# Ancillary Site Establishment Management Plan

## Glebe Island (WHT3) construction ancillary facility

Western Harbour Tunnel

April 2025

THIS PAGE LEFT INTENTIONALLY BLANK

# Contents

# Figures



# Tables

## Document control

### Approval and authorisation

| | |
|---|---|
| **Approved on behalf of ACCIONA by** | Andrew Marsonet |
| **Signed** |  |
| **Dated** | 31/01/2024 |

### Document status

| Revision | Date | Description | Approval |
|---|---|---|---|
| Rev A | 01/03/2024 | For TfNSW review | C. Weller |
| Rev B | 23/04/2024 | Updated following external consultation | M. Lee / C. Weller |
| Rev 00 | 13/05/2024 | For ER endorsement | M. Lee / C. Weller |
| Rev 01 | 31/05/2024 | Updated following DPHI review | M. Lee / C. Weller |
| Rev 02 | 24/02/2025 | Updated to include Glebe Island Area 2 | M. Lee / C. Weller |
| Rev 2.1 | 18/03/2025 | Updated following TfNSW review | M. Lee / C. Weller |
| Rev 2.2 | 1/04/2025 | Updated following ER review. For ER endorsement | M. Lee / C. Weller |
| Rev 03 | 24/04/2025 | Update following DPHI review | M. Lee / C. Weller |

# Glossary/ Abbreviations

| Abbreviations | Expanded text |
|---|---|
| AQMS | Air quality monitoring station |
| CEMP | Construction Environmental Management Plan |
| CNVIS | Construction Noise and Vibration Impact Statement |
| Construction | Has the same definition as Schedule 1 of the planning approval (SSI #8863) |
| CSSI | The Critical State Significant Infrastructure, as described in Schedule 1, the carrying out of which is approved under the terms of this approval |
| DPHI | Department of Planning, Housing and Infrastructure (formerly Department of Planning and Environment (DPE)) |
| DPI | New South Wales Department of Primary Industries |
| EIS | Environmental Impact Statement |
| Environmental Representative (ER) | The Environmental Representative(s) for the CSSI approved by the Planning Secretary |
| EPA | New South Wales Environment Protection Authority |
| EPL | Environment Protection Licence under the POEO Act |
| EWMS | Environmental Work Method Statements |
| MCoA | Minister's Conditions of Approval |
| MOD2 | Western Harbour Tunnel and Warringah Freeway Upgrade TBM solution of crossing Sydney Harbour – Modification 2 |
| NCAs | Noise catchment areas |
| NMLs | Noise management levels |
| Non-compliance | Failure to comply with the requirements of Project approval or any applicable licence, permit or legal requirements |
| Non-conformance | Failure to conform to the requirements of Project system documentation including the CEMP or supporting documentation |
| OOHW | Out-of-Hours-Work |
| PESCP | Progressive Erosion and Sediment Control Plan |

| Abbreviations | Expanded text |
|---|---|
| Planning Approval Documents | Approval documentation as listed under MCoA A1 |
| POEO Act | Protection of the Environment Operations Act 1997(NSW) |
| Project, the | Western Harbour Tunnel project |
| REMM | Revised Environmental Management Measures |
| Roads and Maritime | Roads and Maritime Services (now Transport for New South Wales) |
| RtS | Response to Submissions Report |
| SAMs | Sensitive Area Maps |
| SSWMP | Soil and Surface Water Management Sub-plan |
| SWMS | Safe Work Method Statement |
| TfNSW | Transport for New South Wales (formerly Roads and Maritime) |
| TGS | Traffic Guidance Schemes (previously known as Traffic Control Plans or TCPs) |
| TMPs | Traffic Management Plans |
| VMPs | Vehicle Movement Plans |
| WFU | Warringah Freeway Upgrade |
| WHT | Western Harbour Tunnel |

# 1 Introduction

## 1.1 Context

This Ancillary Site Establishment Management Plan (ASEMP or Plan) has been prepared for the Western Harbour Tunnel (WHT) (the Project) component of the Western Harbour Tunnel and Warringah Freeway Upgrade project (SSI #8863).

This ASEMP has been prepared to address the relevant requirements associated with the establishment of surface base construction ancillary facilities as required under the Minister's Conditions of Approval (MCoA) A17.

This Plan describes how the Contractor proposes to manage potential environmental impacts during the establishment of Glebe Island (WHT3) construction ancillary facility. The management of environmental aspects during the operation and use of the site is addressed through the Construction Environmental Management Plan (CEMP), along with its associated Sub-plans and monitoring programs.

## 1.2 Background and project description

The Western Harbour Tunnel and Warringah Freeway Upgrade project comprises a new motorway tunnel connection across Sydney Harbour, and an upgrade of the Warringah Freeway to integrate the new motorway infrastructure with the existing road network.

The Project will connect the approved M4-M5 Link in Rozelle to the Warringah Freeway at North Sydney/Cammeray. The Project will traverse from Rozelle to Cammeray, comprising twin 6.5-kilometre bored/excavated tunnel, supported by a number of surface based ancillary facilities.

The Environmental Impact Statement (EIS) was prepared to assess the impacts of construction and operation of the Western Harbour Tunnel and Warringah Freeway Upgrade project. As part of the EIS development, a detailed assessment of the construction methodology including the surface based construction support sites was prepared and provided in Chapter 6 (Construction work). Various specialist papers associated with a variety of environmental aspects were prepared to support the EIS.

The Response to Submissions Report (RtS) was prepared in response to submissions received on the EIS. The RtS includes clarifications as well as further detail relating to management of surface based ancillary facilities. The EIS environmental management measures were revised and included in Part D of the RtS.

The Western Harbour Tunnel and Warringah Freeway Upgrade project was declared to be Critical State Significant Infrastructure (CSSI) by the Minister for Planning and Public Space (the Minister) on 9 November 2020 and approved by the Minister on 21 January 2021.

The construction methodology of the project has changed and subsequently a modification to the project approval is required. The Western Harbour Tunnel and Warringah Freeway Upgrade TBM solution of crossing Sydney Harbour – Modification 2 (MOD2) application proposes to modify the construction methodology across Sydney Harbour from an immersed tube tunnel (IMT) design with transition structures at both ends of the harbour crossing, to a tunnel boring machine (TBM) methodology and to include an additional construction ancillary facility at Emu Plains. MOD2 was lodged on 14 July 2023. The environmental management measures in the RtS report were revised and included in Appendix B2 of the MOD2 report. A Response to Submissions Report dated October 2023 (the MOD2 RtS) was prepared in response to submissions received on the MOD2 application. The MOD2 was approved by the Planning Secretary on 29 January 2024.

The Infrastructure Approval Condition A16 allows for the establishment and use of ancillary facilities that are not identified by description and location in the EIS provided the requirements outlined in Condition A16 are met. The Project has undertaken an assessment against Condition

A16, and it was identified that Glebe Island Area 2 meets the requirements outlined in Condition A16. The assessment was issued to the Environmental Representative for information on the 18 February 2025. The proposed activities for establishment and use of Glebe Island Area 2 are outlined in Table 1-1. Figure 1.1 shows the indicative footprint of Glebe Island Area 2.

## 1.3 Scope and staging

The scope of this ASEMP is to describe how ACCIONA will manage environmental impacts during the establishment works for Glebe Island (WHT3) construction ancillary facility.

As described in Transport for New South Wales (TfNSW) Staging Report, this Project will be managed in stages with the CEMP. ACCIONA are responsible for the following stages below.

**Stage 3B – WHT Northern Tunnelling and Integration works**

- Excavation of twin mainline tunnels about 2.5 kilometres long and each accommodating three lanes of traffic in each direction, connecting portals adjacent to the Cammeray Golf Course to the Harbour Crossing section of the tunnel at Berrys Bay.
- Excavation of Falcon Street off-ramp tunnel.
- Excavation of Berry Street on-ramp tunnel.
- Cut and cover infrastructure surface construction at the Ridge Street North construction support site (WHT9), Berry Street and the Warringah Freeway portals.
- Integration works including Mechanical and Electrical fit out for the Southern and Northern tunnelling sections, paving, surface connections, ventilation cavern fitout, integration and fitout of the Motorway Operation Centre and Motorway Control Centre
- Establishment and operation of Glebe Island (WHT3 – southern portion. The northern portion of WHT3 as described in the EIS will not be used); Ridge Street North (WHT9), and Cammeray Golf Course (WHT10) construction support sites.
- Operation of the City West Link Portal tunnelling support site (WHT12) after the completion of Stage 3A.
- Installation of acoustic structures.
- Utilities connections including but not limited to power, potable water, sewerage.
- Carrying out of surveys, test drilling, test excavations, geotechnical or contamination investigations or other tests or surveys, sampling or investigation.
- Establishment and operation of Berry Street (WHT8) construction ancillary facility.

**Stage 3C – WHT Sydney Harbour Crossing**

- Excavation of about 1.8 km of twin mainline tunnels using Tunnel Boring Machine (TBM) methodology.
- Construction of launch chambers beneath Birchgrove, and receival chambers and burial beneath the Waverton Peninsula.
- Establishment and operation of an underground slurry treatment plant within an existing ventilation cavern (constructed by the Stage 3A contractor).
- Establishment and operation of a Water Treatment Plant.
- Establishment and operation of an underground grout batching plant.
- Access and egress via City West Link Portal (WHT12) for:
    - Spoil removal.
    - Materials and equipment delivery, including concrete tunnel segments and box culverts.

- Use of Ridge Street North (WHT9) as a tunnelling support site, including the construction of an acoustic shed.
- Construction and operation of an additional construction ancillary facility at Emu Plains (WHT13), primarily for the prefabrication and storage of tunnel lining segments, box culverts and other pre-cast concrete elements.
- Design and construction of Berrys Bay foreshore park

Requirements triggered by the scope of works are identified Table 3-1 and Appendix A.

For more details on staging refer to the Staging Report, which has been prepared in accordance with MCoA A10.

## 1.4 Site Description – Glebe Island (WHT3)

A description of the key features of Glebe Island (WHT3) construction ancillary facility is provided in Table 1-1 and the location is shown in Figure 1-1 respectively.

Table 1-1: Key features of the Glebe Island (WHT3) construction ancillary facility

| Key features | Summary |
|---|---|
| Site area | Total area – approximately 54,700m$^2$<br>• Glebe Island (WHT3) construction ancillary facility – approximately 47,500 m2<br>• Glebe Island (WHT3) Area 2 – approximately 7,200m$^2$ |
| Site description | The Glebe Island construction support site (WHT3) identified in the Project EIS included two sites – one on the northern and one on the southern side of White Bay. The northern portion next to the White Bay Cruise Terminal will no longer be required by the Project and as such is not addressed in this ASEMP.<br>The approved southern portion of the construction support site is still required by the Project and is the focus of this ASEMP. In general, the Glebe Island site (WHT3) would be used for construction staging, logistics, storage and transport of major plant and equipment to support TBM tunnelling. Located in White Bay at Rozelle, the site is bound by Jones Bay/Johnstons Bay to the north and east, The Western Distributor and Rozelle Bay/Blackwattle Bay to the south and industrial land use to the west.<br>The construction support site is currently completed hardstand and operates as a port facility.<br>Glebe Island Area 2 construction ancillary facility is located immediately adjacent to the eastern boundary of Glebe Island (WHT3) construction ancillary facility. Refer to Figure 1-1. Area 2 has been assessed against the requirements of CoA A16 to ensure that the addition of the area is consistent with the Instrument of Approval. |
| Key establishment activities | Key activities required to establish the Glebe Island (WHT3) construction ancillary facility includes:<br>• demolition of several structures within the boundary of the construction support site. Some structures to be retained as outlined in Figure 1-1<br>• laydown and storage of material and equipment |

| Key features | Summary |
|---|---|
| | • establishment of internal access roads<br>• installation of construction site facilities (such as construction site office, amenities and ablution) and supporting infrastructure (such as site gates, first aid hut, carpark and shuttle bus bay, and utility connections)<br>• undertake geotechnical investigation and installation of instrumentation<br>• installation of site environmental management controls (including site fencing, and erosion and sediment controls).<br>Key activities required to establish the Glebe Island (WHT3) Area 2 includes:<br>• installation of site environmental management controls (including site fencing, and erosion and sediment controls). |
| Key operational activities – managed under the CEMP | Key activities during the operation of Glebe Island (WHT3) construction ancillary facility and Glebe Island (WHT3) Area 2 includes:<br>• Storage and transport of major plant and equipment to support TBM tunnelling<br>• Receival of TBM components, plants and equipment via ship<br>• Short term storage and transport of excavated spoil material, including excavated tunnel material where direct transport from the slurry treatment plant site at tunnel portals is not possible.<br>• Laydown and storage of pre-cast segments and culverts for contingency<br>• On-site parking |
| Hours of construction | The majority of the site establishment activities at this site will be carried out during standard construction hours (7am to 6pm Monday to Friday, 8am to 6pm Saturday (with Highly Noise Intensive Works finishing at 1pm) and no construction works on Sundays or public holidays).<br>There may be time where out-of-hours works would be required to facility delivery such as plant, machinery and equipment. In the event out-of-hours works is required, the relevant procedures will be followed.<br>As described in MOD2, the use of the Glebe Island (WHT3) site will occur 24 hours, 7 days per week. |
| Access arrangements | Access into the site will be via Sommerville Road and James Craig Road, Rozelle |
| Duration | March 2024 until construction completion (anticipated 2026) |

