2) A plan that provides for the following must be prepared and approved by a site auditor before the development commences (a) the management of the construction process relating to a breach of or damage to the containment cell, including how exposed contaminated material will be dealt with, (b) the process for reinstating the containment cell before the development is completed. (3) The plan, including the reinstatement of the containment cell, must be complied with. (4) The land on which the development is carried out must not be used for the purpose of the development unless - (a) a site audit report and site audit statement are obtained from a site auditor before the development is completed, and (b) the report and statement indicate that the site is suitable for the intended use. (5) In this section - site audit report, site audit statement and site auditor have the same meaning as in the Contaminated Land Management Act 1997.	(EP Risk December 2020)
18	**Survey certificate required if building close to lot boundary** (1) This section applies to complying development that consists of the erection of a building that will be located less than 3m from a lot boundary. (2) A survey certificate must be provided to the principal certifying authority - (a) before form work below a ground floor slab is carried out, or (b) if there is no form work below a ground floor slab - before concrete is poured for a ground floor slab or foundations. (3) The survey certificate must - (a) be prepared by a registered land surveyor under the Surveying and Spatial Information Act 2002, and (b) show the location of the building relative to the boundaries of the lot.	-
19	**Engineering certificate required for certain development** (1) This section applies to development specified in sections 1, 2, 4 - 9, 12 and 13. (2) A certificate by a qualified engineer must be provided to the principal certifying authority, before the principal certifying authority carries out the final inspection, certifying that the development has satisfactory design and structural integrity.	-
20	**Emergency facilities**	-

	Fire watch measures must be implemented during a period in which work on existing alarm signalling equipment results in a loss of a monitoring service.

CDC 250077/01 – S4

CDC 250077/01 approves the construction and operation of Warehouse S4. This Addendum addresses the relevant conditions and commitments required under that Development Certificate.

The construction of the Project will be consistent with the relevant conditions of the CDC which are addressed by this Addendum in Table A-3 below.

Table A-4 MPW South CDC Conditions

Condition	Requirement	Reference
14	**Hours of construction work** Construction may be carried out only between 7.00am and 5.00pm Monday to Saturday, unless construction cannot be heard at the nearest residence.	Section 1.2.3 CNVMP Addendum
15	**Dust emissions** To control dust emissions from the site, suitable measures must be taken to suppress dust or mitigate the effect of dust emissions prior to demolition, excavation or building work.	CSWMP Addendum
16	**Earthworks** (1) Earthworks, including a structural retaining system or other related structure, must not— (a) cause a danger to life or property or damage to any adjoining buildings or structures on the land comprising the lot on which the earthworks are carried out or to any building or structure on land comprising an adjoining lot, or (b) redirect the flow of any surface or ground water, or cause sediment to be transported, onto an adjoining property. (2) Excavated soil found to be contaminated, as classified under guidelines made under the *Contaminated Land Management Act 1997*, must be— (a) removed from the site in accordance with any requirements of the *Protection of the Environment Operations Act 1997*, or (b) appropriately remediated or managed on site. (3) Fill brought to the site must be appropriate fill. (4) Excavation must be carried out in accordance with *Excavation Work: Code of Practice*, published by SafeWork NSW in January 2020.	CSWMP Addendum

17	**Development on land containing containment cell** (1) This section applies to complying development carried out on land containing a containment cell if the development is likely to— (a) cause the cell to be breached or otherwise damaged, or (b) reduce the effectiveness of the cell. (2) A plan that provides for the following must be prepared and approved by a site auditor before the development commences— (a) the management of the construction process relating to a breach of or damage to the containment cell, including how exposed contaminated material will be dealt with, (b) the process for reinstating the containment cell before the development is completed. (3) The plan, including the reinstatement of the containment cell, must be complied with. (4) The land on which the development is carried out must not be used for the purpose of the development unless— (a) a site audit report and site audit statement are obtained from a site auditor before the development is completed, and (b) the report and statement indicate that the site is suitable for the intended use. (5) In this section— ***site audit report***, ***site audit statement*** and ***site auditor*** have the same meaning as in the *Contaminated Land Management Act 1997*.	MPW Long Term Environmental Management Plan (LTEMP) (EP Risk, December 2020)
18	**Survey certificate required if building close to lot boundary** (1) This section applies to complying development that consists of the erection of a building that will be located less than 3m from a lot boundary. (2) A survey certificate must be provided to the principal certifying authority— (a) before form work below a ground floor slab is carried out, or (b) if there is no form work below a ground floor slab—before concrete is poured for a ground floor slab or foundations. (3) The survey certificate must— (a) be prepared by a registered land surveyor under the *Surveying and Spatial Information Act 2002*, and (b) show the location of the building relative to the boundaries of the lot.	-
19	**Engineering certificate required for certain development** (1) This section applies to development specified in sections 1, 2, 4–9, 12 and 13.	-

	(2) A certificate by a qualified engineer must be provided to the principal certifying authority, before the principal certifying authority carries out the final inspection, certifying that the development has satisfactory design and structural integrity.	
20	**Emergency facilities** Fire watch measures must be implemented during a period in which work on existing alarm signalling equipment results in a loss of a monitoring service.	-

Appendix A4 – Revised Environmental Management Measures

The final REMM are detailed in the Moorebank Precinct West – Concept Modification – Supplementary Response to Submissions Report (Arcadis, 4 August 2017).

The construction of the Project will be consistent with the relevant REMM and they are addressed by this Addendum as identified Table A-4.

Table A-4 MPW Stage 2 Final Revised Environmental Management Measures

REMM	Requirement	Reference
1A	An EMS that complies with AS/NZS ISO 140001:2004 would be developed and implemented on the Project site.	Section 2.1
1B	EMPs including CEMPs and OEMPs (or equivalent) would be prepared for the Project. At this point, Provisional EMPs (included in Volume 2, Appendix H of the EIS) have been prepared and would be updated as more is known about the Project phasing including detailed design, construction and operation.	This Addendum
2A	A Community Engagement Plan (CEP) (or equivalent) would be prepared to outline community involvement and consultation activities during early works, construction and operation phases. As a minimum, the CEP would include appropriate measures for community involvement, including: • a direct telephone number (24 hour); • an email address; • a postal address; • regular project updates; • a community liaison representative; and scheduled meetings with a local representative body such as a community consultative (or liaison) committee. The CEP would also set out a guide on expectations for responding to relevant information received from community members.	CCS
2B	The CEP would be prepared to ensure: • the community and stakeholders have a high level of awareness of all processes and activities associated with the Project; • accurate and accessible information is made available; and • a timely response is given to issues and concerns raised by stakeholders and the community.	CCS
3A	The final design would (as a minimum) provide for sustainability outcomes generally in accordance with the sustainability initiatives identified in Table 9.4 in Chapter 9 – Project sustainability of the EIS.	NA
3B	Implementation of sustainability initiatives would be monitored in accordance with the monitoring framework developed as part of the EMS for the next stage of approvals. This framework would identify sustainability indicators for monitoring.	Section 2.1

4A	The Project team would continue to liaise with the Australian Rail Track Corporation, Transport for NSW and other stakeholders responsible for the management of the rail freight network regarding the capacity of the network related to the project.	NA
4B	As part of the Stage 2 SSD approval(s) process further analysis would be undertaken to determine likely demand distribution and capacity across the rail freight network as it relates to the project.	NA
4C	Install a variable message signage system within the Project site to direct heavy vehicles and facilitate safe and efficient access and navigation.	NA
4D	Consider the provision of pedestrian and cyclist connections from Moorebank Avenue into the Project site.	NA
4E	Consider the provision of staff storage and shower areas to promote cycling, jogging and walking as modes of transport.	NA
4F	Negotiate with bus operators for the provision of additional bus stops and increased bus services between the Project site and nearby public transport interchange hubs to reduce the volume of light vehicles generated by staff. This would be determined based on staff numbers and likely patronage numbers.	NA
4G	Undertake detailed design and staging of the Project rail link construction works to ensure: • connection with the Southern Sydney Freight Line (SSFL) is designed to minimise construction impacts on SSFL operations; • connection with the SSFL would allow trains to exit and enter the SSFL main line at a maximum design speed of 45 kilometres per hour (km/h); • trains entering and leaving the Project site endeavour to minimise adverse disruption to other operations on the SSFL; and • the Project's internal train control system and signalling integrates with the SSFL system where required.	NA
4H	Prior to all future development application stages, in consultation with Transport for NSW and other relevant agencies of NSW Government, ensure that adequate arrangements are in place to ensure that: • The impacts of additional traffic associated with the future development application stages will minimise Project related traffic impacts and consider the capacity of the road network, taking account of background traffic growth and planned road network improvements. • Arrangements are in place (irrespective of funding source) for the on-time delivery of the necessary road network improvements referred to in point 1 above. The contribution of MIC towards road network improvements as envisaged by this mitigation measure would be subject to the following conditions: • That certain throughput levels at the terminal had been achieved. These throughputs are outlined in column 1 of Table 7.20 of the Response to Submissions report.	NA

	• That it can be further demonstrated (as part of any subsequent planning approval stage) that the intersection performance would have deteriorated to a Level of Service E or worse (where previously operating at a LoS D or above) were it not for the implementation of the upgrades outlined in Table 7.20 of the Response to Submissions report.	
4Hi	Road Safety Audit and dilapidation report is to be undertaken on Moorebank Avenue from Amended Modification Proposal site entrances to the M5 Interchange.	NA
4I	Reducing the volumes of construction vehicles travelling during peak periods, especially if the increase in traffic generated by construction activities impedes on the operation of Moorebank Avenue.	NA
4J	Maintain access to neighbouring properties. It is particularly important that the ABB site has access throughout the construction stages.	NA
4K	In addition to the Community Engagement Plan (or equivalent) (Refer to 2A), a communication plan will be developed to provide information to the relevant authorities and bus operators in addition to the local community. The communication plan will need to incorporate a contact list with the chain of command.	CCS
4L	Implement relevant traffic control measures to inform drivers of the construction activities and locations of heavy vehicle access locations.	CTAMP – Addendum
4M	Obtain Road Occupancy Licences (ROLs) as necessary.	NA
4N	Develop an emergency response plan for the modification of Moorebank Avenue. During this phase, emergency vehicles using Moorebank Avenue as a transport route would need to be considered, as well as emergency access to adjoining properties.	CERP – Addendum
4O	Traffic on Moorebank Avenue would be monitored during peak periods to ensure that queuing at intersections does not impact on other road users.	NA
4P	Modify access locations in response to the development of the Moorebank Avenue modification	NA
4Q	Provision of alternate suitable pedestrian and cycle and facilities during the construction of Moorebank Avenue modifications retaining well defined and well signed routes and paths.	NA
5A	A construction noise and vibration management plan (CNVMP) (or equivalent) would be developed for construction activities.	CNVMP – Addendum
5B	The appropriateness of the noise and vibration management and mitigation measures in 5C to 5T are to be further investigated as part of the future development applications. These measures, or their replacement measures, are to be implemented through the CNVMP (or equivalent) prior to and during all noise-generating construction works for each of the Project phases.	CNVMP – Addendum
5C	Construction activities associated with the Development shall be undertaken during the following standard construction hours:	NA

	• 7.00 am to 6.00 pm Mondays to Fridays, inclusive; • 8.00 am to 1.00 pm Saturdays: and • at no time on Sundays or public holidays. Works may be undertaken outside of standard construction hours, subject to assessment within, and approval of, future development applications.	

5D	Construction works outside of the standard construction hours identified in REMM 5C may be undertaken in the following circumstances:
	• construction works that generate noise that is:
	  ○ no more than 5 dB(A) above rating background level at any residence in accordance with the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009); and
	  ○ no more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) at other sensitive receivers; 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 and/or to prevent environmental harm;
	• works approved through an EPL, or
	• works as approved through the out-of-hours work protocol outlined in the CEMP.
		Section 1.2.3
		CNVMP – Addendum

5E	During site inductions and toolbox talks, all site workers (including subcontractors and temporary workforce) are to be made aware of the hours of construction and how to apply practical, feasible and reasonable measures to minimise noise and vibration when undertaking construction activities.	Section 2.7 CNVMP – Addendum
5F	Quieter and less vibration-emitting construction methods would be applied where feasible and reasonable. For example, when piling is required, bored piles rather than impact-driven piles would minimise noise and vibration impacts.	CNVMP – Addendum
5G	The construction site would be arranged to minimise noise impacts by locating potentially noisy activities away from the nearest receivers wherever possible.	CNVMP – Addendum
5H	Where possible, equipment that emit directional noise would be oriented away from sensitive receptors.	CNVMP – Addendum
5I	Reversing of vehicles and mobile equipment would be minimised so as to prevent nuisance caused by reversing alarms. This could be achieved through one-way traffic systems and the use of traffic lights which could also limit the use of vehicle horns.	CNVMP – Addendum
5J	Where work is proposed in the vicinity of residences, potentially affected residents would be advised, at least two weeks prior to the commencement of works, of the potential noise and vibration levels	CNVMP – Addendum

	and the proposed management measures to control environmental impacts.	
5K	Whenever possible, loading and unloading areas would be located away from the nearest residences.	CNVMP – Addendum
5L	Broadband reversing alarms would be considered instead of tonal reversing alarms, in particular outside standard working hours (such as during night-time rail possession works).	CNVMP – Addendum
5M	Equipment that is used intermittently would be shut down when not in use for extended periods of time.	CNVMP – Addendum
5N	Where possible, all engine covers would be kept closed while equipment is operating.	CNVMP – Addendum
5O	Where possible, trucks associated with the work would not be left standing with their engines operating in streets adjacent to or within residential areas.	CNVMP – Addendum
5P	Traffic speeds would be signposted. All drivers would be expected to comply with speed limits and to implement responsible driving practices to minimise noise associated with unnecessary acceleration and braking. Traffic movements should be scheduled to minimise continuous traffic flows (convoys).	CNVMP – Addendum
5Q	The site manager (as appropriate) should provide a community liaison phone number and permanent site contact so that any noise and/or vibration related complaints can be received and addressed in a timely manner. Consultation and cooperation between the site and its neighbours would assist in limiting uncertainty, misconceptions and adverse reactions to noise and vibration.	CCS
5R	Attended noise and ground vibration measurements would be undertaken at monthly intervals in areas within close proximity to sensitive receivers and upon receipt of adverse comment/complaints during the construction program, to confirm that noise and vibration levels at adjacent communities and receptors are consistent with the predictions in this assessment and any approval and/or licence conditions.	CNVMP – Addendum
5S	If noise generating construction works are undertaken outside the standard daytime construction hours and/or measured construction noise levels at nearest residences are greater than 75 dB(A) LAeq, the following additional noise mitigation measures would be considered: • Localised acoustic screens, comprising a solid structure such as plywood fencing to surround noise generating construction plant or work locations. To be effective for ground level noise, the screens would be lined with acoustic absorptive material, at least 2 m in height and installed within 5 m of the noise source. • Dominant noise-generating mechanical plant would be fitted with feasible noise mitigation controls such as exhaust mufflers and engine shrouds. • Respite periods of one hour are recommended for every continuous three-hour period of work; alternatively, daytime works would be	CNVMP – Addendum