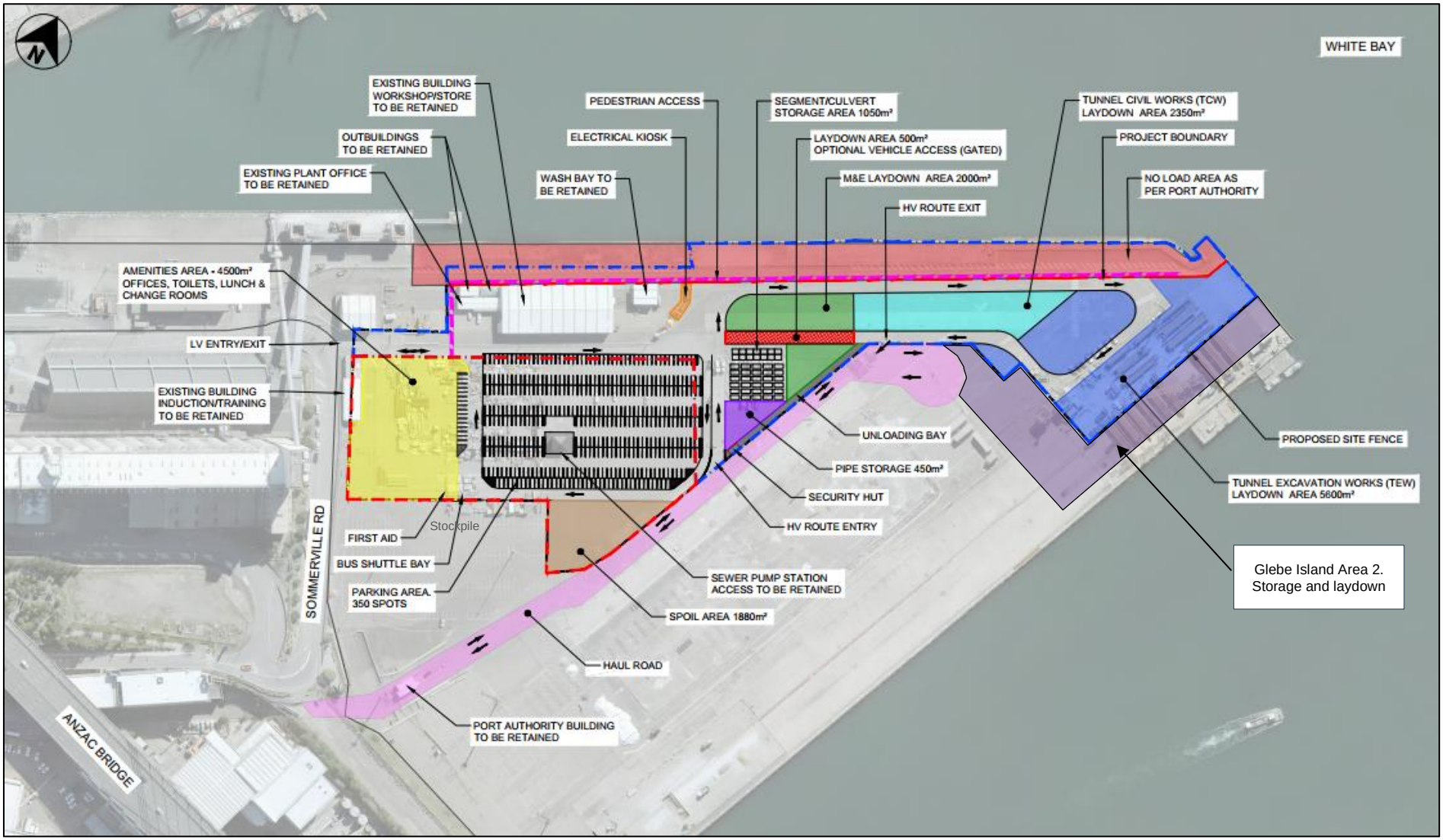


Figure 1-1: Indicative site layout of Glebe Island (WHT3) construction ancillary facility

## 1.5 Interface with other planning documents

This Plan is a component of a suite of documents, prepared as part of the implementation of the Project's Environmental Management System. The Environmental Management System overview is described in Section 4.1 of the CEMP.

The key documents that interface with this Plan are outlined in Table 1-2.

Table 1-2: Key interfaces with this ASEMP

| Plan | Interface |
|---|---|
| Community Communication Strategy (CCS) and Complaints Management System (CMS) | • Describes how community and stakeholder engagement will be managed and facilitates communication about construction of the project with the community as well as relevant councils and agencies<br>▪ Specifies the process for receiving, addressing, resolving and recording complaints as well as outlines the process required in the escalation of a complaint to an independent mediator |
| Construction Environmental Management Plan | • Provides details on overall Project staging, interactions between Sub-plans of the CEMP, and management of cumulative impacts<br>• Provides a framework for how the construction works will be managed<br>• Identifies procedures, processes and management systems that will apply in relation to construction activities<br>• Provides environmental planning and controls for construction including environmental risk assessment, regulatory requirements, protection measures and sustainability requirements |
| Construction Environmental Management Sub-plans (including Monitoring Programs) | • Identifies the specific environmental controls that will be implemented during construction<br>• Details the environmental requirements in accordance with the CoAs, REMMs, and TfNSW plans and procedure, specifications and requirements<br>• Describes monitoring required during construction |

# 2 Purpose and objectives

## 2.1 Purpose

The purpose of this ASEMP is to describe how ACCIONA will manage environmental impacts during site establishment works associated with the Glebe Island (WHT3) construction ancillary facility. The Glebe Island (WHT3) construction ancillary facility will be established and used by Western Harbour Tunnel portion of the Project as part of Stage 3B works.

This ASEMP has been prepared to address the applicable statutory requirements and aims to ensure that the commitments in the planning approval are met with regard to environmental impacts during the establishment of the site.

## 2.2 Objectives

Environmental objectives and targets for the Project are based on the project performance outcomes outlined in Chapter 28 (Synthesis of the environmental impact statement), Section 28.6 of the EIS. Objectives and Targets related to specific Environmental management sub-plans are incorporated within their relevant Sub-plans.

Table 2-1: Environmental objectives

| Performance outcome | How performance will be addressed during Site Establishment | Records |
|---|---|---|
| **Consultation**<br>The project is developed with meaningful and effective engagement during project design and delivery. | • ACCIONA would respond to complaints in a timely and appropriate manner, to ensure all stakeholders' concerns are managed effectively and promptly. | Community Consultation Strategy (CCS)<br>Complaints Register<br>Audits |
| **Transport and traffic**<br>• Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts<br>• The safety of transport system customers is maintained<br>• Impacts on network capacity and the level of service are effectively managed<br>• Works are compatible with existing infrastructure and future transport corridors. | • Minimise impacts to local streets from loss of parking, road closures and heavy vehicle movements<br>• Minimise impacts to road network efficiency<br>• Enable access to properties to be maintained | Heavy vehicle routes<br>Complaints register<br>Weekly traffic inspection record |
| **Noise and vibration**<br>• Noise and vibration are effectively managed to minimise adverse impacts on acoustic amenity. | • Include effective management of noise and vibration in accordance with relevant guidelines<br>• Minimise impacts to the local community | Environmental inspection records<br>Construction Noise and Vibration Impact Statements<br>Monitoring records |

| Performance outcome | How performance will be addressed during Site Establishment | Records |
|---|---|---|
| | ◦ Control noise and vibration at the source<br>◦ Control noise and vibration on the source to receiver transmission path<br>◦ Implement practicable and reasonable measures to minimise the noise and vibration impacts of site establishment activities on local sensitive receivers<br>◦ Undertake training, inspections, auditing and recording | Complaints register |
| **Air quality**<br>• The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust to minimise risks to human health and the environment to the greatest extent | • Provide effective management of dust and other emissions during site establishment | Environmental inspection records<br>Daily Work<br>Diary Environmental monitoring results and reporting<br>Sensitive Area Plans |

## 2.3 Targets

The following targets have been established for the management of the Glebe Island (WHT3) site during site establishment activities:

- Ensure full compliance with the relevant legislative requirements, MCoA and the Planning Approval Documents.
- No regulatory infringements (Penalty Infringement Notices or prosecutions).
- Inspection checklist on time and close out rate within agreed timeframes.
- Implement, and continually improve, an EMS that meets the requirements of AS/NZS ISO 14001.
- Regularly identify and implement opportunities for improvement.
- Provide training that communicates key environmental issues and management controls.

# 3 Environmental Requirements

## 3.1 Regulatory requirements

### 3.1.1 Legislation

A register of legal and other requirements for the Project is contained in Appendix A1 of the CEMP. The register will be maintained by the ACCIONA Environment Manager. This register is a live document and will reviewed as part of Management Reviews (Section 5.17 of the CEMP). Should updates to the ASEMP be required following Management Reviews, the most recent version of this register will be included. Any updates to the legal requirements register will be communicated to the wider project team, including subcontractors where necessary.

### 3.1.2 Additional approvals, licences, permits and requirements

A number of approvals, permits and licences have and/or will be obtained for the Project. The EIS recognised that the following approvals and licences are required for the Project:

- An environment protection licence for road construction and road tunnel emissions under Chapter 3 of the *Protection of the Environment Operations Act 1997* (NSW). In accordance with section 5.24 of the *Environmental Planning and Assessment Act 1979* (NSW), such a licence cannot be refused for an approved project and is to be substantially consistent with any approval under Division 5.2.

All necessary licences, permits and approvals required for the development of the Project will be obtained and maintained as required throughout the life of the Project. No condition of the Project Approval removes the obligation for TfNSW or ACCIONA to obtain, renew or comply with such necessary licences, permits or approvals except as provided under Section 5.23 of the EP&A Act.

Certain port activities such as unloading from ships will be carried out under the authorisation of Port Authority and their relevant license.

## 3.2 Minister's Conditions of Approval

The primary MCoA relevant to the preparation of this Plan are listed in Table 3-1 below.

Secondary MCoA relevant to this Plan and where they are addressed within the plan are provided in Appendix B.

Table 3-1: Primary Minister's Conditions of Approval relevant to the ASEMP

| MCoA No. | Condition Requirements | Document Reference | How Addressed |
|---|---|---|---|
| A5 | Where the terms of this approval require a document or monitoring program to be prepared or a review to be undertaken in consultation with identified parties, evidence of the consultation undertaken must be submitted to the Planning Secretary with the document. The evidence must include:<br>(a) documentation of the engagement with the party identified in the condition of approval that has | Section 4.2 | Evidence of consultation will be submitted to the Planning Secretary along with this document. |

| MCoA No. | Condition Requirements | Document Reference | How Addressed |
|---|---|---|---|
| | occurred before submitting the document for approval;<br>(b) a log of the dates of engagement or attempted engagement with the identified party;<br>(c) documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations;<br>(d) outline of the issues raised by the identified party and how they have been addressed; and<br>(e) a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed. | | |
| A17 | Before establishment of any construction ancillary facility (excluding minor construction ancillary facilities determined by the ER to have minimal environmental impact and those established under Condition A19), the Proponent must prepare an Ancillary Site Establishment Management Plan which outlines the environmental management practices and procedures to be implemented for the establishment of the construction ancillary facilities. The Ancillary Site Establishment Management Plan must be prepared in consultation with the relevant council and government agencies. The Plan must be submitted to the Planning Secretary for approval one month before the establishment of any construction ancillary facilities. The Ancillary Site Establishment Management Plan must detail the management of the construction ancillary facilities and include: | This Plan Section 4.2 | This ASEMP describe ACCIONA's environmental management practices and procedures to be implemented for the establishment of construction ancillary facility.<br>This ASEMP will be prepared in consultation with the relevant council and government agencies.<br>This ASEMP will be submitted to the ER and then to the Planning Secretary for approval one month before the commencement of site establishment works. |
| | (a) a description of activities to be undertaken during establishment of the construction ancillary facility (including scheduling and duration of work to be undertaken at the site); | Section 1.4 | A description of the key activities occurring at Glebe Island (WHT3) construction ancillary facility is provided in Section 1.4. |

| MCoA No. | Condition Requirements | Document Reference | How Addressed |
|---|---|---|---|
| | (b) figures illustrating the proposed operational site layout and the location of the closest sensitive land user(s); | Figure 1-1<br>Figure 5-2 | Figure 1-1 shows the indicative site layout of Glebe Island (WHT3) construction ancillary facility. Figure 5-2 shows the surrounding sensitive receivers. |
| | (c) a program for ongoing analysis of the key environmental risks arising from the site establishment activities described in subsection (a) of this condition, including an initial risk assessment undertaken prior to the commencement of site establishment work; | Appendix A<br>Section 8.1 | An analysis of the initial environmental risk is captured in the environmental risk register provided in Appendix A.<br>Section 8.1 details the management review for ongoing analysis of environmental risk. |
| | (d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to:<br>(i) meet the performance outcomes stated in the documents listed in Condition A1, and<br>(ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and | Section 6.2 | Section 6 outlines how the site establishment activities will be carried out to meet the performance outcomes outlined in Section 2.2 and manage the identified risk.<br>Relevant environmental management measures are detailed in Table 6-1 including where and how they are addressed in this Plan or other Sub-plans. |
| | (e) a program for monitoring the performance outcomes, including a program for construction noise monitoring. | Table 2-1<br>Section 7.3<br>Noise and Vibration Monitoring Program (Appendix D2 of the NVMP) | Relevant environmental monitoring, including noise monitoring to be undertaken during site establishment works are detailed in Table 7-1 and supported by the Noise and Vibration Monitoring Program (Appendix D2 of the NVMP). |
| | Nothing in this condition prevents the Proponent from preparing individual Ancillary Site Establishment Management Plans for each construction ancillary facility. | Noted | Noted |

| MCoA No. | Condition Requirements | Document Reference | How Addressed |
|---|---|---|---|
| A18 | The use of a construction ancillary facility for construction must not commence until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C4 and relevant Construction Monitoring Programs required by Condition C11 have been approved by the Planning Secretary. | Section 4.3 | The use of construction ancillary facility for construction will not commence until the CEMP required by MCoA C1, relevant CEMP Sub-plans and relevant monitoring programs have been approved by the Planning Secretary, and will be used to manage the environmental impacts during operation of the site. |
| A18A | Once an ancillary facility is no longer required for the CSSI, the land must be returned to its pre-existing or better condition within six months of the site being decommissioned or within two years of operation (whichever is the earliest), unless the land is subject to another requirement of this approval or another section of the EP&A Act. | Not applicable | This condition is not applicable to the site establishment phase of the construction ancillary facility. However, the land will be returned within 6 months of the site being decommissioned. |

## 3.3 Revised environmental management measures

There are no Revised Environmental Management Measures (REMMs), as identified in the Planning Approvals Documents outlined in MCoA A1 that relate directly to the preparation of this ASEMP.

# 4 Consultation

## 4.1 Internal consultation

The development of this ASEMP involved detailed review of the documentation by ACCIONA Environment Managers, Construction Project Managers, and the Project Director.

Following ACCIONA satisfaction of the document, the ASEMP will then be submitted to TfNSW for review prior to external consultation.

## 4.2 External consultation

This Plan will be developed and finalised in consultation with relevant councils and government agencies as required by MCoA A17. Evidence of consultation with each agency, including responses received and how any issues raised has been addressed in the development of this Plan will be provided to the Planning Secretary along with this Plan in accordance with MCoA A5.

## 4.3 Endorsement and approval

This ASEMP will require endorsement by the ER, and approval by the Planning Secretary of DPHI. As required by Condition A17 of the CoA, the ASEMP must be submitted to the Planning Secretary for approval no later than one month before the establishment of the relevant construction ancillary facility.

Following site establishment, the use of a construction ancillary facility for construction will not commence until the CEMP, relevant CEMP Sub-plans and relevant Monitoring Programs have been approved, in accordance with MCoA A18. At this time, the CEMP and relevant CEMP Sub-plans will be utilised for the management of construction.