	scheduled between 9.00 am and 12.00 pm, and between 2.00 pm and 5.00 pm. • Where practical, and when night works are being undertaken, noisy construction work would be undertaken during the less sensitive 6.00 pm to 10.00 pm evening period.	
5T	Depending on the specific construction works undertaken, construction noise mitigation may need to be implemented: • where piling works (required for all rail access connection options) are undertaken within approximately 600 m of residences in Casula and within approximately 800 m of residences in Glenfield; • for rail access connection works where daytime construction works undertaken within 450 m of nearest receptors in Casula; and where rail construction is required up to 1400 m from residences outside the standard daytime hours, such as during track possession works.	NA
5U	To achieve the noise reductions outlined in Table 7.30 of the Response to Submissions report and the Revised Project Noise and Vibration Impact Assessment report in Appendix F, mitigation treatments may be required to reduce noise from all dominant noise sources. The Project would implement reasonable and feasible noise mitigation to control potential noise levels. In the event that the Project does not meet the assessment criteria at receptors, if the Project has reduced noise levels to be as low as practicable, the NSW Industrial Noise Policy (INP) (EPA 2000b) notes that: • achievable noise limits can be negotiated with regulators and the community; and • the Project specific noise mitigation measures and noise levels outlined in Table 7.30 of this report and in the Noise and Vibration Assessment (Appendix F) should not automatically be interpreted as conditions for approval without consideration of other factors (environmental, social and economic) consistent with the objectives of the EP&A Act. In this regard, where appropriate, the INP notes that noise limits can be set above the Project specific noise levels.	NA
5V	Where practical operational plant and equipment would be selected to reduce noise emissions.	NA
5W	Mechanical components on fixed and mobile equipment, such as motors, gearboxes and exhausts, would include enclosures and acoustic insulation (lagging) (as necessary) to limit noise emissions.	NA
5X	Where feasible, motors and mechanical noise-generating components of the rail mounted gantries (RMGs) would be located near to ground level rather than at the top of the gantry.	NA
5Y	Where reasonable and feasible, and where it would produce a lower noise emission, electric motors would be operated instead of diesel powered equipment	NA
5Z	The following measures would be considered and where possible incorporated into the design and operation of the freight trains on the rail track on the main IMT site to control potential operational noise: • The track on the rail access connection would be designed to minimise adverse changes in vertical alignment, to reduce the requirement for	NA

	locomotives to operate at high throttle on the ascent or under heavy braking on the descent. • The rail access connection bridge would be designed as a concrete or composite/concrete structure or more suitably noise mitigating structure to minimise potential re-radiated noise from vibrating sections of the elevated track. Detailed noise analysis would be undertaken to identify both airborne and re-radiated noise contributions, to effectively mitigate total noise emissions. • Locomotives accessing the main IMT site should have approval to operate on the network consistent with the noise limits for locomotives detailed in the ARTC Environmental Protection Licence No. 3142.	
5AA	Unless for health and safety reasons, heavy vehicles should avoid the use of horns within the main IMT site.	NA
5AB	To further control potential rail noise from wheel squeal the following measures are proposed: • Track greasing systems should be investigated on curved sections of track to lubricate and reduce friction at the wheel– rail interface. • The track maintenance system would include measures such as grinding to remove rail roughness, treatment of roughness on the wheels of locomotives and wagons, and adjustment of bogie-suspension tracking and brake system set up.	NA
5AC	Where feasible, all rail tracks would be designed to maximise the separation distance between rail lines and the nearest residences.	NA
5AD	Noise walls or noise barriers would be installed within the main IMT site where required. In regard to noise walls or barriers, if required: • Noise walls/barriers would need to be solid structures, typically constructed of concrete or similar material. • Additional absorptive material could be applied to the internal facades of the noise walls/barriers to reduce reflected noise from the wall/barriers. • TEU containers could be used as noise barriers where they are stacked, to effectively impede the direct line of sight to nearest receptors. • Onsite noise walls/barriers would be constructed at the earliest opportunity in the Project development to provide noise attenuation during all subsequent construction and operation phases. • Subject to further consideration of environmental, social and economic impacts, earth mounding could be considered as an alternative to, or in conjunction with, noise walls/barriers to attenuate the propagation of noise between the site and nearest affected receptors. For the southern rail access, it is proposed that earth mounding be considered on the main IMT site, at the western extent of the IMEX and interstate rail lines.	NA
5AE	Where feasible, all onsite buildings and structures would be designed and constructed to impede noise from ground level operation of heavy vehicles, side picks and ITVs.	NA
5AF	Before the start of each phase of operations, an operational noise and vibration management plan (ONVMP) (or equivalent) would be developed and implemented. The ONVMPs would detail the operation	NA

	of the relevant Project phase, the potential offsite operational noise levels as determined during the detailed design process, and all measures to manage and mitigate operational noise and vibration.	
5AG	As a minimum, the ONVMP (or equivalent) would include: • The operational noise criteria/limits as defined by the relevant Project approvals and Environmental Protection Licence; • identification of all surrounding receptors and land use that would be potentially sensitive to noise and vibration; • identification of all noise and vibration generating operations and the timing of these operations; • the location and specification of any onsite and offsite noise mitigation, including the requirement for future mitigation as part of the staged operation; • detailed measures for managing operational noise, including checklist and auditing procedures to ensure measures are implemented before the start of noise generating activity; • procedures for the monitoring and reporting of operational noise and vibration; • procedures for consultation with the community regarding operational noise and vibration; and • complaint handling procedures.	NA
5AH	During detailed design, where practical and feasible to do so, consideration would be given to: • undertaking locomotive maintenance during the daytime and evening period between 7.00 am and 10.00 pm; • operating heavy vehicles to limit the requirement for reversing and audible reversing alarms; and • appropriate management measure – either contractual or operational – that rail operators accessing the site would be required to undertake regular maintenance of all trains to address wheel flat spots and locomotive exhausts.	NA
5AI	The noise and vibration measures described in 5U–5AH above would be subject to further consideration during detailed design. At that point, the predicted noise impacts and the likely effectiveness of the measures (or equivalent alternative measures) would be further investigated. This further investigation would include consideration of potential environmental, social and economic impacts of the measures. It is also proposed that the following points be considered in the further assessment of potential impacts and design of mitigation measures: Assessment of potential noise emissions from any concrete batching plant, and implementation of any required noise mitigation, would be undertaken by the appointed construction contractor upon confirmation of the design and operation of the concrete batching plant. During detailed design of the Project, consideration of either an automated container handling area or electrically powered plant for the interstate terminal (as per the IMEX terminal), or alternatively the use of plant with the lowest available noise emissions.	NA

	During the detailed design of the Project, more detail on the operating plant and machinery for the Project may be known. This may include the provision of one-third octave band noise emission data from equipment vendors to facilitate a detailed assessment of annoyance characteristics in accordance with the NSW Industrial Noise Policy (INP) (EPA 2000b). To the west of the site, consideration of a noise barrier 4.5 m in height at the haul road to mitigate noise from trucks operating within the Project site using a combination of acoustic barriers, solid walls or earth mounding to fully impede the line of sight between the nearest receptors in Casula and the haul road. To verify the predicted noise levels and recommended noise mitigation in the noise and vibration assessment, the predictive assessment of potential noise levels would be revised for the detailed design of the construction and operation of the southern rail access. This would include an assessment of sleep disturbance impacts from rail spur operations. Where deemed necessary, mitigation measures may be required to reduce and control maximum noise events from sources such as locomotive exhausts and wagon bunching. The specific vibration propagation characteristics can be highly variable depending on the ground conditions at a given location. It is recommended that ground vibration impacts be reviewed during the detailed design, particularly where Project rail track would pass within 50 m of residences	
5AK	The ambient noise monitoring surveys within Casula, Wattle Grove and Glenfield would be continued throughout the construction and operation of the Project (with annual reporting of noise results up to two years beyond the completion of Full Build). The noise surveys would quantify any potential noise from the Project and identify any trends/changes in the ambient noise environment during the progressive development. The measured noise levels and contribution from the operation of the Project would be continually applied to the detailed design of the Project to ensure it includes appropriate mitigation measures to reduce and control noise during construction and operation. The monitoring data would also include any changes to the ambient noise environment from new or changed developments in the area. In the event of any noise or vibration related complaint or adverse comment from the community, noise and ground vibration levels would be measured at the potentially affected premises, where reasonable and feasible. In accordance with procedures in the CNVMP and ONVMP, the measured noise and/or vibration levels would then be assessed to ascertain if remedial action is required	N/A
6A	Following detailed design and before construction, detailed flora and fauna mitigation measures would be developed and presented as part of the CEMP. These detailed measures would incorporate the measures listed in 6B to 6W. The CEMP would address: • general impact mitigation; • staff/contractor inductions; • vegetation clearing protocols;	CFFMP – Addendum

	• pre-clearing surveys and fauna salvage/translocation; • rehabilitation and restitution of adjoining habitat; • weed control; • pest management; and • monitoring. The plans would include clear objectives and actions for the Project including how to: • minimise human interferences to flora and fauna; • minimise vegetation clearing/disturbance; • minimise impact to threatened species and communities; • minimise impacts to aquatic habitats and species; and • undertake flora and fauna monitoring at regular intervals.	
6B	Vegetation clearing would be restricted to the construction footprint and sensitive areas would be clearly identified as exclusion zones.	NA
6C	The exclusion zones would be marked on maps, which would be provided to contractors, and would also be marked on the ground using high visibility fencing (such as barrier mesh).	NA
6D	A trained ecologist would accompany clearing crews to ensure disturbance is minimised and to assist in relocating any native fauna to adjacent habitat.	NA
6E	A staged habitat removal process would be developed and would include the identification and marking of all habitat trees in the area. Where reasonable and feasible, clearing of hollow-bearing trees would be undertaken in March and April when most microbats are likely to be active (not in torpor) but are unlikely to be breeding or caring for young, and when threatened hollow-dependent birds in the locality are also unlikely to be breeding. Pre-clearing surveys would be conducted 12 to 48 hours before vegetation clearing to search for native wildlife (e.g. reptiles, frogs, Cumberland Land Snail) that can be captured and relocated to the retained riparian vegetation of the Georges River corridor. Vegetation would be cleared from a 10 m radius around habitat trees to encourage animals roosting in hollows to leave the tree. A minimum 48 hour waiting period would allow animals to leave. After the waiting period, standing habitat trees would be shaken (where safe and practicable) under the supervision of an ecologist to encourage animals roosting in hollows to leave the trees, which may then be felled, commencing with the most distant trees from secure habitat. Felled habitat trees would either be immediately moved to the edge of retained vegetation, or left on the ground for a further 24 hours before being removed from the construction area, at the discretion of the supervising ecologist.	NA

	All contractors would have the contact numbers of wildlife rescue groups and would be instructed to coordinate with these groups in relation to any animal injured or orphaned during clearing. Within areas of high quality intact native vegetation proposed to be removed: • topsoil (and seedbank) is to be collected from native vegetation that are to be permanently cleared and used in the revegetation of riparian areas; and • native plants in areas that are to be permanently cleared are to be relocated and transplanted in riparian areas identified for rehabilitation.	
6F	Relocation of fauna to adjacent retained habitat would be undertaken by an ecologist during the supervision of vegetation removal	NA
6G	An ecologist would supervise the drainage of any waterbodies on the Project site and would relocate native fish (e.g. eels), tortoises and frogs to the edge of the Georges River and/or the existing pond at the northern end of the IMT site.	NA
6H	The design of site fencing and any overhead powerlines would consider the potential for collision by birds and bats and minimise this risk where practicable.	CFFMP – Addendum
6I	The potential for translocation of threatened plant species as individuals or as part of a soil translocation process would be considered during the detailed development of the CEMP.	NA
6J	Consideration would be given to fitting roost boxes to the bridge over the Georges River to provide roost sites for the Large-footed Myotis and other species of microbats (e.g. Eastern Bentwing-bat) which may utilise such structures. Provision of roost boxes under bridges has been identified as priority action for the recovery of the Large-footed Myotis.	NA
6K	Important habitat elements (e.g. large woody debris) would be moved from the construction area to locations within the conservation area which would not be cleared during the Project, or to stockpiles for later use in vegetation/habitat restoration.	NA
6L	Winter-flowering trees would be preferentially planted in landscaped areas of the Project site to provide a winter foraging resource for migratory and nomadic nectar-feeding birds and the Grey-headed Flying-fox.	CFFMP – Addendum
6M	A bridge/viaduct or similar design would be used for the railway crossing of the Georges River. This may allow connectivity of terrestrial habitat along the river banks underneath the bridge.	NA
6N	Options for maintaining habitat connectivity would be investigated, and may include establishing native vegetation and placing habitat elements such as rock piles and large woody debris under the bridge to provide cover for fauna. Where reasonable and feasible options to allow light and moisture to penetrate under the Georges River bridge will be incorporated into the detailed design.	NA

6O	Erosion and sediment control measures such as silt fencing and hay bales would be used to minimise sedimentation of streams and resultant impacts on aquatic habitats and water quality.	CFFMP – Addendum
6P	The detailed design process for the bridge over the Georges River would consider disturbance to aquatic habitat and fish passage conditions. The design would as a minimum adhere to the fish friendly passage guidelines (Fairfull & Witheridge 2003) for waterway crossings.	NA
6Q	Opportunities for planting of detention basins with native aquatic emergent plants and fringing trees would be explored in the detailed design of the Project and, if practicable, implemented so that they would provide similar habitat in the medium term to that lost through the removal of existing basins.	NA
6R	The CEMP (or equivalent) would include detailed measures for minimising the risk of introducing weeds and pathogens.	CFFMP – Addendum
6S	The Project would include a long-term program for the duration of the Project operation of weed removal and riparian vegetation restoration within parts of the Georges River corridor, which would include monitoring landscaped areas for the presence of noxious and environmental weeds. A preliminary weed management strategy is provided in Appendix E of Technical Paper 3 – Ecological Impact Assessment in Volume 4 of the EIS, setting out the principles for the management of the riparian zone.	NA
6T	Appropriate design and landscape/vegetation management measures would be implemented to reduce the bushfire risk and threat to biodiversity.	N/A
6U	The management of the conservation area along the Georges River would include management of fire regimes to promote biodiversity conservation.	NA
6V	The detailed design process would consider the potential groundwater impacts on ground-dependent ecosystems. In most cases, these impacts would be mitigated at the design phase.	NA
6W	The management plan for the Georges River riparian corridor (refer to Appendix E of Technical Paper 3 – Ecological Impact Assessment in Volume 4 of the EIS) would be implemented and would include a monitoring program designed to detect operational impacts.	NA
6X	Ongoing monitoring of macroinvertebrate communities will be undertaken prior to, during and following construction upstream and downstream of the proposed impact at the Georges River Bridge and reference locations to assist identify any changes in aquatic communities.	NA
6Xi	Directional lighting will be used where lighting is required within the construction area. Lights would be directed away from the riparian vegetation adjoining the Georges River as far as is practicable.	CFFMP – Addendum
6Y	The Biodiversity Offsets Strategy detailed in Appendix C of the Response to Submissions report will be implemented.	NA

6Z	A riparian restoration plan (or equivalent) for the Georges River riparian zone and Casula offset area would be implemented. This plan includes areas outside the Conservation Area, including areas along the western bank of the Georges River. The objectives of the plan include: • improved habitat values for native animals and plants, particularly threatened species; and • management of undesirable fauna species including introduced animal species and some Australian native animals which may be detrimental to the biodiversity of the Project site.	NA
6AA	Measures to manage undesirable fauna species include: • monitoring of the site for the presence of introduced and undesirable animal species as part of fauna monitoring; • cooperating with government bodies, interest groups and adjacent landowners in regional pest management programs including the NSW Department of Primary Industries and the NSW Office of Environment and Heritage; • managing the use of nest boxes by undesirable species by removing the eggs and/or young of introduced animals (e.g. Black Rat and Common Myna) under appropriate permit conditions; • removing any insect colonies (bees, wasps, termites, ants found in nest boxes); and • modifying or moving nest boxes to discourage use by undesirable species.	NA
7A	To minimise the risk of leakages involving natural gas, liquid natural gas (LNG) and flammable and combustible liquids to the atmosphere: • appropriate standards for a gas reticulation network, including AS 2944-1 (2007) and AS 2944-2 (2007), would be referred to in the detailed design process; • correct schedule pipes would be used; • a fire protection system would be installed if necessary for gas users; • cathodic protection would be installed for external corrosion if appropriate; and • access to the Project site would be secure.	NA
7B	To minimise the risks of leakage of LNG and liquid petroleum gas (LPG) and flammable liquids during transport: • materials would be transported according to the Australian Dangerous Goods (ADG) Code, relevant standards and regulations; and • contractors delivering the gas would be trained, competent and certified by the relevant authorities.	NA
7C	To minimise hazards associated with venting of natural gas, LNG and LPG: • LNG storage would be designed to AS/NZS 1596-2008 standards; • access to the Project site would be secure; and	NA

	• significant separation distances to residences and other assets would be put in place.	
7D	Storage of flammable/combustible liquids would be carried out in accordance with AS 1940, with secondary containment in place and location away from drainage paths.	CSWMP – Addendum
7E	Standby or emergency generators and transformers would all have secondary containment.	NA
7F	Oil coolers would generally be located in areas where leaks and runoff are appropriately controlled at source or in a retention basin.	NA
7G	All systems would be designed in accordance with good engineering practice.	NA
7H	Appropriate testing, alarm systems, and workplace health and safety (WHS) safety precautions would be implemented.	NA
7I	No hazardous or regulated wastes would be disposed of onsite.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
7J	All offsite disposals would be carried out by approved transport operators and to approved facilities.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
7K	Other dangerous goods, including any waste materials present on the Project site, would be suitably contained, with secondary containment and runoff controls implemented where appropriate to prevent leaks or spills migrating to environmentally sensitive areas, in particular via stormwater systems that drain to the Georges River.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
7L	The aims and objectives of ‘Planning for Bush Fire Protection' (RFS 2006) would be further considered, and the Rural Fire Service (RFS) consulted, during detailed design.	NA
7M	A bushfire management plan (or equivalent) would be prepared for the Project site to develop the bushfire management measures in detail, in consultation with the RFS. The bushfire management plan (or equivalent) would detail the interaction between the Project footprint and biodiversity offset areas. In the event that no vegetation clearing is undertaken, the bushfire risk assessment and bushfire management plan (or equivalent) would be updated and appropriate mitigation measures provided in the design of the IMT.	NA
7N	Internal roads would be designed and maintained to enable safe access for emergency services and to allow crews to work with equipment aboard the vehicle, including providing: • two-wheel drive, sealed all weather roads; • internal perimeter road to be at least two lanes wide (8 m kerb to kerb);	NA

	• a minimum vertical clearance of 4 m; • curves with a minimum inner radius of 6 m; and • roads with capacity to carry fully loaded fire-fighting vehicles (15 tonnes).	
7O	Water supplies for fire-fighting would be easily accessible and located at regular intervals, including: • reticulated water supply using a ring main system for the perimeter road; • fire hydrant spacing, sizing and pressures complying with AS 2419.1–2005; • location of hydrants outside of any road carriageway; and • ensuring all aboveground water pipes external to buildings are metal, including any taps.	NA
7P	Electricity services would be located to limit the possibility of ignition of surrounding bushland or the fabric of buildings, including: • where practicable, locating electrical transmission lines underground; • where overhead electrical transmission lines are proposed, lines would be installed with short pole spacing (30 m); and • no part of a tree would be closer to a power line than the distance set out in the specifications of Vegetation Safety Clearances issued by Energy Australia (NS179, April 2002).	NA
7Q	Gas services would be located to avoid ignition of surrounding bushland or the fabric of buildings, including: • ensuring all aboveground gas service pipes external to buildings are metal (including connections); and • ensuring reticulated or bottled gas is installed and maintained in accordance with AS 1596 and the requirements of relevant authorities.	NA
7R	A fuel management plan (or equivalent) would be developed for the conservation zone and offset areas taking into consideration the ecological values of this area, including the presence of threatened biodiversity.	NA
7S	A landscape management plan (or equivalent) would be developed for any landscaped gardens within the Project site.	NA
7T	A fire safety and evacuation plan (or equivalent) would be developed that would: • include training requirements for staff on fire prevention and safety; • provide a fire escape plan (designated meeting points and escape routes), and require regular fire drills; • outline provision of a functional fire alarm system; • outline equipment use restrictions during fire bans; and • outline measures for arson prevention, including provision of adequate lighting and security to deter trespassers	CERP – Addendum

7U	A more detailed bushfire risk assessment would be undertaken following finalisation of design and layout, in consultation with the NSW Rural Fire Service.	NA
8A	Further investigations for the southern rail access would be undertaken including a targeted intrusive investigation to gather data on soils and groundwater quality so that management and/or remediation options can be evaluated.	NA
8B	Before construction, a remediation program would be implemented in accordance with the Moorebank Intermodal Terminal Preliminary Remediation Action Plan (RAP) (or equivalent). The program will have been formally reviewed and approved by the Site Auditor under Part 4 of the NSW Contaminated Land Management Act 1997 (CLM Act).	NA
8C	A CEMP would be prepared by the contractor for all excavation and remediation works and would include requirements for decontamination facilities at the Project site.	NA
8D	An unexploded ordnance (UXO) management plan (or equivalent) would be developed for the Project site. This plan would detail a framework for addressing the discovery of UXO or explosive ordnance waste (EOW) to ensure a safe environment for all Project staff, visitors and contractors.	UFP (Appendix C)
8E	An ASS management plan (or equivalent) would be developed in accordance with the ASSMAC Assessment Guidelines (1998), with active ongoing management through the construction phases. Offsite disposal would need to be in accordance with the NSW Waste Classification Guidelines Part 4: Acid Sulfate Soils (2009).	NA
8F	Further testing of residual sediments would be undertaken to gather data to inform the management of sediments likely to be disturbed/dewatered during construction.	NA
8G	Ground penetrating radar (GPR) or similar techniques would be used to locate and document all existing and underground tank infrastructure across the Project site.	NA
8H	A management tracking system for excavated materials would be developed to ensure the proper management of the material movements at the Project site, particularly during excavation works.	NA
8I	Contaminated soil/fill material present will be ‘chased out’ during the excavation works based on visual, olfactory and preliminary field test results.	NA
8J	Excavated soil would be temporarily stockpiled, sampled and analysed for waste classification processes. Subject to receipt of waste classification results, the material would be transported to a licensed offsite waste disposal facility as soon as practicable to minimise dust and odour issue through storage of materials on site.	CSWMP – Addendum
8K	Stockpiled soils would be stored on a sealed surface and the stockpiled areas would be securely bunded using silt fencing to prevent silt laden surface water from entering or leaving the stockpiles or the Project site.	CSWMP – Addendum

8L	All excavation works associated with potential contaminated lands would be undertaken by licensed contractors, experienced in remediation projects and the handling of contaminated soils.	MPW Long Term Environmental Management Plan (LTEMP)
8M	All asbestos removal, transport and disposal would be performed in accordance with the Work Health and Safety Regulation 2011 (WHS Regulation).	MPW LTEMP MPW Asbestos Management Plan (AMP)
8N	The removal works would be conducted in accordance with the National Occupational Health and Safety Commission Code of Practice for the Safe Removal of Asbestos, 2nd Edition [NOHSC 2002 (2005)] (NOHSC 2005a).	MPW LTEMP AMP
8O	An appropriate asbestos removal licence issued by WorkCover NSW would be required for the removal of asbestos contaminated soil.	MPW LTEMP AMP
8P	Environmental management and WHS procedures would be put in place for the asbestos removal during excavation to protect workers, surrounding residents and the environment.	MPW LTEMP AMP
8Q	Temporary stockpiles of asbestos containing material (ACM) soils would be covered to minimise dust and potential asbestos release.	CSWMP – Addendum MPW LTEMP AMP
8R	An asbestos removal clearance certification would be prepared by an occupational hygienist at the completion of the removal work. This would follow the systematic removal of asbestos containing materials and any affected soils from the Project site, and validation of these areas (through visual inspection and laboratory analysis of selected soil samples).	CSWMP – Addendum MPW LTEMP AMP
8S	Asbestos fibre air monitoring would be undertaken during the removal of ACMs and in conjunction with the visual clearance inspection. The monitoring would be conducted in accordance with the National Occupational Health and Safety Commission Guidance Note on the Membrane Filter Method For the Estimating Airborne Asbestos Fibre, 2nd Edition [NOHSC 3003 (2005)] (NOHSC 2005b).	MPW LTEMP AMP
8T	All stockpiles would be maintained in an orderly and safe condition. Batters would be formed with sloped angles that are appropriate to prevent collapse or sliding of the stockpiled materials	CSWMP – Addendum
8U	Stockpiles would be placed at approved locations and would be strategically located to mitigate environmental impacts while facilitating material handling requirements. Contaminated or potentially contaminated materials would only be stockpiled in unremediated areas of the Project site or at locations that did not pose any risk of environmental impairment of the stockpile area or surrounding areas (e.g. hardstand areas).	CSWMP – Addendum MPW LTEMP

8V	Stockpiles would only be constructed in areas of the Project site that had been prepared in accordance with the requirements of the Project Preliminary RAP in Appendix F of Technical Paper 5 – Environmental Site Assessment (Phase 2), Volume 5A and 5B. All such preparatory works would be undertaken before material is placed in the stockpile. Stockpiles must be located on sealed surfaces such as sealed concrete, asphalt, high density polyethylene or a mixture of these, to appropriately mitigate potential cross contamination of underlying soil.	NA
8W	Any stockpiles of contaminated material would be covered with a waterproof membrane (such as polyethylene sheeting) to prevent increased moisture from rainwater infiltration and to reduce windblown dust or odour emission.	CSWMP – Addendum MPW LTEMP
8X	Before the reuse of any material on site, it would be validated so that the lateral and vertical extent of the contamination is defined.	CSWMP – Addendum MPW LTEMP
8Y	Where required, contaminated materials and wastes generated from the Project remediation and construction works would be taken to suitable licensed offsite disposal facilities.	CSWMP – Addendum MPW LTEMP
8Z	Where necessary, consider undertaking further investigations to determine whether other buildings have organochlorine pesticides (OCP) impacts subgrade materials, and to quantify the volume of OCP impacted materials across the site.	NA
8AA	Additional Aqueous Film Forming Foam Assessment (AFFF) be undertaken to determine if any direct remedial and/or management actions are required. A staged approach is considered appropriate and is detailed in the Preliminary AFFF Assessment (Golder Associates 2015b).	NA
8AB	Quality control aspects relating to permanent clean general fill and risks associated with temporary stockpiling would be addressed and managed by a site-specific earthworks specification. This document is to be prepared in consideration of the final design layout adopted, and requirements relating to the stockpiling during the construction of the relevant stage of development of the MPW Project.	NA
8AC	In order to accept fill material onto site, the following will be undertaken: • Material characterisation reports/certification showing that the material being supplied is VENM/ENM must be provided. • Each truck entry will be visually checked and documented to confirm that only approved materials that are consistent with the environmental approvals are allowed to enter the site. Only fully tarped loads are to be accepted by the gatekeeper. • Environmental Assurance of imported fill material will be conducted to confirm that the materials comply with the NSW EPA Waste Classification Guidelines and the Earthworks Specification for the MPW site. The frequency of assurance testing will be as nominated by the Environmental assuror/auditor.	NA