This ASEMP, as approved by the Planning Secretary, including any minor amendments approved by the ER, must be implemented for the duration of establishing the surface base ancillary facility. The operation of the surface base ancillary facility will not commence until the relevant CEMP and sub-plans have been approved in accordance with Condition A18.

This ASEMP will be made available to all personnel and subcontractors via the Project document control management system. A copy of the ASEMP will also be placed on the Project's website.

## 4.4 Ongoing consultation

Community feedback and complaints will be managed in accordance with the Community Communication Strategy and Complaints Management System.

Ongoing consultation with the relevant Councils and other stakeholders will be undertaken regarding impacts associated with site establishment works. For complaints and enquiries about the WHT Project and its use of the Glebe Island (WHT3) site that are initially received by Port Authority, these will be passed onto Acciona in a manner consistent with the Interface Agreement so it can be addressed by TfNSW and/or Acciona in a timely and appropriate manner. Port Authority may request information from TfNSW and Acciona about the planned or actions in relation to a complaint or enquiry received in accordance with the Interface Agreement.

Information will be disseminated to the community through the following channels for project impacts or changes:

- Project website updates
- Temporary advisory signage
- Newsletters

- Leaflets and flyers to local properties affected by the works
- Project display centres and social media

# 5 Site establishment impacts

## 5.1 Traffic and transport

Appendix F (Technical working paper: Traffic and Transport) of the EIS identified site access points and vehicle routes that would be utilised during the construction of the Project. The roads (including local roads) identified in Figure 5-7 to 5-22 of Appendix F of the EIS are approved for use by heavy vehicles on the Project to directly access the construction boundary and ancillary facility. Impacts associated with the use of these roads were assessed in the EIS.

Construction vehicle will utilise James Craig and Sommerville Road, Rozelle from City-West Link to access the Glebe Island (WHT3) construction ancillary facility. Refer to Figure 5-1 below.

No construction vehicles is permitted to access the Glebe Island (WHT3) construction ancillary facility via Robert Street, Rozelle, unless required in the event of an emergency.

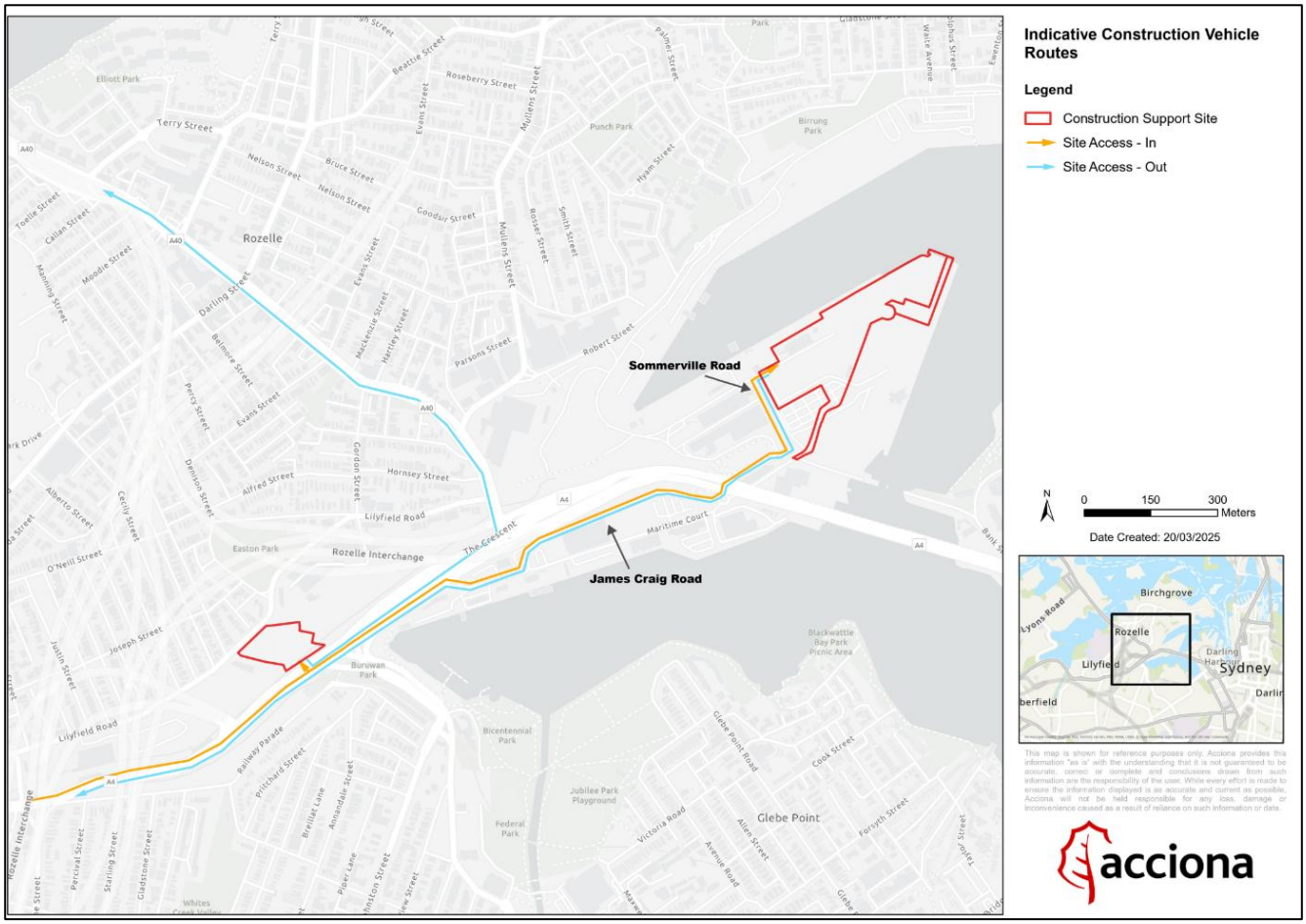


Figure 5-1: Indicative construction vehicle routes – Glebe Island (WHT3)

The proposed peak number of construction vehicles movement for the WHT3 site is provided in Table 5-1. The number within Table 5-1 are taken from the MOD2 report and shows the vehicle movements during the operational phase of the project. It is expected that construction vehicles movement during site establishment works is expected to be significantly lower than indicated in the table below.

Table 5-1: Proposed peak traffic generation during construction

| Construction ancillary facility | Project peak vehicle movement per day | | AM peak (6am to 10am) | | PM peak (3pm to 7pm) | |
|---|---|---|---|---|---|---|
| | Light | Heavy | Light | Heavy | Light | Heavy |
| Glebe Island (WHT3) | 520 | 304 | 205 | 61 | 255 | 61 |

Midblock performance of local roads (level of service (LoS)) in the areas surrounding the construction ancillary facility were modelled in the MOD2 report to understand the traffic impacts during construction. The model compared two scenarios, base case; and anticipated construction volume. The results for midblock road performance relevant to the WHT3 site is provided in Table 5-2 below.

It is anticipated that the number of construction vehicles required during the site establishment works would be considerably lower than the number of vehicles described in the MOD2 report at peak construction. The traffic impact during site establishment works is expected to be lower than the result of the modelled performance. No change to the LoS is expected during the site establishment of Glebe Island (WHT3) construction ancillary facility.

Table 5-2: Modelled performance of local road network during construction

| Modelled scenario | AM peak (8am-9am) | | PM peak (5pm-6pm) | |
|---|---|---|---|---|
| | Average delay (sec) | LoS | Average delay (sec) | LoS |
| **The Crescent/James Craig Road** | | | | |
| Base case 2027 (without construction traffic) | 53.65 | D | 26.22 | B |
| Construction 2027 (with construction traffic) | 53.45 | D | 11.19 | A |
| **The Crescent/City West Link** | | | | |
| Base case 2027 (without construction traffic) | 76.99 | F | 82.68 | F |
| Construction 2027 (with construction traffic) | 47.34 | D | 61.52 | E |

### 5.1.1 Parking

During the WHT3 site establishment phase, on-site car parking facilities will be provided at Glebe Island. No impacts to on-street parking are expected during site establishment works. It is anticipated that these on-site parking facilities will adequately meet the workforce demand.

It should be noted that a shuttle bus service is likely to be established for the City West Link (WHT12) construction support site. It is anticipated that the shuttle bus service will run from the Glebe Island (WHT3) site, where workers would park at WHT3 and be shuttled to their respective site. The Construction Parking and Access Strategy South provide further detail.

### 5.1.2 Active and public transport network

Site establishment activities are not expected to result in any additional impacts to the local active transport network, nor the public transport network (including stops and route).

## 5.2 Air quality

### 5.2.1 Dust emissions

The EIS has divided the WHT and WFU project into fives zones to assess impact to air quality. Glebe Island (WHT3) construction ancillary facility is located in Zone 3. Zone 3 is considered to be highly sensitive to dust settlement effects, highly sensitive to human health risk, and not applicable risk for ecological receivers.

The potential impacts related to management of air quality during site establishment activities include (but may not be limited to):

- Particulate matter ($PM_{2.5}$/$PM_{10}$) generation due to:
    - Operation of construction vehicles, plant and equipment

The potential effects of airborne dust during site establishment works would be temporary, relatively short in duration, and would be further minimised as a result of the proposed air quality mitigation measures. Refer to Section 6.2 for the appropriate environmental safeguards to be implemented during site establishment activities.

### 5.2.2 Greenhouse gas emissions

The use of on-site vehicles, generators and construction equipment, and the handling and on-site storage of minor quantities of fuel and other chemicals, would result in minor localised increased concentrations of airborne greenhouse gas emissions and volatile organic compounds.

The potential impacts related to management of air quality during site establishment activities include:

- Greenhouse gas emission due to:
    - Operation of construction vehicles, plant and equipment
    - Storage of fuel and other chemicals

Minor emissions from these sources would be localised and would be adequately managed with standard environmental management measures.

## 5.3 Noise and vibration

The EIS has established the location and type of sensitive receivers, then grouped the receivers into noise catchment areas (NCAs). The NCAs in the vicinity of the tunnel and surrounding the Glebe Island (WHT3) site are shown in Figure 5-2.

Noise monitoring was carried out during the preparation of the Project EIS between June 2017 and November 2017 to establish the existing background noise levels within each of the NCAs. Noise management levels (NMLs) were then determined for each NCA. Table 5-3 presents the NMLs for each NCAs surrounding the Glebe Island (WHT3) construction ancillary facility.

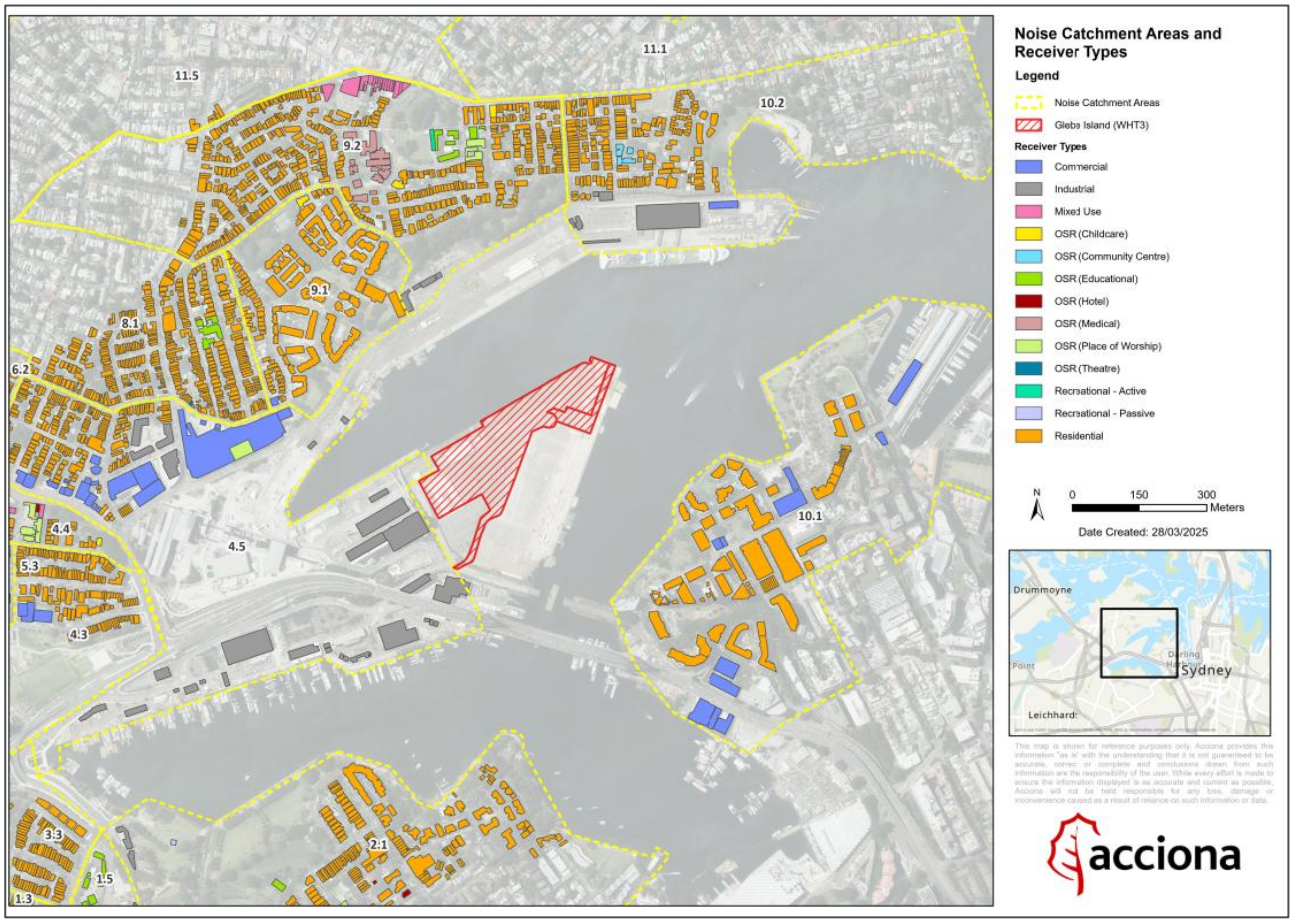


Figure 5-2: NCAs surrounding Glebe Island (WHT3) construction ancillary facility

Table 5-3: NMLs for NCA near Glebe Island (WHT3) construction ancillary facility

| NCA ID | Reference suburb (-sub area) | Noise management level (NML) LAeq(15min) | | | | Screening level |
|---|---|---|---|---|---|---|
| | | Standard Hours (RBL + 10 dB) | Outside standard hours: Out of Hours Work (OOHW) (RBL + 5 dB) | | | LAmax (RBL + 15 dB |
| | | Day | Day | Evening | Night | Night |
| 2.1 | Glebe | 61 | 56 | 56 | 50 | 60 |
| 4.5 | Rozelle | 62 | 57 | 57 | 50 | 60 |
| 8.1 | Balmain | 52 | 47 | 47 | 43 | 53 |
| 9.1 | Balmain | 59 | 54 | 54 | 51 | 61 |
| 9.2 | Balmain | 59 | 54 | 54 | 51 | 61 |
| 10.1 | Pyrmont | 58 | 53 | 50 | 49 | 59 |
| 10.2 | Balmain East | 58 | 53 | 50 | 49 | 59 |

Site establishment activities which are proposed to take place during the daytime period were assessed in Section 5.4 of the EIS Appendix G Noise and Vibration Technical Paper. It should be noted that the assessment in the EIS considered the use of the northern portion of the Glebe

Island (WHT3) site. Furthermore, MOD2 doesn't provide a noise assessment for site establishment activities (i.e. without the northern portion). MOD2 only assessed the laydown and storage of segments, shift change and parking.