9A	A soil and water management plan (or equivalent) would be developed before work begins in the conservation area. This plan would include erosion and sediment control plans (ESCPs) and procedures to manage and minimise potential environmental impacts associated with developing this area.	CSWMP – Addendum
9B	Site compounds, stockpiling areas and storage areas for sensitive plant, equipment and hazardous materials would be located above an appropriate design flood level, which would be determined based on the duration of the construction works.	NA
9C	Stockpiling areas would be located no further west than the toe of the embankment on the western extent of the construction area excluding OSD outlet basin areas, or no closer than 100m from the George's river's eastern bank, whichever is greater.	NA
9C	Implement a staged construction process for the building of the Georges River bridge that minimises temporary obstruction of flow in the main channel and floodplain where reasonable and feasible.	NA
9D	For the building of the Georges River bridge, design temporary works to resist forces and pressures that could occur during the design flood event adopted for the Project construction.	NA
9E	For all site works, provide temporary diversion channels around temporary work obstructions to allow low and normal flows to safely bypass the work areas.	CSWMP – Addendum
9F	The potential effects of various flood events on construction phase works would be further investigated during detailed design and preparation of the Stage 2 SSD approval(s).	NA
9G	The design of the Georges River bridge would ensure structural stability under an appropriate upper limiting flood event, typically the 1 in 2000 year AEP event or other event of similar magnitude.	NA
9H	A detailed scour assessment of the structure would be undertaken and a scour protection scheme for the bridge abutments and piers would be designed to ensure structural stability and to avoid erosion of the channel and floodplain bed local to the structure.	NA
9I	Further design optimisation of the bridge would consider reducing the afflux impacts as far as possible. The bridge piers would be designed to minimise obstruction to flow and associated afflux under potential blockage and/or debris build-up scenarios.	NA
9J	Further hydraulic modelling would be undertaken to quantify the impact of climate change on afflux caused by the bridge and on hydraulic loading on the bridge structure.	NA
9K	The following staging process would be considered to be implemented when constructing surface water drainage infrastructure: • Biofiltration and detention basins that form part of the proposed stormwater management strategy would be excavated at the first phase of development, with the intention that the excavated basins	CSWMP – Addendum

	would be used as temporary construction phase sedimentation basins. • Once these construction phases become operational, these temporary construction phase sedimentation basins could be developed into the permanent biofiltration and detention basins. • During the relevant phase of development, all major stormwater pipes and culverts (600 mm diameter and larger) and main channels and outlets would be installed. Minor drainage and upstream systems would then be progressively connected to the major drainage elements during each phase of construction as required.	
9L	A soil and water management plan (or equivalent) would be developed before land was disturbed that would include erosion and sediment control plans (ESCPs) and procedures to manage and minimise potential environmental impacts associated with construction of the Project. The ESCP(s) for the Project would be prepared in accordance with Volume 1 of Managing Urban Stormwater: Soils and Construction (‘the Blue Book') (Landcom 2004), Managing Urban Stormwater: Soils and Construction: Installation of Services, Volume 2A (OEH 2008) and Managing Urban Stormwater: Soils and Construction – Main Road Construction, Volume 2D (OEH 2008). The ESCP(s) would be established before the start of each construction phase and would be updated as relevant to the changing construction activities. Strategies to be considered as part of the plan include: • clean runoff from upstream undisturbed areas would be diverted around the Project site to minimise overland flow through the disturbed areas; • stabilised surfaces would be reinstated as quickly as practicable after construction; • all stockpiled materials would be stored in bunded areas and away from waterways to avoid sediment-laden runoff entering the waterways; • sediment would be prevented from moving offsite and sediment-laden water prevented from entering any watercourse, drainage line or drainage inlet; • erosion and sediment control measures would be regularly inspected (particularly following rainfall events) to monitor their effectiveness and stability; • erosion and sediment control measures would be left in place until the works are complete or areas are stabilised; • temporary erosion control and energy dissipation measures would be installed to protect receiving environments from erosion; and • vehicle movements would be managed during rainfall (or while the ground remains sodden) to minimise disturbance to the topsoil.	CSWMP – Addendum
9M	Procedures to maintain acceptable water quality and to manage chemicals and hazardous materials (including spill management procedures, use of spill kits and procedures for refuelling and maintaining construction vehicles/equipment) would be implemented during construction.	CSWMP – Addendum

9N	Vehicles and machinery would be properly maintained to minimise the risk of fuel/oil leaks.	CSWMP – Addendum
9O	Routine inspections of all construction vehicles and equipment would be undertaken for evidence of fuel/oil leaks.	CSWMP – Addendum
9P	All fuels, chemicals and hazardous liquids would be stored within an impervious bunded area in accordance with Australian Standards and NSW Environment Protection Authority guidelines.	CSWMP – Addendum
9Q	Emergency spill kits would be kept onsite at all times. All staff would be made aware of the location of the spill kits and trained in their use.	CSWMP – Addendum CERP – Addendum
9S	Construction plant, vehicles and equipment would be refuelled offsite, or in designated re-fuelling areas located at least 50 metres from drainage lines or waterways.	CSWMP – Addendum
9T	If landfill cells at the Glenfield Waste site are to be affected, then a detailed assessment must be prepared including targeted intrusive investigations to determine contamination pathways and to develop mitigation, management and/or remediation options based on those investigations. No works within this licensed premise without EPA's written approval.	NA
9U	A stormwater management plan (or equivalent) would be developed in accordance with the detailed design. This includes the requirement to control the rate of stormwater runoff so that it does not exceed the pre-developed rate of runoff.	NA
9V	The stormwater system would be designed such that flow from low order events (up to and including the 10% AEP event from the main part of the site, and up to and including the 2% AEP event for the rail access connection corridor) would be conveyed within the formal drainage systems. Flows from rarer events (up to the 1% AEP event) would be conveyed in controlled overland flow paths.	NA
9W	The onsite detention system proposed would detain flow and control discharge rates to the Georges River equal to pre- development discharge rates.	NA
9X	A stormwater treatment system would be implemented, incorporating sedimentation and bio-filtration basins upstream of the stormwater detention basins.	NA
9Y	Use of onsite infiltration would be incorporated into the design through the distribution of swale drains and rain gardens across the Project site.	NA
9Z	A number of other stormwater management opportunities would be considered during development of the detailed design in accordance with Liverpool City Council's Development Control Plan Part 2.4 Development in Moorebank Defence Lands and other relevant policies, including:	NA

	• polishing water runoff using dry creek gravel beds with macrophyte plants; • using drainage swales to slow down stormwater runoff and increase onsite infiltration; • collecting roof rainwater for re-use onsite; • installing gross pollutant traps (GPTs) at the outlets of the pipe system before discharge into the sedimentation basins; and • incorporating impervious surfaces and vegetated areas into the design to increase sub-surface water flow during rain events and to reduce the discharge of stormwater pollutants.	
9AA	Concrete structures and other subsurface infrastructure in areas that may potentially interact with local groundwater would be constructed from sulfate resistant cement and materials.	NA
9AB	Where required, water access entitlements such as groundwater licences would be obtained for dewatering activities, in accordance with the requirements of NSW Office of Water's proposed Aquifer Interference Policy.	NA
9AC	Groundwater quality would be tested to determine salinity levels and inform potential design measures to ensure the design life of any infrastructure is achieved.	NA
9AD	Suitable groundwater monitoring where required would be established and undertaken before construction, during construction and during operation of the Project.	NA
9AE	To prevent the contamination of groundwater during Project construction and operation, suitable water treatment, water retention, water proofing and ground treatments would be investigated and implemented where required.	NA
9AF	Potential impacts on two existing groundwater bores in the vicinity of the proposal would be further investigated during detailed design. Mitigation measures to minimise these impacts would also be developed as required.	NA
9AG	The following groundwater assessments would be carried out: • an overall assessment of pre-construction groundwater quality and levels; • characterisation of local and regional groundwater flow systems, including the groundwater contours and flow conditions; • consideration of potential groundwater supply options, if required; • assessment of impacts on groundwater levels and quality during construction and ongoing operation; • confirmation of management and mitigation solutions for potential groundwater impacts; and • assessment of the potential salinity impacts that may result from the Project.	NA

10A	A Dust Management Plan (DMP) (or equivalent) would be prepared as part of the CEMP.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10B	Dust minimisation measures would be developed and implemented before commencement of construction. The NSW Coal Mining Benchmarking Study: Measures to Prevent and/or Minimise Emissions of Particulate Matter from Coal Mining (OEH 2011) would be considered.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10C	Methods for management of emissions would be incorporated into Project inductions, training and pre-start talks.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10D	Activities with the potential to cause significant emissions, such as material delivery and load out and bulk earthworks, would be identified in the CEMP. Work practices that minimise emissions during these activities would be investigated and applied where reasonable and feasible.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10E	A mechanism for raising and responding to complaints would be put in place for the duration of the construction phase.	CCS
10F	Vehicle movements would be limited to designated entries and exits, haulage routes and parking areas. Project site exits would be fitted with hardstand material, rumble grids or other appropriate measures to limit the amount of material transported offsite (where required).	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10G	Work site compounds and exposed areas would be screened to assist in capturing airborne particles and reduce potential entrainment of particles from areas susceptible to wind erosion	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10H	Dust would be visually monitored during construction and the following measures would be implemented where necessary: • Apply water (or alternative measures) to exposed surfaces that are causing dust generation. Surfaces may include any stockpiles, hardstand areas and other exposed surfaces (for example recently graded areas). Regular watering would ensure that the soil is moist to achieve 50% control of dust emissions from scrapers, graders and dozers. • Appropriately cover loads on trucks transporting material to and from the construction site. Securely fix tailgates of road transport trucks before loading and immediately after unloading. • Prevent, where possible, or remove, mud and dirt being tracked onto sealed road. • Apply water at a rate of >2 litres (L) per square metre per hour (L/m2/hr) to internal unsealed access roadways and work areas. Application rates would be related to atmospheric conditions (e.g.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)

	prolonged dry periods) and the intensity of construction operations. Paved roads should be regularly swept and watered when necessary.	
10I	Where reasonable and feasible, dust generating activities (particularly clearing and excavating) would be avoided or minimised during dry and windy conditions.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10J	Project site speed limits of 20 km/h would be imposed on all construction vehicles travelling within the Project site.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10K	Graders would be limited to a speed of 8 km/h to reduce potential dust emissions.	NA
10L	Material stockpiles would not exceed an area of 1 ha and would be regularly watered to achieve 50% control of potential dust emissions	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10M	Exposed areas and stockpiles would be limited in area and duration. For example, vegetation stripping or grading would be staged where possible, unconsolidated stockpiles would be covered, or hydro mulch or other revegetation applicant applied to stockpiles or surfaces left standing for extended periods.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10N	Revegetation or rehabilitation activities would proceed once construction activities were completed within a disturbed area.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10O	Construction plant and equipment would be well maintained and regularly serviced so that vehicular emissions remain within relevant air quality guidelines and standards	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10P	Excavation works in potentially contaminated soils should be managed to ensure that they are completed during optimal dispersive conditions to minimise odorous emissions.	NA
10Q	Emissions from trucks would be regulated in accordance with the requirements prescribed in the National Environmental Protection Measure (NEPM) (Diesel Vehicle Emissions) (NEPC 2001) or suitably relevant standards	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10R	All construction vehicles would be tuned to avoid releasing excessive smoke from the exhaust and would be compliant with OEH Smokey Vehicles Program under the NSW Protection of the Environment and Operations Act 1997 (POEO Act) and POEO Regulations (NSW) (2010).	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)

10S	All on-road trucks are to comply with the Euro V emission standards or suitably relevant standards.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10T	All new off-road construction equipment would be required to meet, at minimum, the US Environmental Protection Agency (EPA) Tier 3 emission standards (or suitably relevant standards) for non-road diesel engines.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10U	Establishment of Action Response Levels (ARLs) for use with realtime dust management. These aid in the assessment of impact potential, and establish an early warning system during adverse trends, reducing complaint potential and non-compliance issues. An ARL trigger would be a defined measurement of elevated dust levels for a prolonged period	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
10V	An air quality management plan (AQMP) (or equivalent) would be prepared for the operation of the Project.	NA
10W	Manage Project site traffic to minimise the possibility of trucks queueing along public roads adjacent to the Project site. This can be achieved through the implementation and enforcement of an idling limit for trucks on site and provision for a troubled truck parking area.	NA
10X	Investigate the possibility of reducing locomotives' idling times on site.	NA
10Y	Optimise the use of trucks capable of transporting multiple TEU containers simultaneously to achieve maximum efficiency onsite and reduce air emissions	NA
10Z	Vehicles would be maintained to not release excessive levels of smoke from the exhaust and to be compliant with OEH's Smokey Vehicles Program under the POEO Act and POEO Regulations.	NA
10AA	Emissions from the operators' trucks would be regulated by the NEPM (Diesel Vehicle Emissions) (NEPC 2001).	NA
10AB	Emissions from locomotives would follow international standards, such as those provided for under United States legislation ‘Final Rule: Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less Than 30 Litres per Cylinder' (US EPA 2012) and should meet the Tier 2+ or above emission standard for all new locomotives entering the Project site (No emission standards are available under the NSW or Federal legislative framework for locomotives).	NA
10AC	Emissions from shunting engines would follow international standards, such as those provided for under United States legislation ‘Final Rule: Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less Than 30 Litres per Cylinder' (US EPA 2012) and should meet the Tier 2+ or above emission standard. Older locomotives should upgraded to meet Tier 1 or Tier 2+ emission standards where reasonable and feasible. (No emission standards are	NA

	available under the NSW or Federal legislative framework for shunting engines).	
10AD	During detailed design the following measures would be further investigated: • electrically powered refrigerated on site containers; • site only cars to be hybrid (electric/liquefied natural gas (LNG)/compressed natural gas (CNG), liquefied petroleum gas (LPG)); • older diesel trucks be installed with the latest emission reduction technology, where allowed (e.g. retrofitting of particle filters, installation of catalytic convertors or replacement with newer, less polluting diesel engines to ensure emissions requirements conform to the Australian Design Rule ADR80/03); • requiring all on-road trucks to comply with the Euro V emission standards; • all new off-road construction equipment to meet, at minimum, the US EPA Tier 3 emission standards for nonroad diesel engines (US EPA Tier 4 emission standard equipment should be adopted where available); • use of hybrid locomotives or cleaner fuels for locomotives (e.g. locomotives powered by batteries with a small diesel engine for recharging the batteries and for additional power (as currently used on the Burlington Northern Santa Fe railway, California, USA)); and • use of fuel cells, LNG and electric powered locomotives.	NA
10AE	The following proposals would be considered as part of an effective and integrated strategic management plan: • investigation of the feasibility of increasing the proportion of container traffic that moves by rail; • implementation of terminal appointment systems and appropriate time slots for Project site access for truck and rail deliveries to avoid unnecessary onsite air emissions during peak periods; • minimisation of the potential for fluctuating demand forecasts for equipment among carriers, railways and the terminal through effective communication; • utilisation of the latest information technologies such as Intelligent Transportation Systems (ITS) applied to transportation operations which can result in improved transportation efficiency and a reduced environmental impact; and • use of a virtual container yard to assist with incorporating onsite operational efficiencies to ensure air emissions are minimised.	NA
10AF	The following measures would be further investigated at detailed design stage: • All chemicals and fuels would be stored in sealed containers as per appropriate regulations and guidelines. • The onsite storage of fuel would be kept to a minimum to minimise vapour emission levels.	NA

	• Unloading of fuels (diesel or liquefied natural gas) would be vented via return hoses that recirculate vapours from delivery to receiver. • Tanks would be fitted with a conservation vent (to prevent air inflow and vapour escape until a pre-set vacuum or pressure develops). • Strategies would be put in place to reduce the usage of chemical and fuels in addition to using alternative fuel technologies as recommended in the NSW Action for Air (DECCW 2009). Particular focus would be on those products with the potential to release high levels of air toxics.	
10AG	Odour emissions would be controlled through the implementation of best management practice (BMP). The following mitigation measures and safeguards are recommended for the operational works: • providing covering for inlet works; • extraction of inlet works foul air gases to a soil bed filter for treatment; and • contingencies in place for potential loss of aeration (backup generator for power supply and storage of lime for dosing to the process units in the event that anaerobic conditions occur).	NA
10AH	It is also proposed that ambient air quality monitoring be undertaken as part of the Project's construction phase right through to operation. This would include: • onsite monthly dust deposition monitoring during construction to measure dust fallout from the Project at boundary points and selected sensitive receiver locations. This would include comparison of concentrations with the air quality criteria; and • annualised average monitoring after operations commence to ensure that the ambient air quality criteria are met.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP)
11A	Where possible, establish and maintain areas of native flora and vegetation within the Project site to generate significant carbon sequestration benefits.	NA
11B	Where possible, implement the use of biofuels (e.g. biodiesel, ethanol, or blends such as E10 and B880) to reduce GHG emissions from plant and equipment.	Section 1.3
11C	Consider the use of vehicles with minimum GHG emissions ratings of 7.5 for passenger vehicles and 6 for light commercial vehicles, as described in the Green Vehicle Guide (http://www.greenvehicleguide.gov.au/GVGPublicUI/home.aspx).	Section 1.3
11D	Energy-efficient guidelines for operational work, such as minimal idling time for machinery or complete shut off, would be considered and implemented where appropriate.	NA
11E	Establish an Environmental Management System (EMS) that involves regular monitoring, auditing and reporting on energy, resource use and GHG emissions from all relevant activities; include energy audits with a view to progressively improving energy efficiency and investigation of renewable energy sources (e.g. onsite solar generation), where feasible.	Section 2.1

11F	Investigate methods to reduce losses from industrial processes (refrigerants and SF6).	NA
11G	Investigate and, where possible, implement key performance indicators (KPIs) for plant efficiency and GHG intensity.	NA
11H	Consider and implement, where possible, the mitigation options for further reducing energy and GHG emissions detailed in Table 9.4 in Section 9 – Project sustainability.	NA
12A	Where reasonable and feasible, options would be explored to conserve moderate to high significance sites in situ.	NA
12B	An Aboriginal heritage interpretation strategy for the Project would be developed in close consultation with the registered Aboriginal parties.	NA
12C	Options for managing impacts at sites MA6 and MA7 would be explored during the detailed design phase in consultation with registered Aboriginal parties (RAP). If the scars are considered to be of Aboriginal origin, possible management options include: • Conservation of the tree(s) in situ. This would involve designing the project to ensure that the tree(s) would not be impacted. • Salvage and conservation of the tree(s), or the scarred portion of the tree's trunk, at a location outside the project area. In the event there is not a consensus of views among all of the RAPs, it is recommended that a precautionary approach be taken. This would involve acting upon statements of the tree(s) holding cultural value, even if only a minority of RAPs view either or both trees as holding cultural value.	NA
12D	An archaeological salvage excavation program would be implemented to preserve archaeological deposits of moderate to high archaeological/scientific significance located within the construction footprint (items recorded at MA5 and MA9). Consideration would be given to conserving both sites in situ, within open space reserves, or as an extension of the proposed conservation zone.	NA
12E	A surface salvage program would be carried out to conserve surface artefacts located within the construction footprint (items recorded at MA1, MA2, MA3 and MA4). Salvage of surface artefacts would be undertaken before any impacts in these areas.	NA
12F	The Unanticipated Discoveries Protocol described in Appendix 10 of Technical Paper 10 – Aboriginal Heritage Impact Assessment in Volume 7 of the EIS, would be followed in the event that historical items or relics or suspected burials are encountered during construction works.	UFP (Appendix C)
12G	Consultation would be ongoing with the registered Aboriginal parties during construction of the Project and would include: • consultation on the future care and management of recovered Aboriginal objects; • methodologies for any future investigations; and	CHMP (Appendix J of the MPW Stage 2/3 CEMP)

	• finalisation of management and mitigation strategies subject to detailed design.	
13A	Road names within the School of Military Engineering (SME) would be retained where possible.	NA
13B	Continued commemoration of significant events and individuals would be considered through the naming of buildings, streets and the rail bridge proposed for construction as part of the Project.	NA
13C	Where reasonable and feasible options exist for avoiding impacts on one or more identified heritage items, preference would be given to conserving items of Commonwealth or State significance.	NA
13D	Where avoidance of impacts on a heritage item is not reasonable or feasible, mitigation works inclusive of archival recordings, salvage of archaeological deposits, relocation of significant elements of the built environment and/or adaptive reuse would be undertaken.	NA
13E	A European heritage interpretation strategy would be developed in Close consultation with local historical societies, former and current staff and military personnel.	NA
13F	No impacts would occur within the potential archaeological deposits (PAD) boundaries of Moorebank Historical Potential Archaeological Deposit (MHPAD) 1 and MHPAD2 without prior archaeological salvage, as these sites contain archaeological deposits, inclusive of in-situ building remains, that are assessed to be of local significance in the context of the history of military housing and training at Moorebank.	NA
13G	In addition to archival recording of the Transport Compound Workshop (B99), consideration would be given during the detailed design stage to the in-situ conservation or adaptive reuse of this structure within the Project site. This would assist with mitigation of heritage impacts on the structure itself and the Moorebank Cultural Landscape as a whole.	NA
13H	In addition to archival recording, the Dog Cemetery (MH1) would be repositioned and the individual graves reinterred. This would be carried out in accordance with the wishes of the SME's Explosive Detection Dogs unit and respecting the social value of the site.	NA
13I	In addition to archival recording, consideration would be given during detailed design to the in-situ conservation of the Commemorative Garden (MH6). If in situ conservation is not possible, the plaques and planting should be relocated to an alternative location on public display within the Project.	NA
13J	For the southern rail access, heritage item Railway viaduct, Main Southern Railway Line (Item 12) should be noted on all plans and maps during construction and all care taken to avoid this item.	NA
13K	The Unanticipated Discoveries Protocol (detailed in Appendix 7 of Technical Paper 11 – European Heritage Impact Assessment in Volume 8) would be followed in the event that historical items or relics or suspected burials are encountered during excavation works.	UFP (Appendix C)
13L	The Unanticipated Discoveries Protocol (detailed in Appendix 7 of Technical Paper 11 – European Heritage Impact Assessment in	NA

	Volume 8) would be followed in the event that historical maritime items or relics are encountered during bridge works within the Georges River.	
13M	Further consideration would be given to options for the retention and/or relocation and adaptive reuse of the CUST Hut and the RAAF STRARCH Hangar to mitigate impacts on heritage values associated with these structures and to broaden their cultural landscape. Options considered for mitigation in order of preference are: • Relocation (either offsite or onsite) and conserve/adaptive reuse – this would be investigated further as part of the detailed design and any future development applications. • Interpretive commemoration utilising materials/elements from the building this may be required but would be determined by the findings from investigations in option 1 above. • Demolition may be required but would be determined by the findings from investigations in option 1 above. The first preference would be to retain and adaptively re-use these items on the redeveloped Project site (within the precinct but outside the secure area, as part of the administrative facilities or similar). If this is not feasible or practicable, the second preference would be for relocation to another appropriate location, potentially with adaptive reuse.	NA
14A	Visual mitigation measures to be considered during the detailed design of the Project include: • avoiding clearing of the conservation area which currently obscures and filers views into the Project site; • enhancing existing native vegetation adjoining the Georges River; • enhancing existing native trees with extended and consolidated planting; and • conserve the natural character and streetscape along Moorebank Avenue and allow for effective landscaping.	NA
14B	The following additional visual mitigation measures would be considered during detailed design: • Consider the siting of development to minimise vegetation clearing. • Consider options for permeable tree planting adjoining buildings to reduce visual impacts and to cast shadows. • Enhance vegetation adjoining water bodies. • Maximise integration of the terminal facilities and the associated warehousing precinct by providing vegetation screening, way-finding throughout the Project site, breakout space for the public and staff, and visual relief. • Provide additional native trees to the car park areas to maximise the opportunity for shade and to provide a landscape frontage that is scaled to complement the new buildings. • Provide landscaping along Moorebank Avenue, including extensive tree and shrub planting on road frontages that provides visual relief	NA

	from the industrial appearance of the warehousing, with a layered approach along the streetscape. • Consider localised earth mounding and native canopy tree planting to internal landscape areas on the western side of the new buildings to mitigate visual impacts on residential areas. • Choose finishes and materials that limit contrast with the surrounding landscape, with the preferred use of muted colours. • Take opportunities to start early rehabilitation and supplementary planting of endemic species to the conservation area on the western boundary. • Consider options for tree planting adjacent to buildings, to reduce visual impacts (while also considering any required security constraints and rail line fell distances). • Consider the building design further during the detailed design process and be consistent with controls outlined in the Liverpool Development Control Plan 2008, Part 7 Development in Industrial Areas (LCC 2008c), including facade treatment, materials, building design and lighting.	
14C	Lighting required during construction of the Project would be designed and located to minimise the effects of light spill on surrounding sensitive receivers, including residential areas and the proposed conservation area.	LSMP (Appendix P of the MPW Stage 2/3 CEMP)
14D	Design lighting to minimise impacts on surrounding existing and future residents and the proposed conservation zone.	NA
14E	Consider use of shields on luminaire lighting to minimise brightness effects.	NA
14F	Select asymmetric light distribution-type floodlights as part of the proposed lighting design (which means the light is directed specifically to the task with minimal direct light spill to the surrounding area).	NA
14G	Consider low reflection pavement surfaces to reduce brightness.	NA
14H	Minimise the quantity of light and energy consumption in parts of the Project site that are not active, while retaining safe operation.	NA
15A	Undertake further investigations into the location of existing utilities and the likely impact on these utilities. This would include consultation with asset owners to determine the appropriate measures for relocation.	NA
15B	Implement ‘dial before you dig' protocols for all potential utilities affected by the Project.	NA
16A	A Project contact phone number and website would be maintained during construction and operation to enable the community, including local business owners and/or operators, to access information on the Project and receive responses to any concerns.	CCS
16B	A complaints line and resolution process would be set up and maintained.	CCS

17A	Annualised average monitoring for air quality and noise would be regularly reviewed against the guidelines developed in the specialist studies supporting this EIS, as they are based on protecting the health of the community. Should exceedances be identified in these key indicators as a result of the Project, then a further and more targeted monitoring and management program would be developed as required.	CAQMP (Appendix H of the MPW Stage 2/3 CEMP) CNVMP - Addendum
18A	A construction waste management plan (or equivalent) would be prepared as part of the overall CEMP. This would implement key principles of relevant waste guidelines, and the waste management hierarchy of reduction, reuse, recycling and recovery.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
18B	The waste hierarchy would be investigated and implemented where possible with avoidance of waste, re-use and recycling incorporated into construction methodologies.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
18C	Consideration would be given to the selection of materials for use in construction to minimise waste generated throughout their lifecycle.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
18D	Where practicable, construction materials that contain minimal embodied energy would be preferred.	Section 1.3
18E	Opportunities would be explored where practicable to recycle or re-use materials arising from demolition works, with a preference for onsite re-use where possible (or recycling through an appropriate recycling contractor).	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
18F	Where possible, site disturbance and unnecessary excavation would be minimised.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
18G	Formwork would be re-used where possible.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
18H	Sewage waste would be disposed of by a licensed waste contractor in accordance with Sydney Water and OEH requirements.	CDWMP (Appendix O of the MPW Stage 2/3 CEMP)
18I	A waste management plan (or equivalent) would be prepared and implemented to govern the overall use of materials, categorisation of wastes, and re-use and recycling process.	NA

18J	The waste hierarchy would be investigated and implemented where possible with avoidance of waste, re-use and recycling incorporated into the design, purchasing and procurement.	NA
18K	Consideration would be given to the selection of materials for use in operation to minimise waste generated throughout their lifecycle.	NA
18L	Materials used onsite would be recycled where possible, including steel, batteries, electronics and paper.	NA
18M	Future recovery of waste would be encouraged through site design, including provision for storage areas and appropriate paths for waste containers.	NA
18N	Dedicated recycling storage areas and recycling bins would be located throughout the Project site, with clear signage and convenient access for waste recycle service providers. This would include bins for paper, plastics, glass, metals and compost.	NA
18O	Where required, separate bunded storage area would be established for liquid wastes (e.g. oils), along with drainage to grease trap if required.	NA
18P	A waste management system would be developed to include calculations of anticipated waste volumes from the office, landscaped areas, refuelling facilities and warehousing and distribution activities for ongoing comparison and monitoring.	NA
18Q	Onsite waste management infrastructure would, as a minimum, cater for the following three waste streams: • recovered waste (for re-use or recycling); • residual waste (for disposal or alternative waste technology); and • hazardous waste (wastes that are toxic, corrosive, flammable, explosive or reactive).	NA
18R	Water efficient fixtures and fittings would be installed wherever possible, including in all basins, wash down areas and offices and general amenities areas.	NA
18S	Where possible, rainwater harvesting and surface water runoff management would be utilised for watering of gardens and landscaping.	NA
18T	The use of grey water and black water recycling would be investigated. Recycling water would most likely be used for toilet flushing and/or landscape irrigation. If used, it would comply with the relevant guidelines and agency approval.	NA
18U	Where possible, fire test water from the Project site would be collected for re-use. Washdown water from vehicle and train washdown facilities (if required) would also be collected for re-use.	NA
18V	Where reasonable and feasible, water meters would be installed on all major water uses (air conditioning cooling towers, irrigation, domestic	NA

	hot water, amenities, washdown, rainwater collection and recycled water system).	
18W	Water reduction targets would be considered for office areas, in line with the National Australian Built Environment Rating System (NABERS) Water protocol for office buildings (refer discussion in Section 9 – Project sustainability).	NA
18X	Opportunities to utilise recycled building materials in the overall structure of the Project would be explored. Development of the design would seek to use construction materials that have been made with a post-consumer recycled content of 50% or greater.	NA
18Y	Measures to minimise the use of energy and fuel would be investigated and implemented where appropriate. These may include using non-renewable sources such as petroleum, diesel, natural gas and liquefied natural gas.	NA
18Z	Where practicable, water would be re-used onsite, including water stored in sediment basins.	CSWMP – Addendum
18AA	Initiatives in Table 9.4 in Section 9 – Project sustainability of Concept Plan Approval EIS would be considered and implemented where practicable to minimise the use of energy and fuel during the operation of the Project.	NA
19A	The intersection treatments and delivery timing for all cumulative scenarios are presented in Table 7.37 of the Response to Submission report; a number of these treatments would be required for a Moorebank project only scenario by 2030.	NA
19B	The design and implementation of air quality and noise mitigation would need to be determined for the final staged operations during the detailed design phase and, as required, be included in the environmental assessment for the Stage 2 SSD approval(s).	NA

APPENDIX B. ASPECT AND IMPACT REGISTER

The following risk assessment matrix has been used to determine the risk rating of each individual environmental aspect relevant to the construction of the Project. The risk rating determined from the matrix identifies the level of management measures required for that environmental aspect and the residual risk rating following the implementation of management measures.