The EIS assessment indicated the following:

- No receiver is expected to be highly noise affected (i.e. >75 dB(A))
- up to 90 residential receiver buildings, which are located in NCAs 8.1, 9.1, 9.2 and 10.2, are expected to be noise affected (i.e. > NML)
- three commercial receiver buildings in NCA 9.2 are predicted to be noise affected (up to 5 dB(A) above NML)
- one childcare receiver in NCA 9.2 is predicted to be noise affected (up to 2 dB(A) above NML)
- one educational receiver in NCA 9.2 is predicted to be noise affected (up to 5 dB(A) above NML)
- one place of worship in NCA 9.2 is predicted to be noise affected (up to 4 dB(A) above NML)
- one other sensitive receiver in NCA 9.2 is predicted to be noise affected (up to 4 dB(A) above NML).

However, the predicted noise impacts for NCA 8.1, 9.1, 9.2 and 10.2, all of which are identified to be noise affected in the points above, are expected to experience a lower noise impact than described in the EIS Appendix G Noise and Vibration Technical Paper, given that the northern portion of the Glebe Island (WHT3) site is no longer required for the project. In addition, the predicted noise impacts to receivers could be managed during utility modification works through standard noise management measures, such as choice of plant and equipment and construction methodology.

The MOD2 assessment has assessed the following activities to be taken 24 hours, 7 days per week at the Glebe Island (WHT3) site:

- Laydown and storage of pre-cast segments for contingency. Most of the segments will be transported directly into the tunnel from the pre-cast facility, however, if this supply is interrupted, segments will be sourced from the contingency stockpile at Glebe Island
- Shift change and worker transport to and from the site
- Parking and amenities for workers

The noise assessment in the MOD2 determined the proposed activities at the Glebe Island (WHT3) site are below NMLs and the sleep disturbance screening criteria.

Furthermore, a noise assessment has been undertaken for Glebe Island (WHT3) Area 2 as part of the Glebe Island Construction Noise and Vibration Impact Statement (CNVIS). The assessment predicted that noise levels for construction activities within the proposed Glebe Island Area 2 will meet the NML criteria for the nearest receiver locations, therefore no noise impacts is predicted during the use of Glebe Island Area 2.

There are no vibration impacts from proposed activities undertaken in Glebe Island Area 2, in addition vibration is not perceptible at any residential receiver locations due to the large distances to the works and the separation by White Bay and Johnston Bay.

The potential for noise and vibration impacts on sensitive receivers or structures as a result of site establishment activities will depend on a number of factors, including:

- The type and number of plant and equipment in use
- Proximity to sensitive receivers

- Topography and other physical barriers
- Hours / duration of site establishment works
- Ground condition (bare ground as compared to hardstand)
- The condition of sensitive receivers
- Proximity of heavy traffic areas such as the highway
- Presence of existing background noise (e.g. from heavy traffic areas).

Noting that there is sensitive load area on the northern portion the Glebe Island (WHT3) site. This area shown in Figure 5-3 below is a 'No Load Area'. No load is to be place or temporary stored within this area. Vibration and ground monitoring equipment will be installed to measure ground movements of the 'No Load Area'. A monitoring report will be prepared and provided to Port Authority and other relevant stakeholders detailing the result of the Vibration and ground monitoring.

Refer to Section 6.2 for the appropriate environmental safeguards to be implemented during site establishment activities.

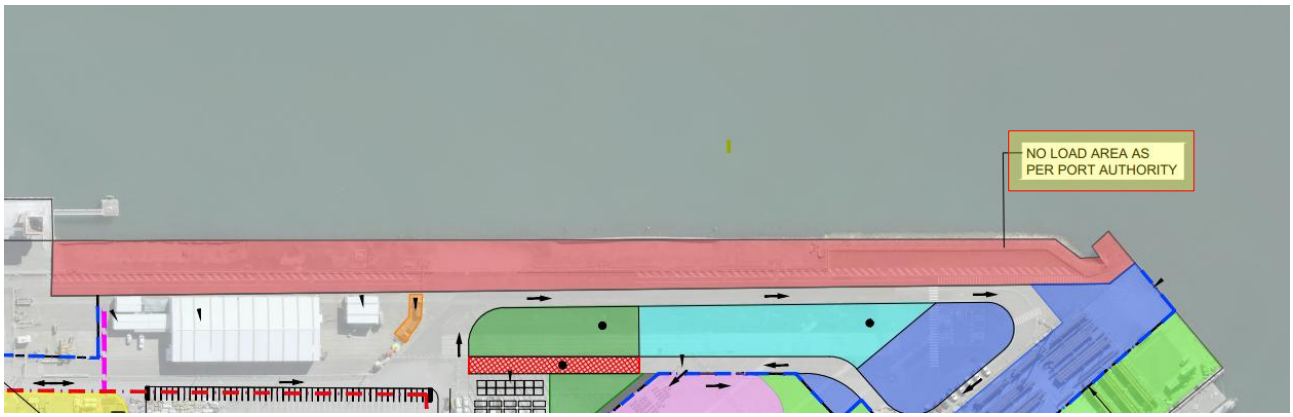


Figure 5-3: No Load Area as per Lease Agreement with Port Authority

## 5.4 Geology, soil and surface water

The EIS detailed the terrain along the project corridor is at an elevation of around 10m Australian Height Datum (AHD) at its southern extent at Rozelle and gently undulates towards Birchgrove. Once the project crosses Sydney Harbour the topography has a moderate incline towards North Sydney, reaching an elevation of around 90m AHD at the Pacific Highway, North Sydney.

Glebe Island (WHT3) site is situated on disturbed landscape. The original soil has been removed, greatly disturbed, or buried. Most of these areas have been levelled to slopes of less than five per cent. Fill material includes soil, rock, building and waste material. The original vegetation has been completely cleared. The North Sydney LEP 2013 identified the site as disturbed terrain in the acid sulfate soils maps.

Minor surface trenching would be involved as part of site establishment works for utility connection works. The temporary exposure of soil has the potential be transported via surface water runoff or wind from the site into surrounding waterways via stormwater runoff. However, surface trenching works are temporary and would occur over a relatively short duration. As such, mitigation is considered straightforward because erosion and sedimentation measures are routinely employed as 'good practice' at most construction sites and areas of surface disturbance.

Refer to Section 6.2 for the appropriate environmental safeguards to be implemented during site establishment activities.

## 5.5 Groundwater

Section 16.3.4 of the Project EIS noted that across the study area the groundwater levels are typically deeper beneath hills and shallowest beneath creeks and gullies.

The regional water table across the study area typically mimics topography and flows from areas of high topographic relief to areas of low topographic relief. The depth of the water table is highly variable and can range from close to ground surface in low lying areas to 100m below ground level beneath elevated ridgelines. Localised water tables may also occur due to the highly stratified nature of the Hawkesbury Sandstone.

The site footprint of the Glebe Island (WHT3) construction ancillary facility is existing hardstand and would limit interaction with groundwater. Any exposure of soils would be limited to minor surface trenching during utility works at relatively shallow depths. As such, there are no anticipated impacts to groundwater.

## 5.6 Flooding and drainage

Table 18-2 of the EIS assessed the potential flood risk at construction ancillary facilities during the Project. Refer to Table 5-4 for an extract of the table for Glebe Island (WHT3) construction ancillary facility. Flood risk to the Glebe Island (WHT3) site from site establishment works are not anticipated.

Table 5-4: Flood risks and potential impacts

| Construction ancillary facility | Description of existing flood behaviour | Potential impacts of construction activities on flood behaviour |
|---|---|---|
| Glebe Island (WHT3) | • Flooding of the White Bay construction support site (WHT3) is principally limited to elevated water levels in Sydney Harbour<br>• Wave action due to coincident high winds could increase flooding conditions at the construction support site during periods of elevated water levels in Sydney Harbour. | • Activities within the confines of the White Bay construction support site (WHT3) would not have an impact on water levels in Sydney Harbour. |

## 5.7 Contamination

Chapter 16 of the EIS identified potential contamination issues at the surface-based construction ancillary facilities. The EIS states that based on the assessment of known and potentially contaminated sites, most sites within and/or adjacent to the project area, including Glebe Island (WHT3) construction ancillary facility, are considered to represent a low contamination risk and are not considered further in the EIS.

In accordance with MCoA E115, a detailed site investigation must be undertaken prior to the commencement of any work that would result in ground disturbance of moderate to high-risk contaminated sites. As such, as a detailed site investigation is not required for the Glebe Island (WHT3) construction ancillary facility.

Environmental safeguards in Section 6.2 will be implemented during site establishment activities to manage any unexpected contamination finds or contamination caused by site establishment works.

## 5.8 Visual amenity

Due to the industrial nature of the existing site and the congruous construction activities proposed, there are not expected to be adverse impacts during construction. Note, MOD2 did not reassess land use and property impacts for Glebe Island.

A summary of the landscape character impacts during construction at White Bay construction support site (WHT3) is provided in Table 22-17 of the EIS. A moderate to low visual impact is anticipated for all viewpoints. This is due to a potential increase in the number of truck movements visible, although this is in keeping with the existing busy local road network. The overall impact rating is moderate to low during day-time hours.

## 5.9 Land use and property

Chapter 20 of the EIS identifies and considers the potential impacts of existing land use and property surrounding the project. Note, MOD2 did not reassess land use and property impacts for Glebe Island.

Land use impacts at the Glebe Island (WHT3) construction support site would be negligible as the surrounding precinct currently provides for a range of maritime and industrial activities. The temporary occupation of this land would not affect the existing land use zoning arrangement or development controls that are applicable to the site. The temporary establishment of a construction support site during construction of the project would not introduce long term land use impacts that would preclude its future development as part of the Bays Precinct Urban Transformation Program.

The WHT3 site has been approved for temporary use during the construction of the Project. The site will be returned to an equivalent state at the completion of construction of the Project and/or in line with MCoA A18A.

## 5.10 Social and economic

Site establishment works have the potential to cause localised social and economic impacts. Impacts may be experienced by the public due to the presence of construction infrastructure, increased traffic, (including increased heavy vehicle movements) and noise and dust. In addition, short term utility disruptions may be necessary to connect utilities to the ancillary facilities. However, the impacts from site establishment works are relatively short in duration and impacts are expected to be low to negligible compared to the construction phase.

## 5.11 Biodiversity

Terrestrial fauna and flora assessment was undertaken as part of Chapter 19 of the EIS. Note, the MOD2 did not reassess biodiversity impacts for Glebe Island. The EIS identified the absence of vegetation (terrestrial flora), threatened ecological community within or next to the Glebe Island (WHT3) construction ancillary facility, as such the site have not been considered further with regards to impacts to terrestrial flora.

While threatened fauna species (birds) and other migratory birds were recorded flying over the construction footprint of the Project during the EIS. Impacts to threatened fauna species (birds) and other migratory birds are not expected during the site establishment phase of Glebe Island (WHT3) construction ancillary facility.

## 5.12 Non-Aboriginal heritage

The EIS did identify one known non-Aboriginal heritage sites within the vicinity of Glebe Island (WHT3) construction ancillary facility. The Glebe Island Bridge, Pyrmont located approximately 200m south of the site boundary is a State heritage significance item. Refer to Figure 5-4 below.

The EIS established a negligible impact rating, as works would remain outside the heritage boundary.

Non-Aboriginal heritage items, identified within the Port Authority Section 170 register, that are located within 100m of the Glebe Island (WHT3) construction ancillary facility are shown in Table 5-5.

Table 5-5: Non-Aboriginal heritage items (Port Authority Section 170)

| Heritage items | SHI ID number | Significance |
|---|---|---|
| Glebe Island Bridge approach | 4560015 | State |
| Glebe Island Dyke Exposures | 4560056 | Local |
| Glebe Island Silos | 4560016 | State |
| Glebe Island Sandstone Quarry Sample | 4560014 | Local |
| Glebe Island Plaque - Opening of Container Terminal | 4560013 | Local |
| Glebe Island World War II Monument | 4560012 | Local |

The ancillary facility is located within highly disturbed urbanised areas and as works would remain outside the heritage items boundary, it is therefore unlikely for site establishment works to impact on any if the identified non-Aboriginal heritage items.

Environmental safeguards in Section 6.2 will be implemented during site establishment activities to manage previously unidentified non-Aboriginal heritage items.