	Consequence				
Likelihood	1 - Not significant	2 - Minor	3 - Moderate	4 - Major	5 - Severe
A - Almost certain	Moderate	Moderate	High	Very High	Very High
B - Likely	Low	Moderate	High	Very High	Very High
C - Possible	Low	Low	Moderate	High	High
D - Improbable	Low	Low	Low	Moderate	Moderate
E - Rare	Low	Low	Low	Low	Moderate

Table B-1 Aspect and impact register

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
General											
General	Approvals and licensing	Not identifying appropriate approvals/ licences required, or proceeding without them	Works delayed Infringements Poor client relations Reputational loss	B	5	Very High	Check EIS, CoC, REMM and EPL requirements Document requirements addressed in CEMP and associated sub-plans Establish and maintain a register of approvals, licenses and permits Implement a program to track compliance	C	3	Moderate	Principal's Representative Contractor's PM Contractor's EM
Visual	Use of vehicles, plant and equipment General construction activities	Changes to visual landscape	Impacts to community Visual amenity	B	2	Moderate	Elements within construction sites will be located to minimise visual impacts, (e.g. setting back large equipment from site boundaries, use of hoardings, progressive re-vegetation) Regular maintenance will be undertaken of site hoardings and perimeter areas including the prompt removal of graffiti Re-vegetation/landscaping would be undertaken progressively Design of site hoardings would consider the use of artwork or project information	D	2	Low	Contractor's EM Contractor's PM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Contamination	Unexpected finds (including asbestos, UXO, EO and EOW)	Pollution of surface water, groundwater and land though spread of existing contamination Safety hazards associated with chemical contaminants, UXO, EO and EOW	Water quality degradation Fauna mortality Loss of amenity (e.g. fishing) Safety risk to construction staff and community	B	5	Very High	Implement management measures in the CMP, AMP and LTEMP Implement the UFP	C	4	High	Contractor's EM
	Use of vehicles, plant and equipment	Pollution of surface water, groundwater and land through leaks and spills	Water quality degradation Fauna mortality Loss of amenity (e.g. fishing) Contamination of land	C	2	Low	Implement management measures in the CERP – Addendum Emergency spill kits to be made available and maintained onsite Spill response training sessions for relevant staff	E	4	Low	Contractor's EM
Traffic	Use of heavy and light vehicles	Use of unauthorised access routes	Disturbance to local road users and residents resulting in complaints Safety risk to road users Potential for delays at local road access points	C	4	High	Implement management measures in the CTAMP – Addendum Implement community notification procedures Ensure adequate signposting for all drivers	D	3	Low	Contractor's CM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Noise and Vibration	Use of vehicles, plant and equipment from general construction activities	Production of noise and vibration	Disruption to community and surrounding fauna Potential damage to adjacent commercial and residential structures Potential damage to heritage structures Potential for complaints	B	3	High	Implement management measures in the CNVMP – Addendum Implement COOHWP Conduct community notification procedures Consult with potentially affected parties that may be impacted by construction vibration and noise, prior to commencement of works Consultation in response to complaints will be undertaken Provide periods of respite for high noise generating activities Conduct on-going noise and vibration monitoring, during vibration and noise-intensive works at receiver locations	C	2	Low	Contractor's EM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
ERSED	Movement of vehicles, plant and equipment General construction activities	Transport of soils and sediments	Soil loss Increased sedimentation and turbidity Damage to offsite flora and fauna habitat Degradation of local watercourses Fines for sediment escaping the site	B	4	Very High	Implement management measures in the CSWMP – Addendum Implement ESCPs Locate stockpiles away from waterways, watercourses and drains Induction/toolbox training on the need to prevent pollution Reuse excavated material onsite where possible	D	3	Low	Contractor's EM
Air Quality	Use of vehicles, plant and equipment	Production of atmospheric pollutants	Air quality degradation from vehicle exhaust Impacts to community Impacts to flora and fauna	C	3	Moderate	Implement management measures in the CAQMP Activities to be undertaken in accordance with EPL ESCPs to be approved before works commence Ensure only well-maintained plant/equipment are used Use of recycled water for dust suppression	D	3	Low	Contractor's EM Site Supervisor

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Resource Use	Use of vehicles, plant and equipment	Depletion of natural resources Greenhouse gas emissions	Depletion of resources Contribution to climate change	B	2	Moderate	Inductions and toolbox training on waste management and energy saving practices for construction plant and equipment, and for office work No idling of plant/equipment where possible onsite Equipment/plant equipment inspections must be undertaken prior to use onsite Consider material substitution where feasible, to reduce embodied energy of construction materials Procure materials and consumables while considering environmental impacts in their manufacture and disposal (e.g. silica fume for use within concrete, recycled paper, etc.) Where possible, locally sourced materials will be used to reduce GHG emissions associated with transport during construction Engage local workforce/suppliers	C	2	Low	Contractor's EM Site Supervisor All Project Personnel

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Bushfire	All works requiring a hot works permit	Idling engines Sparks from activities Cigarette butts causing bushfire Increases in temperature due to climate change	Property damage Destruction of flora and fauna	D	5	Moderate	Implement management measures in the CERP - Addendum Obtain hot works permit which encompasses all proposed relevant works	E	5	Moderate	Contractor's CM Site Supervisor Sub-contractors
Waste	Waste disposal during construction	Generation of construction waste	Depletion of natural resources, and deposition of large amounts of waste to landfill Incorrect disposal of waste	C	2	Moderate	Implement management measures in the CDWMP Waste management will be guided by the NSW EPA waste management hierarchy Use local waste facilities Identify opportunities to incorporate recovered materials into the permanent works	E	2	Low	Contractor's EM Site Supervisor Sub-contractors
Biodiversity	Use of heavy and light vehicles and equipment	Risk of collision with fauna Creation of hazards for fauna	Mortality to flora and fauna	D	3	Low	Implement management measures in the CFFMP – Addendum For animal injuries, contact the local wildlife rescue agency and/or veterinary surgery	E	3	Low	Contractor's EM Site Supervisor Sub-contractors

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
	Working in close proximity to endangered ecological communities	Transport of soils/sediment	Impacts and/or destruction of offsite flora and fauna Soil loss Increased runoff to ecological communities	B	4	Very High	Implement management measures in the CFFMP – Addendum Induction/toolbox training on clearance zones and required protection measures Demarcate no-go zones, potentially with flagging	E	4	Low	Contractor's EM Site Supervisor Sub-contractors
Earthworks											
Air Quality	Movement and deposition of fill (i.e. site levelling, importation and compaction of fill material) Use of vehicles and equipment Stockpiling	Production of particulates (i.e. dust or particulate matter)	Impacts to community Impacts to flora and fauna	C	3	Moderate	Implement management measures in the CAQMP ECSPs to be approved before works commence Activities undertaken in accordance with EPL Use of recycled water for dust suppression	D	3	Low	Contractor's CM Contractor's EM Site Supervisor
	Contaminated material stockpiling	Production of odours	Impacts to community	B	2	Moderate	Implement management measures in the CAQMP, CDWMP and CSWMP – Addendum Activities undertaken in accordance with EPL	D	2	Low	Contractor's EM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
ERSED	Stockpiling of soil	Exposure of soils	Increased sediment transport, sedimentation and turbidity Soil loss Increased runoff Wind and water erosion causing weed/seed dispersal offsite	B	4	Very High	Implement management measures in the CSWMP – Addendum Implement ESCPs Develop ECMs to show stockpile areas Minimise stockpiling as much as practicable Locate stockpiles away from waterways, watercourses and drains Reuse excavated material onsite where possible	D	3	Low	Contractor's CM Contractor's EM Site Supervisor
	Removal of soil Placement of fill	Erosion of soil	Increased sediment transport, sedimentation and turbidity Degradation of water quality Damage to offsite flora and fauna habitat	B	4	Very High	Implement management measures in the CSWMP – Addendum Implement ESCPs Locate stockpiles away from waterways, watercourses and drains Reuse excavated material onsite where possible	D	3	Low	Contractor's CM Contractor's EM Site Supervisor

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Noise and Vibration	Earthworks activities	Production of noise and vibration	Disruption to community and fauna Damage to property	B	3	High	Implement management measures in the CNVMP – Addendum Implement COOHWP Implement community notification procedures Determine vibration limits and structure/receiver offset distances Consult with potentially affected parties that may be impacted by construction vibration and noise, prior to commencement of works Conduct on-going noise and vibration monitoring, during vibration and noise-intensive works at receiver locations	C	2	Low	Contractor's EM
Visual	Use of vehicles, plant and equipment General construction activities	Changes to visual landscape	Impacts to community Visual amenity	B	2	Moderate	Locate these elements within construction sites to minimise visual impacts (e.g. setting back large equipment from site boundaries, use of hoardings or progressive re-vegetation) Regular maintenance will be undertaken of site hoardings and perimeter areas Re-vegetation/landscaping would be undertaken progressively	D	2	Low	Contractor's CM Contractor's EM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
	Importation of fill during night-time hours	Generation of light	Light spill impacts to community and flora and fauna	C	3	Moderate	Implement LSMP	D	3	Low	Contractor's EM
Traffic	Use of heavy and light vehicles for material transportation	Changes to local traffic conditions	Disturbance to local road users and residents Safety risk to road users Potential for delays at local road access points	C	4	High	Implement management measures in the CTAMP – Addendum Implement community notification procedures Induction/toolbox training for traffic related protocols	D	3	Low	Contractor's CM
Waste	Excavation	Generation of additional excavated material	Loss of visual amenity Degradation of water quality Incorrect classification of waste resulting in incorrect/illegal disposal and/or re-use	B	3	High	Implement management measures in the CSWMP – Addendum Implement ESCPs All material recovered offsite to be appropriately tested and classified against EPA Waste Classification Guidelines	D	2	Low	Contractor's EM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Acid Sulphate Soils	Excavation	Disturbance of potential acid sulphate soils and actual acid sulphate soils	Mobilisation of metals within runoff which are toxic to natural systems Release of acidic runoff	C	3	Moderate	Implement management measures in the ASSMP Provide awareness training in the identification and management of ASS Ensure ASS material is left underwater, disposed of off-site or appropriately treated in a bunded area	D	2	Low	Contractor's CM Contractor's EM
Biodiversity	Removal of topsoil and soil	Removal of vegetation	Habitat loss Fragmentation Disturbance, injury or mortality to fauna Transport of noxious weeds	C	4	High	Implement management measures in the CFFMP – Addendum Induction and toolbox training on clearance zones and required protection measures Remove existing weeds species and prevent migration of species	E	4	Low	Contractor's EM Site Supervisor
Heritage	Unexpected heritage items encountered	Removal or disturbance to heritage items	Work delays Additional studies and approval required Damage to heritage item	C	4	High	Implement the UFP Inductions/toolbox training of heritage management protocols	E	4	Low	Contractor's CM Contractor's EM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Utilities and Excavation											
Bushfire	Excavation/ ground penetration for utility works	Sparks from activities	Property damage Destruction of flora and fauna	D	5	Moderate	Implement management measures in the CERP – Addendum Conduct hot works permits	E	5	Moderate	Contractor's CM Contractor's EM Site Supervisor
Biodiversity	Excavation/ ground penetration for utility works	Creation of hazards for fauna	Fragmentation of immediate area Mortality to flora and fauna	D	3	Low	Implement management measures in the CFFMP – Addendum For animal injuries, contact the local wildlife rescue agency and/or veterinary surgery	E	3	Low	Contractor's EM Site Supervisor
Heritage Removal											
Heritage	Unexpected heritage items encountered	Removal or disturbance to heritage items	Work delays Additional studies and approval required Damage to heritage item	C	4	High	Implement a UFP Inductions/toolbox training of heritage management protocols	E	4	Low	Contractor's CM Contractor's EM Site Supervisor
	Disturbance to heritage items	Removal of heritage items	Damage to heritage item Damage to heritage values	C	4	High	Implement management measures in the CHMP Inductions/toolbox training on heritage management protocols Label any known heritage items on ECMs	E	4	Low	Contractor's EM Site Supervisor All Project personnel
Activities Involving Asbestos											

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Biodiversity	Removal of asbestos from onsite structures and asbestos-contaminated soil	Asbestos fibres becoming airborne Removal of fauna	Habitat loss Fragmentation Disturbance, injury or mortality to fauna	B	2	Moderate	Implement management measures in the LTEMP, UFP, AMP and the CFFMP – Addendum General inductions toolbox training on asbestos management protocols Asbestos to be removed in accordance with "The Code of Practice for the Same Removal of Asbestos (NOHSC, 2005) and Code of Practice: How to Safely Remove Asbestos (WorkCoverNSW, 2017)	C	2	Low	Contractor's EM Site Supervisor
ERSED	Asbestos in or on soils Demolition of waste materials	Exposure of soils containing asbestos	Increased sediment transport, sedimentation and turbidity of runoff Soil loss Increased runoff	C	3	Moderate	Implement management measures in the LTEMP, UFP, AMP and CSWMP – Addendum Implement ESCPs Locate stockpiles away from waterways, watercourses and drains Induction/toolbox training on the need to prevent pollution	D	3	Low	Contractor's EM Site Supervisor

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Air Quality	Asbestos in or on soils and demolition of waste materials	Asbestos fibres becoming airborne	Impacts to human health	C	4	High	Implement management measures in the LTEMP, UFP, AMP and CSWMP – Addendum Inductions/toolbox training on asbestos management protocols Wear appropriate PPE	D	3	Low	Contractor's EM Site Supervisor
Waste	Transport, handling and storage of asbestos from designated stockpiles and/or demolition waste	Generation of waste	Prosecution Contamination of waste streams Incorrect classification of waste resulting in incorrect/illegal disposal and/or re-use	C	4	High	Implement management measures related to asbestos in the LTEMP, UFP, AMP and CDWMP Inductions/toolbox training on asbestos management protocols	D	3	Low	Contractor's EM Site Supervisor
Internal Road Construction											
Air Quality	Use of bitumen/ road sealing	Production of odours	Impacts to community	C	2	Low	Implement management measures in the CAQMP Activities undertaken in accordance with EPL	D	2	Low	Contractor's EM Contractor's CM Site Supervisor