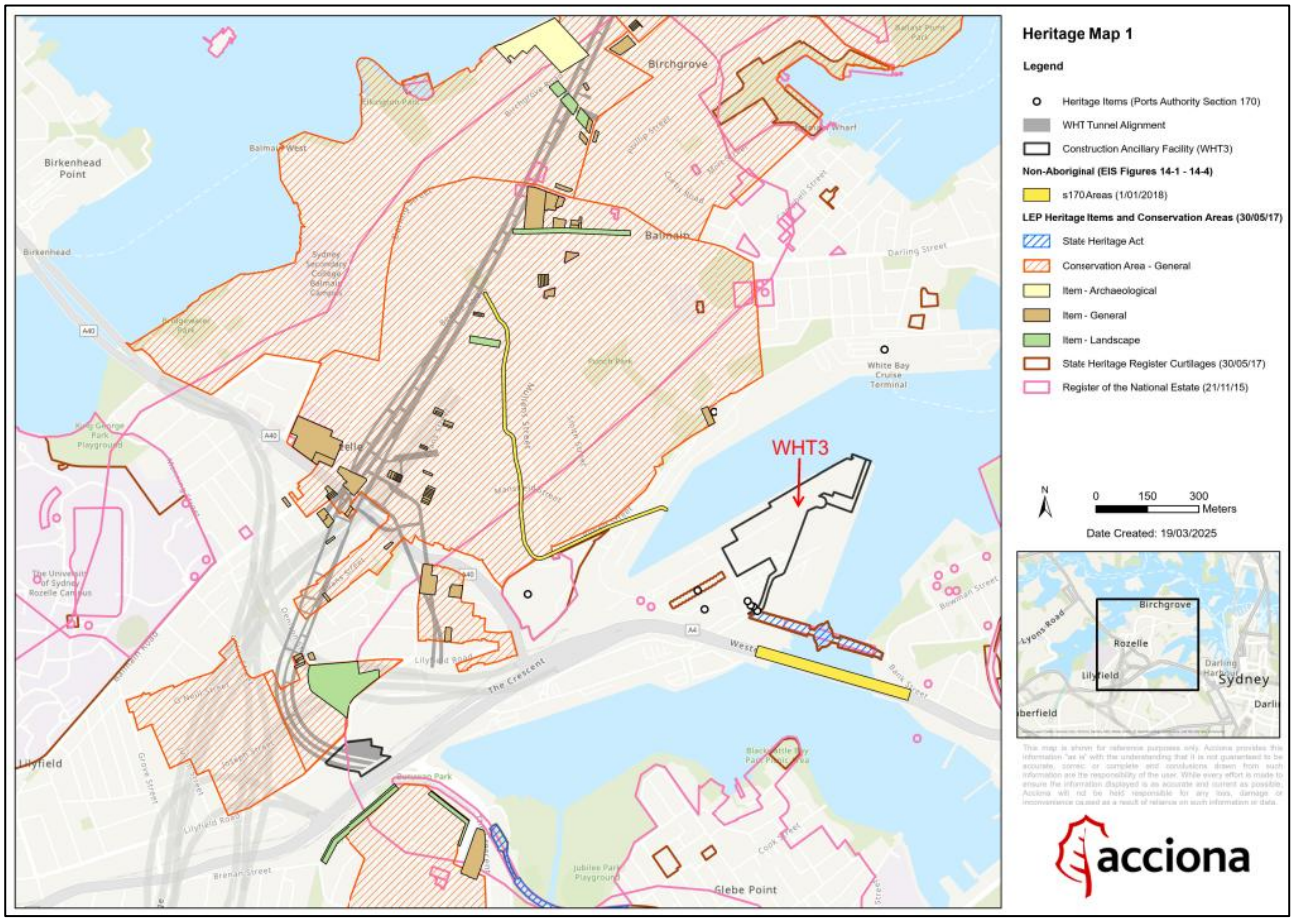


Figure 5-4: Non-Aboriginal heritage items near Glebe Island (WHT3) site

## 5.13 Aboriginal heritage

The EIS did not identify any known Aboriginal heritage sites within the vicinity of Glebe Island (WHT3) construction ancillary facility. Note, the MOD2 did not reassess Aboriginal Heritage impacts for Glebe Island. The ancillary facility is located within highly disturbed urbanised areas, and it is therefore unlikely the site establishment works will impact on Aboriginal heritage.

Environmental safeguards in Section 6.2 will be implemented during site establishment activities to manage previously unidentified non-Aboriginal heritage items.

## 5.14 Resource and waste

Resources used during site establishment will predominately be construction materials (concrete, asphalt, etc), fuel and oil, water and electricity. The waste generated is expected to be mainly unsuitable excavated fill material that is unsuitable for reuse as engineering fill material, and construction waste.

## 5.15 Climate change risk and adaption

As identified in the EIS, potential climate change risks to project construction include an increase in the intensity and frequency of extreme rainfall and storm events, which could lead to localised flooding of ancillary facilities and unsuitable conditions for undertaking site establishment works. An increase in frequency and intensity of extreme heat events could also occur, resulting in increased work health and safety risks and potential delays to project program. Note, MOD2 did not reassess land use and property impacts for Glebe Island.

## 5.16 Hazard and risk

Potential hazard and risk impacts during site establishment works would predominately derive from contaminated material such as accidental spills of fuels and/or chemicals which could result in contamination of soils and/or waterways, mismanagement of existing contaminated material where present and emission of gases from contaminated material.

# 6 Environmental Management

## 6.1 Site establishment risk assessment

An initial environmental risk analysis has been undertaken for site establishment works for Glebe Island (WHT3) construction ancillary facility and provided in the form of an environmental risk register as shown in Appendix A.

The environmental risk register identifies:

- the construction aspects relevant to site establishment works
- the associated potential environmental impacts and a risk rating for those impacts
- the applicable management measures. Management measures may include physical controls, procedures, forms, checklists, monitoring requirements and permits.
- a revised risk rating, assuming the controls nominated within the environmental management plans are implemented.

The environmental aspects of site establishment activities and associated potential impacts will be continually identified, assessed and controlled throughout site establish works and where applicable, the environmental risk register will be updated to reflect any newly identified environmental aspects.

## 6.2 Management and mitigation measures

Management and mitigation measures relevant to the Project are outlined in Table 6-1. These will be implemented to minimise environmental impacts during site establishment works and ensure the relevant commitments and requirements of the project approval are met. These specific management and mitigation measures have been developed to address the risks identified in the Risk Assessment, requirements of applicable legislation, the MCoA and commitments of the REMMs.

Table 6-1: Construction ancillary facility site establishment management and mitigation measure

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| **Traffic and transport management** | | | | | |
| ASEMM1 | During site establishment, all reasonably practicable measures will be implemented to maintain pedestrian and vehicular access to, utilities and properties unless otherwise agreed with the relevant owner/occupier, by implementing the actions as described in Section 6.13 of the Traffic, Transport and Access Management Sub-Plan | Pre-construction dilapidation reports.<br>Traffic Management Plans (TMPs)<br>Traffic Guidance Schemes (TGS) (previously known as Traffic Control Plans or TCPs) | Contractor's Traffic Manager<br>Site supervisor | MCoA E128, E129, E139, and E141<br>REMM LP3 | Consultation records<br>Inspections<br>Agreement with owner<br>Gatekeepers where necessary<br>CCTV monitoring where necessary |
| ASEMM2 | Construction vehicle (including light vehicles) will utilise James Craig and Sommerville Road, Rozelle from City-West Link to access the Glebe Island (WHT3) construction ancillary facility.<br>No construction vehicles is permitted to access the Glebe Island (WHT3) construction ancillary facility via Robert Street, Rozelle, unless required in the event of an emergency. | Vehicle Movement Plans (VMPs) | Contractor's Traffic Manager<br>Site supervisor | MCoA E130 | Vehicle Movement Plans (VMPs) |
| ASEMM3 | Vehicle movements to and from construction sites will be managed to ensure pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic | TMPs<br>Vehicle Movement Plans (VMPs) | Contractor's Traffic Manager<br>Site supervisor | REMM CTT7 | Road safety audits |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | signals and modifications to existing signals or, on occasion, police presence | TGSs | | | Traffic Management Plans |
| ASEMM4 | Before any local road is used by a heavy vehicle for the purposes of the Project, a Road Dilapidation Report will be prepared for the road in consultation with relevant councils and road owners, including such mechanisms to be considered for the repair of damage to the local road(s) caused by heavy vehicle movements associated with the Project.<br>A copy of the Road Dilapidation Report will be provided to the relevant council within three weeks of completion of the survey and no later than one month prior to the road being used by heavy vehicles associated with the Project. | Suitably Qualified Person | Traffic Manager | MCoA E136<br>REMM CTT1 | Road Dilapidation Report<br>Evidence of submission in accordance with this requirement. |
| ASEMM5 | A Road Dilapidation Report will be prepared following completion of works using a road. If damage to roads occurs as a result of the Project, either the relevant road authority will be compensated for the damage so caused, or the damage will be rectified to restore the road to at least the condition it was pre-works as identified in the Road Dilapidation report (at the relevant road authority's discretion). | Suitably Qualified Person | Traffic Manager<br>Project Manager | MCoA E137 | Road Dilapidation Report |
| ASEMM6 | The Construction Parking and Access Strategy will be implemented to mitigate impacts resulting from on- and off-street parking changes during construction. | Construction Parking and Access Strategy<br>TMPs | Traffic Manager<br>Site Supervisor<br>Project Manager | MCoA E139 and E140<br>REMM CTT9 | Implementation of Construction Parking and Access Strategy |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | Vehicles (including light and heavy vehicles) associated with the Project will be managed to minimise parking on public road. | | | | |
| **Air quality management** | | | | | |
| ASEMM7 | Reasonable and feasible dust suppression and/or management measures will be implemented during construction to minimise dust generation during the transfer, handling and on-site storage of construction materials (such as sand, aggregates or fine materials) (e.g. the covering of vehicle loads).<br>Management measures may include water carts, dust sweepers, dust suppressants, sprinklers, dust screens, site exit controls to prevent mud/material tracking (e.g. wheel washing systems and rumble grids), stabilisation of exposed areas or stockpiles, and surface treatments. | Environmental Work Method Statements (EWMS) (where applicable)<br>Management measures may include water carts, wheel washes, rumble grids, wetting systems (hoses, sprinklers etc), soil binders, segregation areas. | Site Supervisor<br>Environmental Manager | MCoA E1<br>REMM AQ1(a) and (c) | Environmental inspection checklist records |
| ASEMM8 | Site inspections will be carried out to monitor compliance with implemented air quality measures, to verify that equipment and vessels are in good condition and that no black smoke is generated by engines and/or equipment.<br>Inspections will occur in line with Table 7-1, monitoring occurring in line with the monitoring and reporting | Personnel to carry out site inspections schedule/ monitoring and inspection requirements | Site Supervisor<br>Environmental Manager | MCoA E1<br>REMM AQ1(h) | Environmental inspection checklist records<br>Air Quality and Odour Monitoring Program (refer |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | requirements of the Air Quality and Odour Monitoring Program. | | | | Appendix J2, Section 4.2)<br>CEMP Section 5.12 |
| ASEMM9 | Weather forecasts and prevailing wind directions will be reviewed prior to the commencement of potential dust generating activities.<br>Where dust is visually observed as migrating outside of the project boundary, additional adjustment/management measures will be implemented. This can include additional water applied to haul roads and stockpile benches. | Weather forecast<br>Wind direction and measurements<br>Water carts | Site Supervisor | MCoA E1<br>REMM AQ1(d) | Environmental inspection checklist records<br>Weather records<br>Environmental Work Method Statements (where applicable) |
| ASEMM10 | Engine idling will be minimised for plant and equipment will be switched off when not in use to reduce emissions. | Plant and equipment maintenance as required<br>Plant onboarding & prestart checks.<br>Driver Code of Conduct | Site Supervisor | MCoA E1<br>Transport for NSW Specification G36 | Plant and equipment records<br>Environmental inspection checklist records |
| ASEMM11 | Dust and air quality complaints will be managed in accordance with the overarching complaints management system for the project. Appropriate | Complaints Management System | Site Supervisor<br>Environmental Manager | MCoA E1<br>REMM AQ2 | Project Complaints Register |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | corrective actions, if required, will be taken to reduce emissions in a timely manner. | | | | |
| **Noise and vibration management** | | | | | |
| ASEMM12 | Detailed Construction Noise and Vibration Impact Statements (CNVIS) will be carried out for all construction ancillary facilities and major construction works required for the project prior to the commencement of construction where exceedance of noise management levels, vibration criteria or ground-borne noise is predicted.<br>The Statements will consider the proposed site layouts and noise and vibration generating activities that will take place during all major stages of the construction ancillary facility, assess predicted noise and vibration levels against the relevant management levels, and incorporate feasible and reasonable mitigation and management measures in accordance with the requirements of the Interim Construction Noise Guideline (DECC, 2009) and the Construction Noise and Vibration Guideline (Roads and Maritime, 2016a). | CNVIS | Environment Manager<br>Project Manager | MCoA E75<br>REMM CNV2 | CNVIS |
| ASEMM13 | The 'No Load Area' is to be clearly demarcated with temporary fencing and appropriate signage to ensure no load is placed or stored within the sensitive area. | SAMs | Foreman<br>Site Engineer | Port Authority Lease Agreement | Site inspection records<br>SWMS |
| ASEMM14 | Vibration and ground monitoring equipment will be installed to measure ground movements of the 'No Load Area'. A monitoring report will be prepared and provided to Port Authority and other relevant | Vibration monitoring equipment | Environment Manager | Port Authority Lease Agreement | Site inspection records<br>Data records |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | stakeholders detailing the result of the vibration and ground monitoring. | | | | |
| ASEMM15 | Prior to arriving on site, drivers will be advised of designated vehicle routes, parking locations, acceptable delivery hours specific to the site and other relevant practices (i.e. minimising the use of engine brakes and no extended periods of engine idling). | Induction materials | Foreman<br>Site Engineer | ACCIONA Practice | Vehicle movement plans<br>Traffic control plans<br>Induction records |
| ASEMM16 | All construction plant and equipment used on site must be, in addition to other requirements:<br>(a) fitted with properly maintained noise suppression devices in accordance with the manufacturers specifications (where appropriate)<br>(b) regularly inspected and maintained in an efficient condition in accordance with daily pre-start checklist requirements;<br>(c) operated in a proper and efficient manner. | Plant risk assessment<br>Manufacturer's specifications | Supervisor/ Foreman | G36 | Plant inspection record |
| ASEMM17 | Plant and machinery to be used on site would be of appropriate size and power for the relevant construction task | Plant risk assessment<br>Manufacturer's specifications | Supervisor/ Foreman | CNVG | Plant inspection record |
| ASEMM18 | Non-tonal reversing beepers (or an equivalent mechanism) must be fitted and used on all construction vehicles and mobile plant regularly used on site and for any out of hours work. | Plant risk assessment<br>Manufacturer's specifications | Supervisor/ Foreman | CNVG | Plant inspection record |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| ASEMM19 | The Project will use regularly serviced low sound power equipment where reasonable and feasible | Plant and equipment | Foreman<br>Environment Manager | MCoA E74 (a) | Site inspection records |
| ASEMM20 | Stationary noise sources would be enclosed or shielded where reasonable and feasible. This would apply to plant and equipment such as generators, stationary concrete cutters, stationary asphalt corers, stationary vacuum trucks, and stationary jack hammers | Safe Work Method Statement (SWMS) | Project Manager<br>Foreman | ACCIONA Practice | Site inspection records<br>SWMS |
| ASEMM21 | Construction activities associated with the Project will be carried out in accordance with the hours in the NVMP. | Induction materials | Project Manager | MCoA E66, E67, E68, and E74 (b) | Induction records<br>Site inspection records<br>ROLs |
| ASEMM22 | Except as permitted by an EPL, highly noise intensive works that result in an exceedance of the applicable NML at the same receiver will only be carried out:<br>• Between 8:00 am and 6:00 pm Monday to Friday<br>• Between 8:00 am and 1:00 pm Saturday<br>• In continuous blocks not exceeding three (3) hours each with a minimum respite from those activities and works of not less than one (1) hour between each block.<br>Noisiest works will be scheduled before 11.00 pm Sunday to Thursday and before 12 midnight Friday and Saturday. | Induction materials<br>Project EPL | Project Manager<br>Environment Manager | MCoA E67 and E74 (c) | Induction records<br>Site inspection records |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| ASEMM23 | Out-of-Hours-Work (OOHW) is to be carried out in accordance with:<br>• Project Out-of-Hours-Works Protocol<br>• Project EPL<br>Notification for OOHWs will be in accordance with the Community Communication Strategy (CCS) as described in Section 4.4 | Induction materials<br>OOHW Protocol (Appendix D3 of Noise and Vibration Management Sub-Plan)<br>Project EPL | Project Manager<br>Environment Manager | MCoA E69<br>REMM CNV3<br>EPL | Induction records<br>OOHW Permits<br>Site inspection records |
| ASEMM24 | The use of alternative construction and demolition techniques will be considered where predicted noise levels exceed the NML | Noise and Vibration Management Sub-Plan | Foreman<br>Environment Manager | MCoA E74 (e) | Site inspection records |
| ASEMM25 | Residences/sensitive receivers will be notified of construction activities that are likely to affect their noise and vibration amenity in accordance with the Community Communication Strategy. Information provided will include:<br>• The types of activities to be undertaken<br>• The timing of activities including expected start and finish<br>• The location of activities<br>• Details of the community information line and how to make an enquiry and/or complaint.<br>If the potential vibration exceedance is to occur more than once or extend over a period of 24 hours, owner and occupiers will be provided a monthly schedule of | Community Communication Strategy<br>CEMP | Project Manager<br>Environment Manager | MCoA E83<br>EPL | Community notifications |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | potential exceedances for the duration of the potential exceedances, unless otherwise agreed by the owner and occupier. | | | | |
| ASEMM26 | Where noise assessments predict noise levels above the NMLs at community, religious, educational institutions and noise and vibration sensitive businesses and critical working areas, consultation with the potentially affected receiver will be undertaken to identify sensitive periods and minimise impacts, where possible. | CNVIS | Project Manager<br>Environment Manager<br>Communications & Stakeholder Manager | MCoA E72 | Consultation records |
| ASEMM27 | All complaints will be managed in accordance with the CCS and EPL. | Communications Strategy | Communications & Stakeholder Manager | G36 Section 3.7.4 | Complaints register |
| ASEMM28 | Monitoring will be undertaken in response to complaints, as determined on a case by case basis. | Noise and Vibration Monitoring Program (Appendix D2 of the Noise and Vibration Management Sub-Plan) | Environment Manager<br>Communications & Stakeholder Manager | ACCIONA Practice | Monitoring records |
| ASEMM29 | Noise and vibration monitoring will be carried out in accordance with the Project's Noise and Vibration Monitoring Program. | Noise and Vibration Monitoring Program (Appendix D2 of | Environment Manager | ACCIONA Practice<br>REMMs AH3, AH4, CNV4 | Monitoring records |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | Construction noise and vibration impacts will be monitored periodically throughout all stages of the construction ancillary facility to ensure that:<br>a) Impacts are consistent with the noise and vibration levels detailed in the relevant Construction Noise and Vibration Impact Statements<br>b) Noise and vibration impacts are being appropriately managed<br>c) Mitigation measures are effective. | the Noise and Vibration Management Sub-Plan) | | | |
| ASEMM30 | Work will be coordinated between project construction sites and / or non-project construction works to avoid cumulative noise impacts. | N/A | Utilities Coordination Manager<br>Project Manager<br>Environment Manager | REMMs CNV1 and CNV10 | Meetings with relevant authorities |
| ASEMM31 | Community consultation will be undertaken throughout the project to gauge impacts of noise and any unknown impacts from concurrent or consecutive sets of construction works. | N/A | Project Manager<br>Communications & Stakeholder Manager | REMMs CNV1, CNV8 (d) and CNV10 | Community notification |
| **Soil and surface water management** | | | | | |
| ASEMM32 | Training will be provided to relevant project personnel, including subcontractors on soil, contamination and surface water requirements through inductions, toolboxes or targeted training.<br>All Project personnel will undertake the Project induction, including content as specified in this Plan. | Suitably qualified / trained persons | Construction Manager<br>HR/Training Manager | MCoA C2 | Induction records<br>Toolbox talk record |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | | | Environment Manager | | |
| ASEMM33 | Progressive Erosion and Sediment Control Plans will be developed in accordance with *Managing UrbanStormwater: Soils and construction - Volume 2A*Landcom, 2004) *and Volume 2D* (NSW Department of Environment, Climate Change, 2008) (the Blue Book) and implemented onsite, in accordance with Section 7.1 of the Soil and Surface Water Management Sub Plan.<br>Inspections of installed measures will be incorporated into weekly environmental inspections as well as ad hoc / informal daily inspections | Suitably qualified / trained persons<br>Soil Conservationist | Construction Manager<br>Site Superintendent / Site supervisors<br>Environment Manager | MCoA E114 | PESCP |
| ASEMM34 | Stockpile management will occur in accordance with Section 7.3 of the Soil and Surface Water Management Sub Plan. | Environmental Inspection Checklist | Construction Manager<br>Site Superintendent / Site supervisors<br>Environment Manager | REMM F5<br>REMM F6 | Site Surveillance and Inspection reports |
| ASEMM35 | Erosion and sedimentation controls will be checked and maintained weekly and following heavy rain, and actions recorded in the Environmental Inspection Checklist. | Soil Conservationist<br>Suitably qualified / trained persons<br>Environmental Inspection Checklist | Construction Manager<br>Site Superintendent / Site supervisors<br>Environment Manager | MCoA E114<br>REMM WQ1 | Site surveillance and inspections reports |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| ASEMM36 | Prior to forecast potential heavy rainfall and flood events, sites will be inspected for areas requiring additional management measures. Controls are to be implemented in accordance with Section 7.6 of the Soil and Surface Water Management Sub Plan. | Progressive Erosion and Sediment Control Plans (PESCPs)<br>Sensitive Area Maps (SAMs) | Environment Manager Site<br>Superintendent / Site supervisors | REMM F7 | Site Surveillance and Inspection reports |
| **Flooding and drainage management** | | | | | |
| ASEMM37 | The Heavy Rainfall and Flooding Response process is to be followed in the event of heavy rainfall or flood event. Refer to Section 7.6 of the Soil and Surface Water Management Plan. | Soil and Surface Water Management Plan | Site Supervisor | REMM F7 | Site surveillance and inspections reports |
| ASEMM38 | Water will not be actively discharged from site until necessary approvals and permits/ licences are obtained, including the Dewatering Permit, as described in Section 7.8 of the Soil and Surface Water Management Sub-plan.<br>To be valid, the Dewatering Permit must be signed by the Environment Manager or delegate. | Soil and Surface Water Management Plan<br>Dewatering Permit | Environment Manager | MCoA E210 | Dewatering Permit |
| ASEMM39 | Where stockpile areas are required to be established, they will be located in areas which are not subject to frequent inundation by floodwater (ideally outside the 10% AEP). The exact level of flood risk accepted at stockpile sites will depend on the duration of stockpiling operations, the type of material stored, the nature of the receiving drainage lines. | ESCP | Environment Manager | REMM F5 | Site Surveillance and Inspection reports |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| ASEMM40 | Site facilities would be located outside the 1% AEP flood extent where feasible and reasonable | Design Manager | Site Supervisor | REMM F6 | Site Surveillance and Inspection reports |
| **Contamination management** | | | | | |
| ASEMM41 | The discovery of previously unidentified contaminated material, including asbestos or asbestos containing material, will be managed in accordance with an Unexpected Contaminated Lands Discovery Procedure, as outlined in the Guideline for the Management of Contamination (Roads and Maritime, 2013a). Refer to Appendix E4 of the Soil and Surface Water Management Sub-plan. | Unexpected Contamination Finds Procedure | Environment Manager<br>Supervisor | MCoA E123<br>REMM SG11 | Records of unexpected finds |
| **Hazard and risk management** | | | | | |
| ASEMM42 | Site personnel will be trained in the Spill Response and Management Procedure and the protocol to be implemented in the event of a spill or leak. | Safety and environmental coupled with site management protocols | Construction Manager<br>HR/Training Manager<br>Environment Manager | REMM SG23, WQ2 | Induction records<br>Toolbox talk record |
| ASEMM43 | Spill kits will be maintained at all times on site and in site vehicles. | Spill kits | Site Superintendent / Site supervisors<br>WHS Manager | REMM SG23 | Site surveillance and inspections |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| ASEMM44 | All incidents will be managed in accordance with Section 5.11 of the CEMP. | Project Induction | All personnel<br>Environment Manager | MCoA A43 and C2 | Induction records<br>Toolbox talk record<br>Site surveillance and inspections reports |
| ASEMM45 | Vehicles and machinery will be properly maintained and routinely inspected to minimise the risk of fuel/oil leaks. | ACCIONA plant policy | Maintenance Manager | Best Practice | Maintenance Records<br>Site surveillance and inspections reports |
| ASEMM46 | All drums and decanted containers must be labelled and stored within bunded areas whenever they are not in use. Whenever practical, all unattended drums/containers must be returned to the bunded storage area. | Chemical bunds | Site supervisors<br>Environment Manager | REMM HR1 | Site surveillance and inspections reports |
| ASEMM47 | Liquid chemicals and fuels will be stored in appropriate containers in bunded areas in accordance with supplier's instructions and relevant legislation, Australian Standards, and applicable Guidelines. Bunded areas will have the capacity to hold 110% of the liquid waste volume for bulk storage or 120% of the volume of the largest container for smaller packaged storage | Chemical bunds | Site supervisors<br>Environment Manager | REMM HR1 | Site surveillance and inspections reports |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| ASEMM48 | Where practicable, designated plant refuelling areas, plant service/maintenance areas and concrete/plant wash down areas will be located at least 5 metres from native vegetation and at least 50 metres from:<br>• a natural surface drainage area, and<br>• a built drainage structure such as a storm water pipe or box culvert. | PESCP<br>SAMs | Design Manager<br>Construction Manager<br>Environment Manager | REMM HR1 | Design Drawings<br>Site surveillance and inspections<br>PESCP |
| ASEMM49 | Works will be minimised near the water's edge where possible to prevent items or material from falling or entering the water. Otherwise the use of netting and restraints will be implemented where appropriate.<br>Any items or materials that enter water are to be removed, where safe to do so. | Nets and restraints. | Superintendent / Site supervisors | Port Authority Lease Agreement | Site Surveillance and Inspection reports |
| **Visual amenity management** | | | | | |
| ASEMM50 | Where ancillary facilities are adjacent to sensitive land user(s), boundary screening will be erected for the duration of the ancillary facility is in use unless otherwise agreed with relevant affected residents, business operators or landowners.<br>Boundary screening should minimise visual impacts on adjacent sensitive land user(s). | Design Manager | Site Supervisor<br>Design Manager | MCoA A20 | Design drawings<br>Site surveillance and inspections |
| ASEMM51 | Where required, site lighting will be designed to minimise glare issues and light spillage into adjoining properties and be generally consistent with the requirements of *Australian Standards and Guidelines* | Design Manager | Site Supervisor<br>Design Manager | REMM V5 | Design drawings |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | *4282 2019 Control of the obtrusive effects of outdoor lighting*. | | | | |
| ASEMM52 | Site boundary fencing / hoarding will include the following information:<br>• CSSI number<br>• Application number<br>• Telephone number<br>• Postal address<br>• Email address | Signage | Construction Manager<br>Environment Manager | MCoA A48 | Design drawings<br>Site surveillance and inspections |
| **Biodiversity management** | | | | | |
| ASEMM53 | The unexpected threatened species finds procedure within the Flora and Fauna Management Plan will be implemented to ensure that if flora or fauna are identified within an area to be cleared, the procedure would minimise the potential for impacts. | Unexpected Threatened Species Finds Procedure | Environment Manager<br>Project Ecologist | REMM B3 | Records of unexpected finds |
| ASEMM54 | The weed management protocol contained in Appendix C1 of the Fauna and Flora Management Plan will be implemented. | Weed management protocol | Contractor | REMM B14 and B15 | Implementation of Weed Control Procedure Site records |
| **Heritage management** | | | | | |
| ASEMM55 | Cultural and historical heritage (Aboriginal and non-Aboriginal) awareness training will be provided for contractors prior to commencement of works to ensure | Induction material | Environmental Manager | MCoA E50 | Induction records |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | understanding of the procedure required to be carried out in the event of discovery of unexpected historical heritage (Aboriginal and non-Aboriginal) materials, features or deposits, or the discovery of human remains. | Unexpected Heritage Finds and Human Remains Procedure | | REMM NAH12 and AH6 | |
| ASEMM56 | If at any time during the project, Heritage Items and/or possible human skeletal material are encountered, the *Roads and Maritime Services Standard Management Procedure: Unexpected Heritage Items* (Roads and Maritime, 2022) will be followed.<br>Refer to Non-Aboriginal Heritage Management Sub-plan Section 7.2. | Unexpected Heritage Finds and Human Remains Procedure | Environmental Manager<br>Site Supervisor | MCoA E50, E63 and E64<br>REMMs NAH10, NAH11 and AH5 | Reporting / Records of unexpected finds |
| **Waste management** | | | | | |
| ASEMM57 | The resource management hierarchy principles established under the Waste Avoidance and Recovery Act 2001 of avoid/reduce/reuse/ recycle/dispose will be applied. | Waste Management Plan | Environment and Sustainability Managers<br>Foreman | MCoA E201<br>REMM WM2 | Waste Management Tracking Register<br>WARR reporting |
| ASEMM58 | Wastes for land disposal will be classified in accordance with the NSW Environment Protection Authority *Waste Classification Guidelines: Part 1 Classifying Waste.* | Suitably qualified / trained persons | Environment and Sustainability Managers<br>Supervisor | MCoA E205<br>REMM WM3, SG7 | Material export permit |
| ASEMM59 | Wastes will be appropriately transported, stored and handled according to their waste classification and in a | Licence waste transporter | Environment and Sustainability Managers | REMM WM4 | Material export permit |

| ID | Measure/Requirement | Resource needed | Responsibility | Source | Evidence |
|---|---|---|---|---|---|
| | manner that prevents pollution of the surrounding environment. | | Supervisor | | |
| ASEMM60 | Waste will be managed and disposed of in accordance with relevant applicable legislation, policies and guidelines, including the *Protection of the EnvironmentOperations Act 1997*, *Environment Operations (Waste) Regulation 2014*, *Waste Avoidance and Resource Recovery Act 2001* and the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21* (NSW EPA, 2014b). | Suitably qualified / trained persons | Environment and Sustainability Managers<br>Supervisor | MCoA E202 and E203<br>REMM WM7 | Material export permit<br>Waste Management Tracking Register |
| ASEMM61 | Construction materials will be sourced in accordance with the project's Sustainability Framework and with a preference for Australian materials and prefabricated products with low embodied energy, where feasible and reasonable. | ACCIONA's Procurement team | Environment and Sustainability Managers<br>Procurement Manager | REMM WM1 | Procurement records |

# 7 Compliance management

Compliance with this Plan will be measured against the targets outlined in Section 2.3 of this plan through ongoing monitoring throughout the Project.