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Noise and Vibration	Use of vehicles, plant and equipment	Production of noise	Disruption to community and fauna Damage to property	B	3	High	Implement management measures in the CNVMP – Addendum Implement COOHWP (where applicable) Conduct community notification procedures Consult with potentially affected parties that may be impacted by construction vibration and noise, prior to commencement of works Consultation in response to complaints will be undertaken Provide periods of respite for high noise generating activities Conduct on-going noise and vibration monitoring, during vibration and noise-intensive works at receiver locations	C	2	Low	Contractor's EM Contractor's CM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Traffic	Use of heavy and light vehicles for material transportation	Changes to local traffic conditions	Disturbance to local road users and residents Safety risk to road users Potential for delays at local road access points	C	4	High	Implement management measures in the CTAMP – Addendum Ensure detour signage is used during road closures Implement community notification procedures Consultation in response to complaints will be undertaken	D	3	Low	Contractor's CM Contractor's EM

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Warehouse Construction											
Noise and Vibration	Use of vehicles, plant and equipment	Production of noise	Disruption to community and fauna Damage to property	B	3	High	Implement management measures in the CNVMP – Addendum Implement COOHWP Conduct community notification procedures Consult with potentially affected parties that may be impacted by construction vibration and noise, prior to commencement of works Consultation in response to complaints will be undertaken Provide periods of respite for high noise generating activities Conduct on-going noise and vibration monitoring, during vibration and noise-intensive works at receiver locations	C	2	Low	Contractor's CM Contractor's EM
Visual	Use of vehicles, plant and equipment Development of warehouses	Changes to visual landscape	Impacts to community and surrounding streetscape Visual amenity	B	2	Moderate	Locate these elements within construction sites to minimise visual impacts (e.g. setting back large equipment from site boundaries, use of hoardings)	C	2	Low	Contractor's CM Contractor's EM Site Supervisor

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Traffic	Use of heavy and light vehicles for material transportation	Oversized vehicle movements	Disturbance to local road users and residents Safety risk to road users Potential for delays at local road access points	C	4	High	Implement management measures in the CTAMP – Addendum Implement community notification procedures Induction/toolbox training for traffic related protocols	D	3	Low	Contractor's CM Contractor's EM
Waste	Construction activities associated with construction of warehouse	Generation of construction waste	Visual amenity Deposition of large amounts to landfill Potential degradation of water quality	B	2	Moderate	Implement management measures in the CDWMP and CSWMP – Addendum Inductions/toolbox training on proper construction procedures for the building of warehouses	D	2	Low	Contractor's CM Contractor's EM
Landscaping											
Waste	Landscaping	Generation of landscaping waste	Depletion of natural resources and deposition of large amounts of waste to landfill Loss of visual amenity	B	2	Moderate	Implement management measures in the CDWMP Avoidance and reuse of material will have priority over recycling Minimise waste generation by ordering the correct quantity of materials Use local waste facilities	D	2	Low	Contractor's CM Contractor's EM Site Supervisors

Category	Environmental Aspect	Environmental Impact	Consequence	Likelihood	Consequence	Risk Rating	Control Measures	Likelihood	Consequence	Risk Rating	Responsibility
Noise Wall Construction											
Noise and Vibration	Use of vehicles, plant and equipment	Production of noise from noise wall construction activities	Disruption to community and fauna Damage to property	B	2	Minor	Implement management measures in the CNVMP – Addendum Implement COOHWP Conduct community notification procedures Consult with potentially affected parties that may be impacted by construction vibration and noise, prior to commencement of works Consultation in response to complaints will be undertaken Provide periods of respite for high noise generating activities Conduct on-going noise and vibration monitoring, during vibration and noise-intensive works at receiver locations	C	2	Low	Contractor's CM Contractor's EM

APPENDIX C. UNEXPECTED FINDS PROTOCOL

Moorebank Logistics Park – West Precinct South

EPBC 2011/6086 Approval

Unexpected Finds Protocol

Author	[redacted]
Checker	[redacted]
Approver	[redacted]
Report No	-
Date	28/02/2024
Revision	02

[redacted]

Author Details

Author Details	Qualifications and Experience
[redacted]	BSc, DipEnvStud, MSc [redacted] has over 30 years of experience in the transport, industrial, water, energy, communications and other sectors. As a project director and project manager, [redacted] has broad-ranging experience in managing the preparation of strategic planning studies, environmental assessments and plans, risk assessments and environmental management systems for large and complex programs and projects.
[redacted]	BEnvSc (Hons1), GradCert EnvPl [redacted] has 18 years of environmental planning, assessment and management experience in the private sector. This experience includes working on projects ranging in scale from small local development to large complex developments over a long timeframe.

Revisions

Revision	Date	Description	Prepared by	Approved by
01	25/01/2024	Draft for client review	[redacted]	
02	28/02/2024	Final	[redacted]	

Acronyms and Definitions

Acronym / Term	Meaning
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
MPW Concept Approval	MPW Concept Approval (SSD 5066), granted by (the now) DPE on 29 September 2014 for the development of an intermodal terminal facility including a rail link connecting the site to the Southern Sydney Freight Line, an intermodal terminal, warehousing and distribution facilities and a freight village.
MPW	Moorebank Precinct West
PFAS	Per & Poly-Fluoroalkyl Substances
SSD	State Significant Development
the Development	MPW Stage 2 Development
UFP	Unexpected Finds Protocol

C-1. Introduction

This Unexpected Finds Protocol (UFP) has been developed to detail processes required to manage the unexpected discovery of contamination, ordnances, Aboriginal sites, Non-indigenous heritage items and threatened flora and fauna during the construction of the Project.

C-1.1. Objectives and targets

Table C-1 shows objectives and targets for the management of unexpected finds for the Project.

Table C-1 Objectives and targets

Objective	Target	Timeframe
To implement the unexpected finds protocol to minimise the impacts of onsite contamination (including Ordnance) that has not previously been recorded within the Development.	Stop relevant works in 100% of cases where potential contamination is identified in accordance with the Unexpected Finds (Contamination) Protocol (Appendix A).	Construction
To implement the unexpected finds protocol to minimise impacts on unknown non-indigenous heritage items and Aboriginal sites.	STOP works in 100% cases where potential heritage is identified in accordance with the Unexpected (Aboriginal Sites and Non-Indigenous Heritage) Finds Protocol (Appendix B).	Construction
To implement the unexpected finds protocol to minimise impacts on threatened flora and/or fauna species or threatened ecological communities that have not been previously recorded within the Development.	Stop relevant works in 100% of cases where potential threatened flora and/or fauna species or threatened ecological communities are identified in accordance with the Unexpected (Biodiversity) Finds Protocol (Appendix C).	Construction

C-2. Environmental Management

C-2.1. Compliance Matrix

The construction of the Project is approved under both the EPBC Act and the EP&A Act. Both these approvals have environmental conditions relevant to the construction of the Project.

Table C-2 provides a summary of the relevant requirements to be addressed in this protocol and met during Project construction.

Table C-2 Relevant Approvals Requirements addressed in this UFP

Reference	Requirement	Document reference
EPBC 2021/8068 Approval		
CoA 8	Sections of the CEMP and OEMP relating to contamination and soils must be prepared by a suitably qualified expert and must: … d) in relation to management of PFAS: … ii) detail implementation and operational procedures, appropriate to the risk posed by any contamination, including: … • a contingency action plan for unexpected PFAS contaminant discoveries vi) detail review procedures appropriate to the risk posed by any contamination	MPW Per & Poly-Fluoroalkyl Substances (PFAS) Management Plan – Construction Appendix A of this UFP
CoA 11	Sections of the CEMP and OEMP relating to Aboriginal heritage must be prepared by a suitably qualified expert and must: a) be consistent with the Aboriginal Heritage Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 12A to 12G from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	Appendix B of this UFP

CoA 12	Sections of the CEMP and OEMP relating to European heritage must be prepared by a suitably qualified expert and must: a) be consistent with the European Heritage Provisional Environmental Framework (2 July 2014), provided at Appendix O to the finalised EIS b) incorporate all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as 'mandatory' c) explain how all measures 13A to 13M from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed d) be approved by the Minister or a relevant New South Wales regulator.	Appendix B of this Protocol
State Significant Development (SSD) 5066 Development Consent		
NA	No relevant requirements are included in the SSD 5066 Development Consent	NA
REMM		
8D	An unexploded ordnance (UXO) management plan (or equivalent) would be developed for the Project site. This plan would detail a framework for addressing the discovery of UXO or explosive ordnance waste (EOW) to ensure a safe environment for all Project staff, visitors and contractors.	Appendix A of this Protocol
12F	The Unanticipated Discoveries Protocol described in Appendix 10 of Technical Paper 10 – Aboriginal Heritage Impact Assessment in Volume 7 of the EIS, would be followed in the event that historical items or relics or suspected burials are encountered during construction works.	Appendix B of this Protocol
13K	The Unanticipated Discoveries Protocol (detailed in Appendix 7 of Technical Paper 11 – European Heritage Impact Assessment in Volume 8) would be followed in the event that historical items or relics or suspected burials are encountered during excavation works.	Appendix B of this Protocol

C-2.2 Unexpected Finds Protocols

Specific protocols for the discovery of unexpected finds have been developed for the construction of the Project and are provided in the appendices to this Protocol:

•

- Appendix C-1 – Unexpected Contamination Finds Protocol – Covers onsite contamination, including ordnance
- Appendix C-2 – Unexpected Aboriginal Sites and Non-Indigenous Heritage Finds Protocol – Covers Aboriginal sites and Non-indigenous heritage finds
- Appendix C-3 – Unexpected Biodiversity Finds Protocol – Covers threatened flora and/or fauna species or threatened ecological communities.

Appendix C-1 –Unexpected Contamination Finds Protocol

Potential Site Contamination Hazards

Chemical Drums/ Containers

Asbestos

Ash/Slag

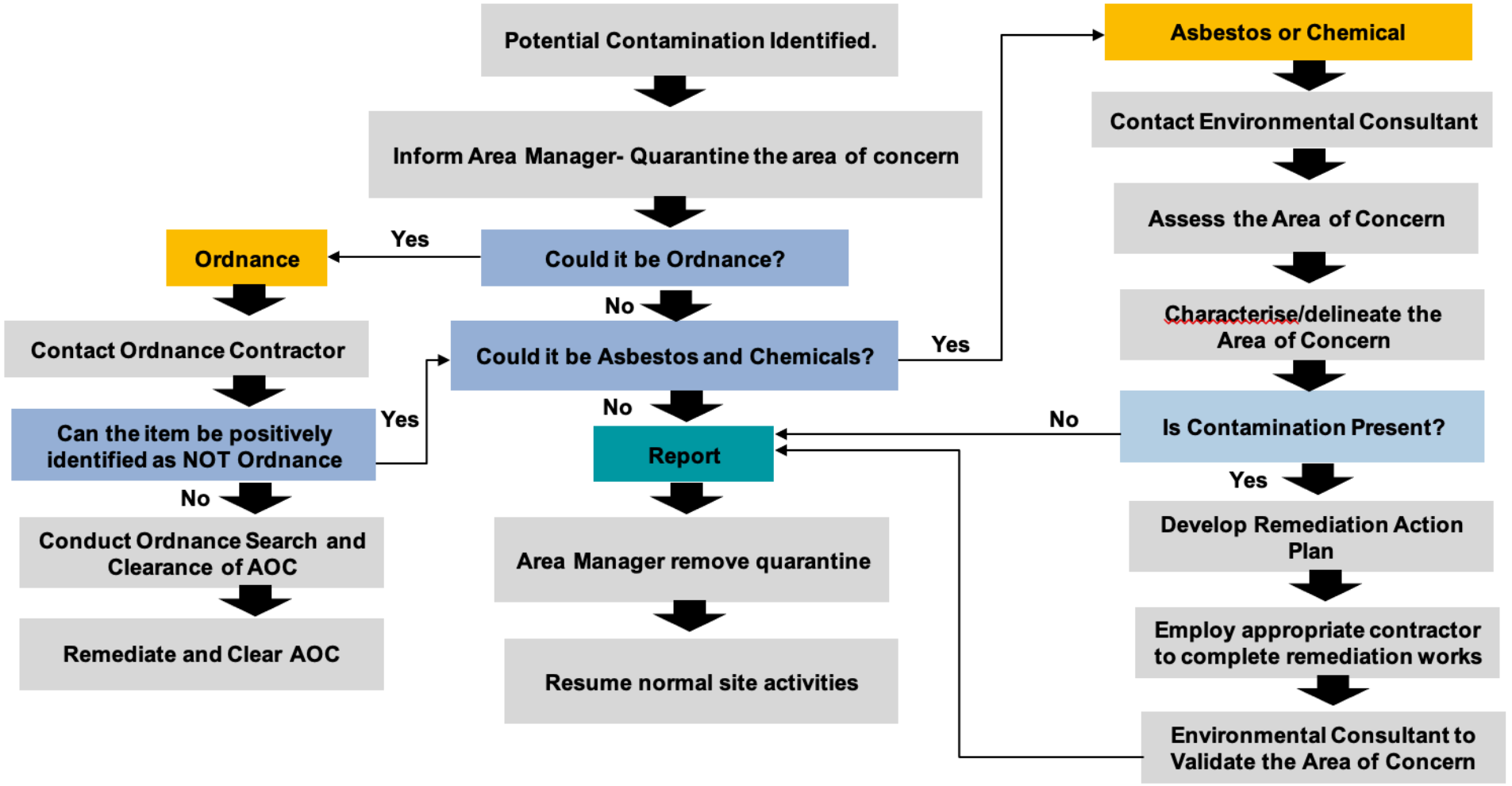
Unexploded Ordnance/ Explosive Ordnance Waste/ Explosive Ordnance

Odours

If you SEE or SMELL anything unusual

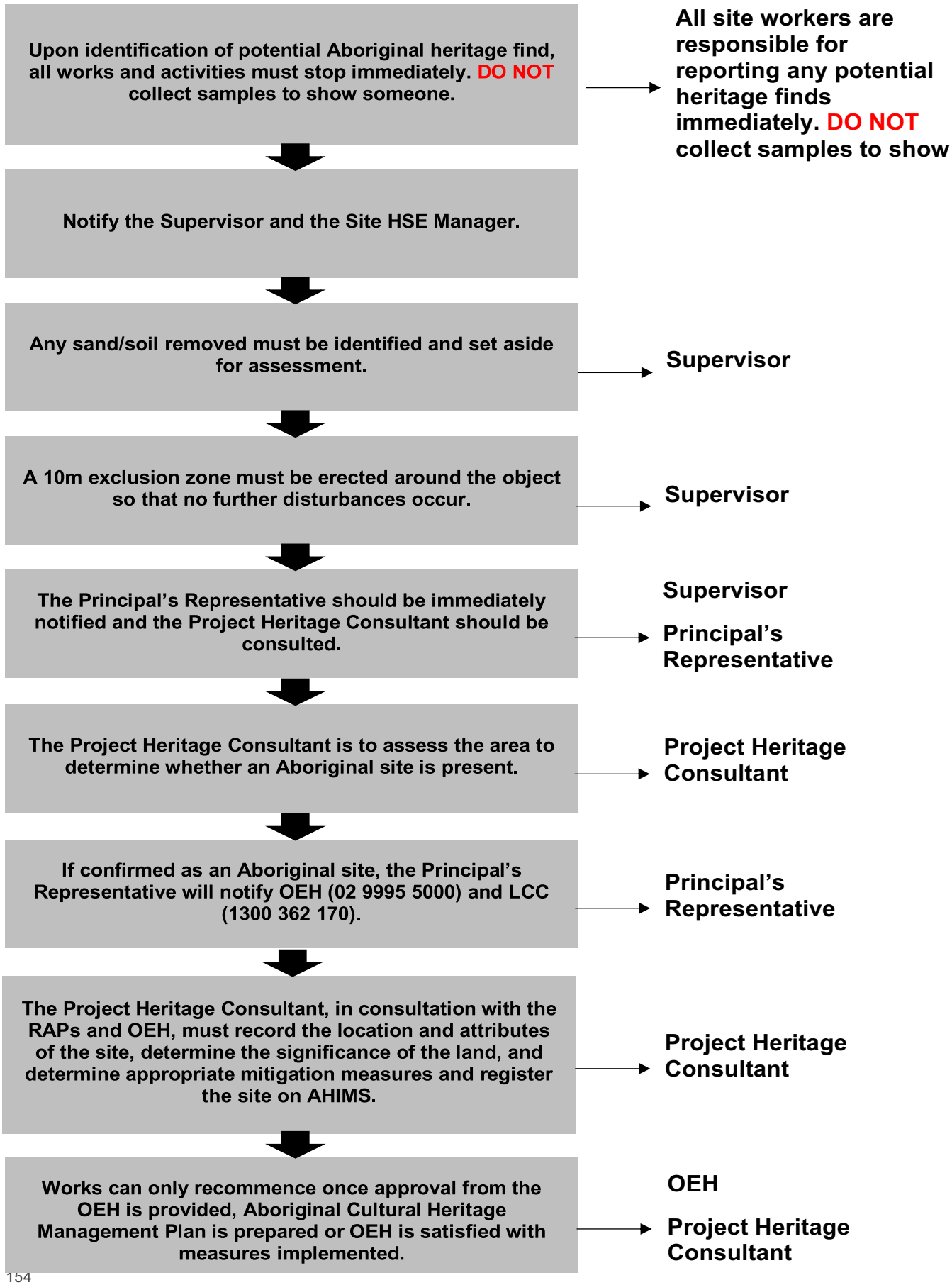
STOP WORK and contact Site HSE Manager

DO NOT RESTART WORK before the area has been investigated and cleared by an Environmental Consultant


Potential Contamination Identified.
Inform Area Manager- Quarantine the area of concern
Could it be Ordnance?
Yes
Ordnance
Contact Ordnance Contractor
Can the item be positively identified as NOT Ordnance
Yes
No
Conduct Ordnance Search and Clearance of AOC
Remediate and Clear AOC
No
Could it be Asbestos and Chemicals?
Yes
Asbestos or Chemical
Contact Environmental Consultant
Assess the Area of Concern
Characterise/delineate the Area of Concern
Is Contamination Present?
No
Yes
Develop Remediation Action Plan
Employ appropriate contractor to complete remediation works
Environmental Consultant to Validate the Area of Concern
No
Report
Area Manager remove quarantine
Resume normal site activities

Appendix C-2 –Unexpected Aboriginal Sites and Non-Indigenous Heritage Finds Protocol

4.7. Aboriginal Sites/Item



Examples of potential unexpected Aboriginal sites/item finds

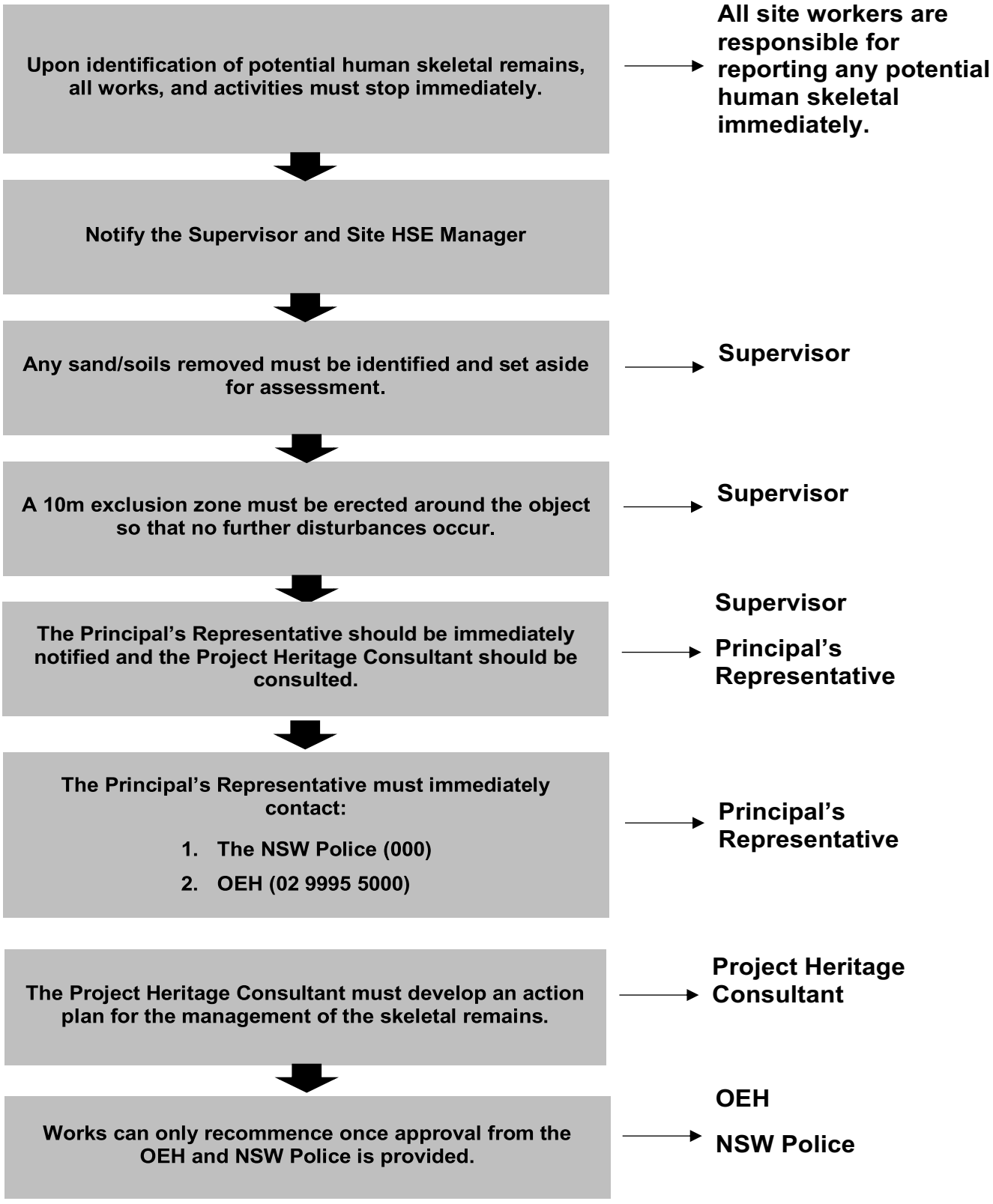
It is highly unlikely that an Aboriginal artefacts will be identified on the site due to the historical disturbance of the area. However, the most likely finds are isolated finds such as flaked stone tools.

Typical characteristics of flaked stone tools include:

- Sharp edges
  - Retouch along one or more edges
  - Stone rich in silica
  - Stone type often different to the natural rock in the area
- Flakes
  - Usually less than 5 mm long
  - A ‘striking platform’ visible
  - Impact point often present on the striking platform
  - A ‘bulb of percussion’ often present below the striking platform
  - May have been shaped into a recognizable tool form, such as point or scraper
- Cores
  - May be fist-sized or smaller
  - May have one or more scars where flakes have been removed.

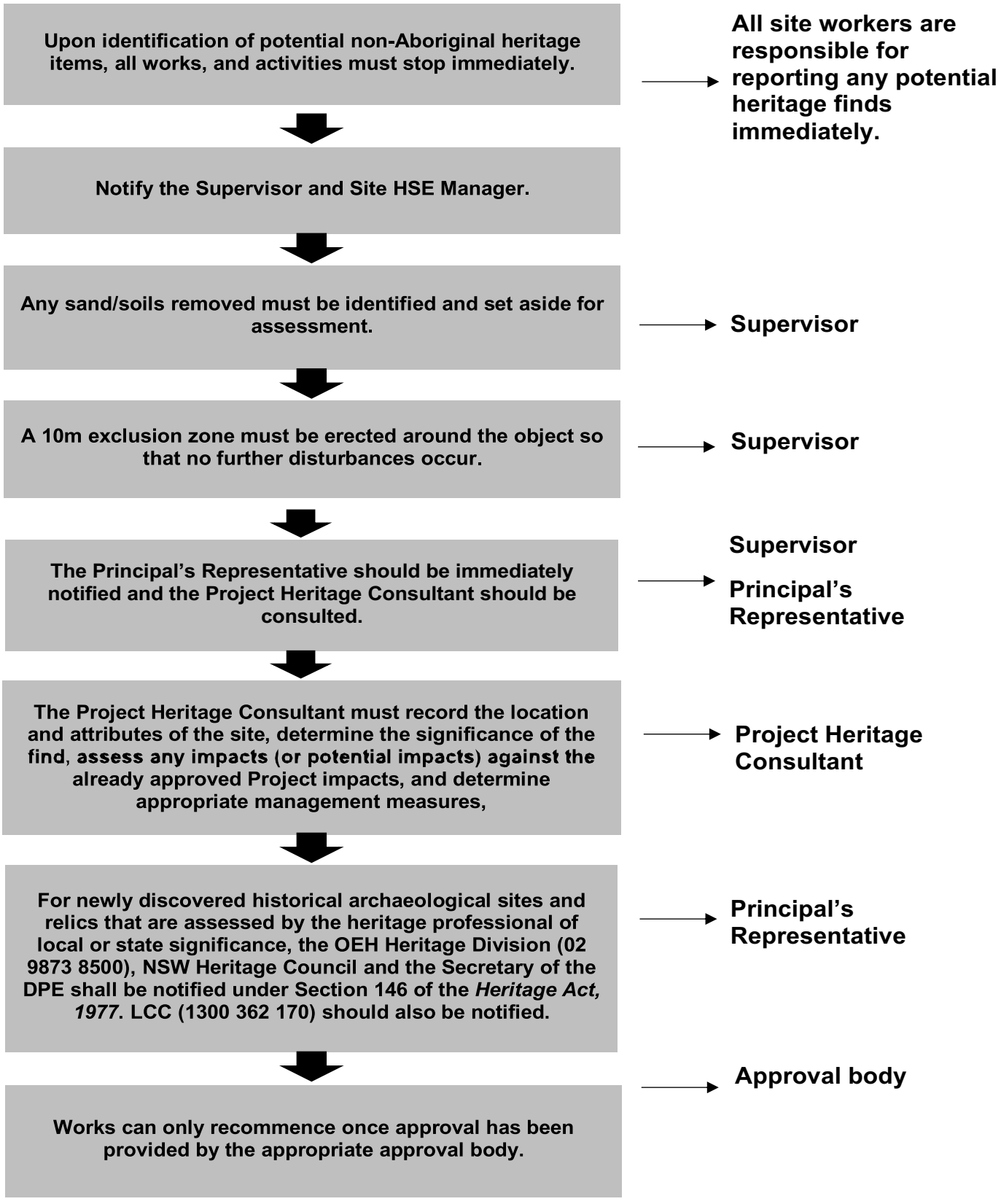
It is noted that not all features can be seen on each stone tool and some require an experienced eye to identify them. Breakage can remove key features.

Skeletal remains



Non-Aboriginal heritage

Note: In the context of this UFP, an unexpected find is defined as a previously unknown heritage item or evidence of heritage value. It does not include uncovering findings within previously identified potential archaeological deposits.



Appendix C-3 –Unexpected Biodiversity Finds Protocol

Unexpected Biodiversity Finds Protocol

Purpose

This Unexpected Finds Protocol explains the actions and measures to be implemented if any threatened flora and/or fauna species or threatened ecological communities that have not been previously recorded within the Project site are identified during construction.

Training

All personnel undertaking Project construction work will be inducted on the identification of known and potential threatened species and ecological communities occurring onsite and will be trained in this Protocol through toolbox talks or a site induction.

Protocol

Upon detection of threatened species or ecological community during construction, the following steps must be followed.

1. **STOP ALL WORK** in the vicinity of the find. Immediately notify the Supervisor and Site HSE Manager who will notify the Principal's Representative. The Principal's Representative will consult with the Project Ecologist, who must confirm the presence of the threatened species and/or ecological communities, or otherwise.
2. **EXCLUSION ZONE**. In consultation with the Project Ecologist, create a buffer zone/exclusion zone around the find.
3. **EXTERNAL NOTIFICATION**. The Principal's Representative notify the Office of Environment and Heritage (OEH) of the previously unidentified threatened species and/or ecological community.
4. **ASSESS IMPACT**. An assessment is to be undertaken by the Principal's Representative and Project Ecologist in consultation with OEH assess the likely impact to the identified threatened species and or community and propose appropriate management options, such as relocation measures.
5. **OBTAIN APPROVALS**. Obtain any relevant licences, permits or approvals required if the threatened species and/or ecological community is likely to be significantly impacted. Consultation with OEH must be completed for any proposed amendment to location or reclassification of threatened species, populations and ecological communities.
6. **RECOMMENCE WORKS**. Any works may recommence once the Site HSE Manager has:
   - Obtained approvals as required
   - Confirmed that all corrective actions and additional mitigation measures have been implemented.
7. **UPDATE PLANS AND PROCEDURES**. The Site HSE Manager must ensure that the threatened species/ecological community is included in subsequent site plans and/or sensitive area drawings, inductions and Toolbox Talks. The Site HSE Manager must

provide information to enable an update of ecological monitoring and/or biodiversity offset requirements.