## 7.1 Roles and responsibilities

The Project Team's organisational structure and overall roles and responsibilities as well as the Environmental Representative and required specialists are outlined in the CEMP.

Specific roles and their responsibilities during site establishment activities are detailed in Table 7-1 below.

## 7.2 Training

All employees, contractors and utility staff will undergo site induction training. The induction training will address site and/or construction activity specific impacts, including but not limited to:

- Existence and requirements of this plan
- Relevant legislation
- Roles and responsibilities
- Construction traffic routes
- Construction parking and access requirements.
- Procedures to be implemented in the event of an unexpected discovery of potential heritage find, unexpected discovery of contaminated land and unexpected threatened species find.
- Soil and water quality management and protection measures

Further details regarding staff induction and training are outlined in the CEMP.

## 7.3 Monitoring and inspection

Inspections of sensitive areas and activities with potential environmental impact will occur for the duration of the project. Monitoring and inspection requirements relevant to this Plan are outlined in Table 7-1. Details of the monitoring methodology are documented in the respective CEMP Sub-plans and/or monitoring program.

Additional requirements and responsibilities in relation to monitoring and inspections are documented in Section 5.12 of the CEMP.

Table 7-1: Monitoring and inspection program

| Monitoring details | Records | Responsibility | Frequency |
|---|---|---|---|
| Attended and unattended noise monitoring as determined by the CNVIS or in response to complaint | Monitoring records | Environmental Manager | • As required under the Noise and Vibration Monitoring Program for attended noise monitoring<br>• Continuous by noise loggers for unattended noise monitoring |

| Monitoring details | Records | Responsibility | Frequency |
|---|---|---|---|
| | | | • Spot checks for noise intensive plant and equipment |
| Dust deposition gauges to record airborne dust at the construction ancillary facility | Monitoring records | Environmental Manager | • Monthly basis (30 days +/- 2 days) |
| Inspection of erosion and sedimentation controls | Environmental inspection checklist | Site Supervisor<br>Environmental Manager | • Weekly[1]<br>• After heavy rainfall events[2]<br>• Before a site shutdown of > 3 days |
| Meteorological data including daily rainfall, hourly temperature, relative humidity, wind (direction and speed) and barometric pressure | Daily rainfall records from closest BOM or DPE station | Environmental Manager | • Approximately daily |
| Any additional monitoring as defined by EPL | TBC | Environmental Manager | • TBC |
| Construction vehicles and plant will be inspected | Inspection records | Site Supervisor<br>Plant operator | • Pre-start checks occurring prior to operation of vehicles & plant. |
| Ground movement within the 'No Load Area'. | Monitoring report / records | Environmental Manager<br>Interface Team | • Monthly to Ports Authority |
| Notes<br>[1] Daily check will be conducted as part of ad-hoc/informal site inspections<br>[2] A heavy rainfall event is rainfall exceeding 25 mm in 24 hours | | | |

## 7.4 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this Plan, MCoA and other relevant approvals, licences and guidelines.

Audit requirements are detailed in Section 5.13 of the CEMP.

## 7.5 Incidents and Non-compliances

All incidents will be managed in accordance with Section 5.11 of the CEMP.

All non-compliances will be managed in accordance with Section 5.15 of the CEMP.

Some incidents and non-compliances may require notifying Port Authority under Clause 11.3 of the Port Authority Lease Agreement. In such circumstances, Port Authority will be notified immediately

by phone as soon as practicable and given a written notice. Circumstances includes but not limited to a breach of environmental law or in the event of a spillage within the Glebe Island (WHT3) site.

## 7.6 Reporting

Reporting requirements and responsibilities are documented in Section 5.14 and 5.7 of the CEMP.

Incident response reporting will be carried out in accordance with Section 5.11 of the CEMP.

# 8 Review and improvement

## 8.1 Continuous improvement

As outlined in Section 5.17 of the CEMP, management reviews will be undertaken as part of the continual improvement process. The reviews will be initiated by the Environmental Manager and include relevant project team members and stakeholders. Continuous improvement of this Plan and of monitoring requirements detailed in Section 8.3 of this Plan will be achieved by the ongoing evaluation of environmental management performance against planning approval requirements, environmental policies, objectives and targets for the purpose of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of traffic management
- Determine the cause or causes of non-conformances and deficiencies
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Make comparisons with objectives and targets outlined in Section 2.2 and 2.3 of this Plan.

## 8.2 Plan update and amendment

The auditing and review processes described in Section 5.13 to Section 5.17 of the CEMP may result in the need to update or revise this Plan. This will occur whenever there is a change to the scope or methodology that may increase potential environmental impacts.

Only the Environment Manager can amend this plan. Any update of this plan will require the endorsement of the TfNSW representative, the Environmental Representative and, depending on the change, to follow the process outlined in Section 2 of the CEMP, which must be followed where approval from the Planning Secretary is required prior to implementation of the update is required.

# Appendix A – Environmental Risk Register

This Environmental Risk Register has been prepared to satisfy the requirement under MCoA A17 (c). A Project Environmental Aspect and Impact Register have been prepared by ACCIONA to supplement the Environmental Risk Analysis conducted as part of the Environmental Impact Statement (EIS). For more detail on the EIS and Project assessment and approval process, please refer to the Construction Environmental Management Plan.

The risk management process involved an assessment of specific project activities/aspects in or near environmentally sensitive areas and resulted in the development of a list of environmental risks (effects and impacts) and a corresponding risk mitigation strategy and risk ranking. Each environmental risk was categorised, based on the following:

- The environmental aspect
- Relative scale of the potential impact
- Type of potential impact
- Likelihood of occurrence.

The identification of risks included a review of the proposed works, the CoA, REMM, and review of the environmental risks identified by the EA and subsequent Submissions Report. The risk assessment process has been implemented as described below.

**Risk Assessment Process**

The following tables outline the risk assessment process using 3 steps to identify the appropriate management measures required.

- Table 1 is used to determine the likelihood that the aspect will have an impact on the environment.
- Table 2 is used to determine the potential consequence rating of the risk identified

From these two tables, a risk rating can then be assigned by using Table 3 to determine how severe the potential impact may be and what level of management each type of risk will require.

**Table 1: Likelihood criteria**

| Score | Description | | Percentage | Expected frequency |
|---|---|---|---|---|
| 5 | Almost Certain | Common / Frequent Occurrence | Can be expected to occur 75% - 99% | More than 1 event per month |
| 4 | Likely | Is known to occur or “It has happened regularly” | Can quite commonly occur 50% - 75% | More than 1 event per year |
| 3 | Possible | Could occur or “I’ve heard of it happening” | May occasionally occur 25% - 50% | 1 event per 1 to 10 years |
| 2 | Unlikely | Not likely to occur very often | May infrequently occur 10% - 25% | 1 event per 10 to 100years |
| 1 | Rare | Conceivable but only in exceptional circumstances | May occur in exceptional circumstances 0% – 10% | Less than 1 event per100 years |

**Table 2: Consequence criteria**

| Consequence Rating | 1<br>Negligible | 2<br>Minor | 3<br>Moderate | 4<br>Major | 5<br>Substantial |
|---|---|---|---|---|---|
| Safety and Health | First Aid Treatment (or No treatment) | Medical Treatment Injury | Lost Time Injury | Permanent Injury (Paraplegia, Amputation) | Fatality (Single or multiple) |
| Environment and Heritage | Small, contained localised impact / Low level repairable damage | Short lived, well contained environmental impact / Minor remedial action required | Medium term, contained impact / Significant remedial action required | Impacts extend off-site / external ecosystem. Considerable remediation required | Long Term irreversible damage / Long Term Remediation required |
| Plant Damage | Little or No Damage | Damage less than $15,000 | Damage between $15,000 and $50,000 | Damage between $50,000 and $100, 000 | Damage greater than $100, 000 |
| Reputation | Brief local negative media coverage. | Local negative media coverage. Site or project problem. | Regional/short negative media coverage. Loss of Client / project. | Sustained national negative media coverage. Loss of long term key client. | International negative media coverage. Loss of business from key sector. |
| Time | Delay / Business interruption <1% of program days | Delay / Business interruption between 1%-3% of program days | Delay / Business interruption between 4%-6% of program days | Delay / Business interruption between 7%-10% of program days | Delay / Business interruption >10% of program days |
| Cost | Additional cost to the business / project <1% revenue | Additional cost to the business / project between 1%-3% revenue | Additional cost to the business / project between 4%-6% of revenue | Additional cost to the business / project between 7%-10% of revenue | Additional cost to the business / project >10% of revenue |

**Table 3: Risk severity**

| | Consequence | Negligible | Minor | Moderate | Major | Substantial |
|---|---|---|---|---|---|---|
| Likelihood | Rating | 1 | 2 | 3 | 4 | 5 |
| Almost Certain | 5 | 5 (Low) | 10 (Moderate) | 18 (Very High) | 23 (Extreme) | 25 (Extreme) |
| Likely | 4 | 4 (Low) | 9 (Moderate) | 17 (Very High) | 20 (Very High) | 24 (Extreme) |
| Possible | 3 | 3 (Low) | 8 (Moderate) | 13 (High) | 19 (Very High) | 22 (Very High) |
| Unlikely | 2 | 2 (Low) | 7 (Low) | 12 (High) | 15 (High) | 21 (Very High) |
| Rare | 1 | 1 (Low) | 6 (Low) | 11 (Moderate) | 14 (High) | 16 (High) |

**Table 4: Environmental Risk Register**

| Issue | Construction activity/aspect | Potential Impact | Risk (prior to mitigation) | Indicative mitigation measures | Risk (following mitigation) | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| Air Quality | • Stockpiling<br>• Vehicular movements on unsealed roads<br>• Material haulage<br>• Vehicle emissions<br>• Handling of chemicals, waste and hazardous goods. | Complaints from neighbours, including loss of amenity, dust in living areas, swimming pools | Likelihood – 5<br>Consequence – 2<br>Risk – 10 (Moderate) | • Induct personnel on air quality issues and safeguards<br>• Utilise safe dust suppressants to reduce dust generation<br>• Use street sweepers to reduce dust in areas of dust build up<br>• All trucks carrying dispersible material must be covered when on public roads<br>• Vehicles, equipment, machinery must be designed, operated and maintained to control the emission of smoke, dust, odours and fumes<br>• All disturbed areas stabilised, revegetated and/or landscaped as soon as practicable<br>• No burning or incineration of any material at any time<br>• Air quality monitoring in accordance with Project Air Quality and Odour Monitoring Program.<br>• Pesticide use will be in accordance with the Pesticides Act, 1999<br>• Selection of appropriate plant / equipment for use, and minimise idling<br>• Minimise exhaust fumes – vehicle shut down procedures, maintenance, education of operators. | Likelihood – 3<br>Consequence – 1<br>Risk – 3 (Low) | Air Quality and Odour Management Sub Plan (AQOMP) including the Air Quality and Odour Monitoring Program.<br>Environmental Work Method Statements (EWMS)<br>Soil and Surface Water Management Sub Plan (SSWMP)<br>Community Consultation Strategy (CCS) / Complaints Procedure<br>Project induction<br>Environmental Protection License (EPL) |
| | | Potential adverse health effects | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| | | Degradation of local air quality and other aspects of the natural environment | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| | | Health risks to neighbours and members of the public from release of gases and/or smoke, or unexpected odour | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | | Likelihood – 1<br>Consequence – 2<br>Risk – 6 (Low) | |
| Heritage | • Construction of site compounds and material or equipment stockpile areas.<br>• Temporary access roads | Impact to undiscovered or undocumented heritage sites | Likelihood – 1<br>Consequence – 3<br>Risk – 12 (Moderate) | • Induct personnel on heritage issues and safeguards.<br>• Adherence to Non-Aboriginal Heritage Management Sub Plan<br>• Implement unexpected find procedures as required. | Likelihood – 1<br>Consequence – 2<br>Risk – 6 (Low) | Aboriginal Cultural Heritage Management Plan (ACHMP)<br>Non-Aboriginal Heritage Management Sub Plan (NAHMP)<br>Unexpected Heritage Finds Procedure<br>Project induction |
| | | Finding / disturbing unknown burials or human remains | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | | Likelihood – 1<br>Consequence – 2<br>Risk – 6 (Low) | |
| Noise and vibration | • Potentially noisy and vibration impact generating works including (but not limited to):<br>o Site establishment.<br>o Transport, vehicle movements/deliveries on public roads<br>• Potential Out-of-Hours Work | Noise impacts on sensitive receivers during works | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | • Consult with local communities and affected residents.<br>• Adherence to working hours in NVMP unless otherwise approved.<br>• Implement OOHW Permit process, including the OOHW Protocol. Where OOHW are unavoidable, program noisy works outside night-time periods.<br>• Construction Noise and Vibration Impact Statements (CNVIS) to be prepared to determine impact, appropriate mitigation and consultation requirements<br>• Respite periods for highly noise intensive works.<br>• Construction equipment selected, operated and maintained to minimise noise impacts and fitted with non-tonal reversing alarms<br>• Regular noise monitoring to monitor predicted verses actual levels.<br>• Managing construction vehicle routes and speed of vehicles. | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | NVMP including the Noise and Vibration Monitoring Program<br>Out-of-hours-work (OOHW) Protocol where required<br>EWMS<br>Construction Noise and Vibration Impact Statement (CNVIS)<br>Negotiated agreements<br>Complaints procedure<br>Project induction<br>EPL |

| Issue | Construction activity/aspect | Potential Impact | Risk (prior to mitigation) | Indicative mitigation measures | Risk (following mitigation) | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | Vibration impacts on nearby receptors. | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | • Modelling vibration impacts and monitoring where impacts are predicted.<br>• Building condition reports on potentially impacted buildings and structures.<br>• Review monitoring results and implement corrective actions as appropriate, such as for example revising mitigation measures, revising predictions.<br>• Implement any additional feasible and reasonable mitigation measures, identified from the review of monitoring results, for minimising noise and vibration impacts<br>• Implement on site controls (listed in the NVMP)<br>• Land Use Survey to confirm surrounding land uses, prior to construction impacting receivers.<br>• Be considerate of changes in work from home as result of COVID; will result in an increase in noise experience. | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | |
| Soil and water quality | • Storage of fuels and chemicals<br>• Maintenance of plant and equipment, including servicing and refuelling<br>• Temporary access road construction | Unapproved discharge of dirty water | Likelihood – 4<br>Consequence – 3<br>Risk – 17 (Very High) | • Appropriately designed erosion control structures (e.g. rock checks, sedimentation basins, silt fences and sand bags) will be installed, maintained and cleaned regularly to maintain capacity.<br>• Locate stockpiles, plant and equipment away from drainage lines, watercourses or stormwater drains<br>• Install clean water diversions to ensure clean and dirty water are not mixed on site.<br>• Storage and compound access are sealed as early during works as practicable.<br>• Chemical storage meets bunding requirements.<br>• Implement concrete washout process within bunded areas.<br>• Provide and maintain spill kits.<br>• Implement SSWMP<br>• Implement Dewatering Permit process – testing and confirming criteria is complied with prior to dewatering<br>• Investigate potential use of temporary Water Treatment Plants (pending EPA approval) for the management of surface water<br>• Communicate discharge requirements to project team<br>• Maximise reuse of construction water<br>• Monitoring/measuring potable water use<br>• Include Flood Prone Areas on the SAMs to prioritise not storing materials inside these locations.<br>• Location of stockpiles outside flood risk areas<br>• Set up sites to reduce flood impacts<br>• Avoid blocking drainage lines or pits or provide alternative drainage pathway | Likelihood – 3<br>Consequence – 2 Risk – 8 (Moderate) | SWMP and Monitoring Program<br>EWMS<br>Project induction<br>Targeted ERSED training<br>Dewatering Permit<br>EPL<br>SAMs<br>Sustainability Management Plan |
| | | Dirty water not captured and leaves site without controls. | Likelihood – 4<br>Consequence – 3<br>Risk – 17 (Very High) | | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | |
| | | Materials (including hazardous materials or unconsolidated construction materials) washout from flood event. | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| | | Excessive potable water usage | Likelihood – 4<br>Consequence – 3<br>Risk – 17 (very high) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| | | Excessive waste being directed to landfill. | Likelihood – 3<br>Consequence – 1<br>Risk – 3 (Low) | | Likelihood – 2<br>Consequence – 1<br>Risk – 2 (Low) | |
| Contamination | • Maintenance of plant and equipment, including servicing and refuelling<br>• Use and storage of hazardous material/chemicals | Poor environmental culture leading to poor environment outcomes. Non-compliance with CEMP, EPL, MCoA and legislative requirements. | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | • Implement a Spill Response Procedure<br>• Appropriate storage of potentially hazardous materials away from water courses, in bunded areas of appropriate site to contain all stored<br>• Minimise stockpiling and storage of potentially hazardous materials in flood prone areas. Flood prone areas to be identified in the Project's sensitive area plans | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | Contaminated Land Management Plan<br>SSWMP<br>EPA guidelines<br>Spill Response Procedure |

| Issue | Construction activity/aspect | Potential Impact | Risk (prior to mitigation) | Indicative mitigation measures | Risk (following mitigation) | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| Waste Management | • Generation of all waste during construction activities including office waste, building materials, excess unsuitable spoil material, vegetation material. | Incorrect disposal of contaminated waste. | Likelihood – 3<br>Consequence – 4<br>Risk – 19 Very High | • Apply waste hierarchy principles – avoid-reduce-reuse-recycle.<br>• Waste materials contained in waste bins or other suitable containers, and collected for recycling, reuse or disposal by the licensed waste contractor.<br>• Separate, contain, manage and dispose contaminated waste to prevent migration and further contamination whilst maintaining compliance with EPA requirements.<br>• Label and store all liquid waste containers in a bunded area prior to removal off-site.<br>• Undertake inspections of the worksite and waste storage areas to ensure litter / debris is regularly cleaned up and contained on site.<br>• Establish recycling system early on in Project.<br>• Establish good segregation areas for concrete<br>• Waste concrete is not to be transported off site for land disposal.<br>• Section 143 Notices Under the POEO Act and provision of a letter to landholder highlighting the need for a “s.143 Notice”, the Contractor’s role and the respective roles of the TfNSW and the landholder in ensuring that the waste is appropriately managed.<br>• Consider types of waste, how each waste type will be used as a beneficial use and address in the approvals that no other type of waste will be used.<br>• Waste disposal tracking and/or permit system<br>• Undertake waste audits<br>• Works will be minimised near the water’s edge where possible to prevent items or material from falling or entering the water. Otherwise the use of netting and restraints will be implemented where appropriate | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | Waste and Resource Management Plan (WRMP)<br>Sustainability Management Plan (SMP)<br>Waste Register<br>EPL |
| | | Meeting POEO Act requirements for VENM, ENM, Recovered Aggregate, Reclaimed Asphalt pavement and mulch | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| | | Accidents - Safety of commuters, pedestrians, cyclists, contractors and subcontractors. | Likelihood – 4<br>Consequence – 4<br>Risk – 20 (Very High) | | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | |
| Traffic and transport | • Haulage of material.<br>• Import of material / plant / equipment.<br>• Travel to / from site.<br>• Loss of street parking | Noise Vibrations and Dust nuisance to residents on haul routes | Likelihood – 4<br>Consequence – 4<br>Risk – 20 (Very High) | • Include bicycle groups and bicycle delivery companies into consultation strategy<br>• Technical and safety management via Traffic Management documentation:<br>-Traffic Staging Drawings<br>-Road Occupancy Licenses/applications<br>-Vehicle Movement Plans<br>-Traffic Guidance Schemes (TGS) (previously known as Traffic Control Plans)<br>• Where additional access routes are required, these will aim to:<br>- Avoid sensitive areas including schools, aged care facilities and child care facilities<br>- Minimise impacts on residents<br>- Return construction vehicles to major arterial roads as quickly as possible.<br>• Any additional local road access will require DPHI approval (reference E132)<br>• Undertake road dilapidation surveys on local roads<br>• All vehicles carrying materials are to be covered or otherwise adequately secured to prevent any loss of material, which may cause driver safety issues.<br>• Toolbox workforce and driver education on communication of approved access routes and requirements<br>• Implement Chain of Responsibility requirements (legislation) | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | Traffic Management Plan (TMP)<br>Traffic Transport and Access Management Plan (TTAMP)<br>EWMS<br>Project induction<br>Toolbox talks<br>CPAS |
| | | Unapproved use of local roads | Likelihood – 4<br>Consequence – 4<br>Risk – 20 (Very High) | | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High)<br>Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | |
| | | Unapproved use of local roads<br>Closures or detours of roads, and footpaths causing disruption and delay | Likelihood – 4<br>Consequence – 4<br>Risk – 20 (Very High)<br>Likelihood – 4<br>Consequence – 3<br>Risk – 17 (Very High) | | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | |

| Issue | Construction activity/aspect | Potential Impact | Risk (prior to mitigation) | Indicative mitigation measures | Risk (following mitigation) | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | Property access impacts | Likelihood – 4<br>Consequence – 3<br>Risk – 17 (Very High) | • Utilise Traffic Control Devices (TCD) to promote orderly traffic flow, regulate traffic (assign right of way, and indicate regulations in force), warn road users of hazards or regulatory controls ahead and guide traffic (e.g. guide signs to inform road users of directions to destinations, identify routes, and pavement markings to guide the travel path of vehicles)<br>• Stage works to limit road occupancy and minimise potential impacts, and obtain all approvals with concurrence of the relevant road authority<br>• Maintain pedestrian and cyclist connectivity, utilising detours where all other options are exhausted<br>• Design sites to improve the safety or amenity of pedestrians including where heavy vehicles are entering and exiting construction support sites<br>• Changes to pedestrian and bicycle connectivity will be signposted on location and communicated to local stakeholders prior to implementation<br>• Incorporate the following measures as part of the TMPs, to minimise impacts on mobility impaired pedestrians:<br>- Clearly define temporary footpath or bicycle lane/path arrangements by using appropriate signage<br>- Maintain sufficient space for wheelchair access<br>- Maintain a smooth, even surface on all temporary footpaths and crossings<br>- Conduct regular inspections to maintain footpaths free of trip hazards<br>- When changing footpath access, minimise grades for wheelchair use<br>• Adopt Disability Discrimination Act 1992 requirements for kerb ramps and bus stop locations.<br>• Notifications and consultation with road users. Communicate changes with groups such as cycling groups and delivery rider companies about the changes<br>• Implement measures described in the Construction Parking and Access Strategy (CPAS) for minimising construction worker parking impacts. | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | |
| Hazard and risk | • Loading of the ‘no load’ area<br>• Plant and equipment working near water edge / edge of port boundary | • Plant and equipment falling or entering water | Likelihood – 3<br>Consequence – 3<br>Risk – 13 (High) | • Induct site personnel on the ‘No load’ area<br>• Works will be minimised near the water’s edge where possible<br>• Use of netting and restraints will be implemented where appropriate.<br>• Use of flagging to delineate the ‘No-Load’ zone<br>• Training in environmental emergency response.<br>• Ensure all environmental personnel are trained in the CEMP and all associated documents. | Likelihood – 1<br>Consequence – 3<br>Risk – 11 (High) | SWMS<br>Project induction<br>Toolbox talks |
| General Environmental Management | • Environmental management / supervision<br>• Incident response | Failure to follow requirements of strategies / procedures. | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | • Ensure all environmental personnel are trained in the CEMP and all associated documents.<br>• Environment team diligence in including requirements from CEMP and procedures into EWMS and training.<br>• Regular review of environmental management documents.<br>• Regular environment team and ERG meetings.<br>• Environmental Manager to be involved in design and construction meetings.<br>• Training in environmental emergency response.<br>• Ensure non-conformance report process is followed. | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | CEMP<br>Procedures (in CEMP and sub-plans)<br>TfNSW Incident Management procedures<br>EWMS<br>Compliance Tracking Program<br>Internal / external audits<br>ERG<br>EPL |
| | | Failure to report environmental issues and incidents. | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |

| Issue | Construction activity/aspect | Potential Impact | Risk (prior to mitigation) | Indicative mitigation measures | Risk (following mitigation) | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | Inconsistent advice to construction personnel. | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | • Early consultation with regards to proposed upcoming works and approvals to be sought.<br>• Implementation of high operating standards & in accordance with accepted industry standards. | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| | | Inadequate response to environmental incident/ emergency. | Likelihood – 3<br>Consequence – 2<br>Risk – 8 (Moderate) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| | | Lost opportunities to implement innovations leading to better environmental outcomes | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | |
| Planning Approvals | • Approvals/ Legislative Compliance | Poor working relationships with regulators | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | • Early consultation in preparing approvals and ASMEP.<br>• Ensure all environmental personnel are trained in the CEMP, ASEMP and all associated documents.<br>• Environment team diligence in including requirements from CEMP, ASEMP and procedures into EWMS and training.<br>• Regular review of environmental management documents.<br>• Regular review of compliance with environmental management documents, MCoA etc.<br>• Regular environment team and ERG meetings.<br>• Early consultation with regards to proposed upcoming works and approvals to be sought. | Likelihood – 2<br>Consequence – 2<br>Risk – 7 (Low) | CEMP<br>Compliance Tracking Program<br>Internal / external audits<br>ERG<br>EPL |
| | | Delays due to receipt of approvals (e.g. ASEMP, Planning Modifications, Environment Assessments for Ancillary Facilities) | Likelihood – 4<br>Consequence – 2<br>Risk – 9 (Moderate) | | Likelihood – 1<br>Consequence – 2<br>Risk – 6 (Low) | |

# Appendix B - Compliance Matrix for secondary conditions

| MCoA No. | Condition Requirements | Document Reference | How Addressed |
|---|---|---|---|
| A20 | Boundary screening must be erected between ancillary facilities and are adjacent to sensitive land user(s) for the duration of the ancillary facility is in use unless otherwise agreed with relevant affected residents, business operators or landowners. All Boundary screening must minimise visual impacts on adjacent sensitive land user(s). | Table 6-1 | Where ancillary facilities are adjacent to sensitive land user(s), boundary screening will be erected for the duration of the ancillary facility is in use unless otherwise agreed with relevant affected residents, business operators or landowners.<br>Boundary screening should minimise visual impacts on adjacent sensitive land user(s). |
| A48 | The CSSI name; application number; telephone number, postal address and email address required under Condition B8 of this approval must be made available on site boundary fencing / hoarding at each ancillary facility before the commencement of construction. This information must also be provided on the website required under Condition B15 of this approval. | Table 6-1 | Site boundary fencing / hoarding will include the following information:<br>• CSSI number<br>• Application number<br>• Telephone number<br>• Postal address<br>• Email address |
| E70 | Mitigation measures must be implemented with the aim of achieving the following construction noise management levels and vibration objectives:<br>(a) construction 'Noise affected' NML established using the Interim Construction Noise Guideline (DECC, 2009);<br>(b) vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure);<br>(c) Australian Standard AS 2187.2 - 2006 "Explosives - Storage and Use - Use of Explosives";<br>(d) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and | Table 6-1 | The management measures to be implemented where reasonably feasible during the site establishment phase for the Glebe Island (WHT3) site to minimise construction noise and vibration are outlined in Table 6-1 from ASEMM12 to ASEMM31. |

| MCoA No. | Condition Requirements | Document Reference | How Addressed |
|---|---|---|---|
| | (e) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage).; and<br><br>(f) the project noise trigger levels as determined in accordance with the Noise Policy for Industry (EPA, 2017), for the operation of the Emu Plains construction ancillary facility (WHT13).<br><br>Any work identified as exceeding the noise management levels and/or vibration criteria must be managed in accordance with the Noise and Vibration CEMP Sub-plan.<br><br>*Note: The ICNG identifies 'particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the construction NML.* | | |
| E130 | Access to the ancillary facility WHT3 construction support site at White Bay by construction vehicles (including light vehicles) must only be via The Crescent/City West Link and James Craig Road. No vehicle associated with the CSSI is permitted to access the site via Robert Street, Rozelle, unless required in the event of an emergency. | Section 5.1<br><br>Table 6-1 | Construction vehicle (including light vehicles) will utilise James Craig and Sommerville Road, Rozelle from City-West Link to access the Glebe Island (WHT3) construction ancillary facility.<br><br>No construction vehicles is permitted to access the Glebe Island (WHT3) construction ancillary facility via Robert Street, Rozelle, unless required in the event of an emergency. |