Ancillary Site Establishment Management Plan

Western Harbour Tunnel and Warringah Freeway Upgrade SSI-8863 Stage 2 – Warringah Freeway Upgrade

Transport for NSW

WHTBLWFU-CPBD-NWW-EV-PLN-000001-2





Document control

Approval

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Endorsed by Environment Representative	Maurice Pignatelli
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Dated	18 February 2022
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Glossary/Abbreviations

Abbreviation	Expanded text
AA	Acoustics Advisor
AQMP	Air Quality Management Sub-plan
Ancillary facility	A temporary facility for construction of the CSSI including an office and amenities compound, construction compound, material crushing and screening plant, materials storage compound, maintenance workshop, testing laboratory, material stockpile area and car parking facilities. Note: where an approved management plan contains a stockpile management protocol, a material stockpile area located within the construction boundary is not considered to be an ancillary facility.
ASEMP	Ancillary Site Establishment Management Plan
ASS	Acid Sulfate Soils
CEMP	Construction Environmental Management Plan
CET	Community Engagement Team
CLMP	Contaminated Land Management Sub-plan
CNVIS	Construction Noise and Vibration Impact Statement
Compliance audit	Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (CEMP) (which incorporates the relevant approval conditions).
CSSI	Critical State Significant Infrastructure
СТР	Compliance Tracking Program
ESCP	Erosion and Sedimentation Control Plan
Minister, the	Minister of the NSW Department of Planning, Industry and Environment (or delegate)
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EEC	Endangered Ecological Community
Ecologically sustainable development	Using, conserving and enhancing the community's resources so that the ecological processes on which life depends are maintained and the total quality of life now and in the future, can be increased (Council of Australian Governments, 1992). The principles of Ecologically sustainable

Abbreviation	Expanded text
	development and outlined in Clause 7(4), Schedule 2 the <i>Environmental Planning and Assessment Regulation 2000</i> (NSW).
EPA	NSW Environment Protection Authority
ER	Environmental Representative
ERG	Environmental Review Group – generally comprising representatives of TfNSW, Environmental Representative, Project delivery team, regulatory authorities (DPIE, EPA) and councils (North Sydney Council). The ERG will be maintained for the duration of the Project and will meet regularly and undertake environmental inspections. The role of the ERG is to work collaboratively with the Project team to provide proactive advice on environmental management issues on the Project.
EMS	Environmental Management System
ER	Environmental Representative
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.
Environmental incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
ЕММ	Environmental Management Measure as outlined in the project EIS documentation.
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental Representative	A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EPL	Environment Protection Licence

Abbreviation	Expanded text
ESCP	Erosion and Sediment Control Plan
EWMS	Environmental work method statement
GHG	Greenhouse gas
Hold point	Is a verification point that prevents work from commencing prior to approval from TfNSW
ICNG	Interim Construction Noise Guideline
Minister, the	Minister for Planning and Public Spaces
MCoA	NSW Minister's Conditions of Approval
NVMP	Noise and Vibration Management Sub-plan
Non-compliance	Failure to comply with the requirements of the Project approval or any applicable licence, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of Project system documentation including this CEMP or supporting documentation.
OOHW	Out of Hours Works
PACHCI	Procedure for Aboriginal Cultural Heritage Consultation and Investigation
PCB	Polychlorinated biphenyl
PESCP	Progressive Erosion and Sediment Control Plan
PIRMP	Pollution Incident Response Management Plan
Principal, the	TfNSW
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
Project, the	Warringah Freeway Upgrade
RAP	Remediation Action Plan
REMM	Revised Environmental Management Measure
Roads and Maritime	Roads and Maritime Services (now TfNSW)
ROL	Road occupancy licence
RtS	Response to Submissions Report
WRMP	Waste and Resource Management Sub-plan
SAP	Sensitive Area Plan

Abbreviation	Expanded text
SEARs	Secretary's Environmental Assessment Requirements
SEP	Site Environmental Plan
SPIR	Submission and Preferred Infrastructure Report
SSI	State Significant Infrastructure
SWMP	Soil and Water Management Sub-plan
TCP	Traffic Control Plan
TfNSW	Transport for New South Wales
UMS	Utilities Management Strategy
WFU	Warringah Freeway Upgrade

1 Introduction

1.1 Context

This Ancillary Site Establishment Management Plan (ASEMP or Plan) relates to the Warringah Freeway Upgrade (WFU) (the Project), a component of the Western Harbour Tunnel and Warringah Freeway Upgrade project.

This ASEMP has been prepared to address the requirements of the Minister's Conditions of Approval (MCoA) for the Western Harbour Tunnel and Warringah Freeway Upgrade project, the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement dated January 2020 (the EIS), the Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions Report dated September 2020 (the RtS) and applicable guidance and legislation.

In accordance with the Staging Report, Western Harbour Tunnel and Warringah Freeway Upgrade (SSI 8863) (October 2021, Revision 1), this Plan is applicable to Stage 2 works.

1.2 Background and Project description

1.2.1 Project Background

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 and to enable the future connection of the Beaches Link and Gore Hill Freeway Connection project.

The Warringah Freeway Upgrade Project extends from the northern end of the Sydney Harbour Bridge to Willoughby Road, and will optimise traffic flow, reducing the number of merge points along with introducing a southbound bus lane. The upgrade will also improve Ridge Street and Ernest Street bridges.

The EIS for the Western Harbour Tunnel and Warringah Freeway Upgrade project was prepared and finalised in January 2020 to assess the impacts of construction and operation of the Project.

The Project is classified as State Significant Infrastructure under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) and Clause 94 of the State Environmental Planning Policy (Infrastructure) 2007. The Project was declared Critical State Significant Infrastructure (CSSI) under Section 5.13 under the EP&A Act and Clause 16 of the State Environmental Planning Policy (State and Regional Development) 2011.

The Western Harbour Tunnel and Warringah Freeway Upgrade Project was approved by the Minister for Planning and Public Spaces on 21 January 2021.

The proponent, Transport for NSW (TfNSW), has contracted the CPB Contractors and Downer Joint Venture (CPB Downer JV) for the design and construction of the Project.

1.2.2 Project Description

The Western Harbour Tunnel and Warringah Freeway Upgrade project is being constructed in three stages:

- Stage 1 Early and Enabling Works:
 - Stage 1A Critical utility installation, relocation and protection
 - Stage 1B Cammeray Golf Course adjustment works
 - Stage 1C Massey to Amherst noise wall
 - Stage 1D Western Harbour Tunnel construction power and utilities

- Stage 1E Maritime Heritage relocation of historic vessels M.V. Cape Don and Baragoola
- Stage 2 Warringah Freeway Upgrade project (the Project and subject of this document):
- Stage 3 Western Harbour Tunnel project.

The Western Harbour Tunnel and Warringah Freeway Upgrade project is described in detail in Chapter 5 of the EIS. In summary, the project will comprise:

- A new crossing of Sydney Harbour involving twin motorway tunnels connecting the M4-M5 Link at Rozelle and the Warringah Freeway at North Sydney (the Western Harbour Tunnel).
- Upgrade and integration works along the existing Warringah Freeway, including
 infrastructure required for connections to and from the Western Harbour Tunnel (the
 Warringah Freeway Upgrade). This will also include some infrastructure required to
 integrate the future Beaches Link and Gore Hill Freeway Connection project to reduce
 ongoing disruption to the Warringah Freeway.

This ASEMP applies to the Warringah Freeway Upgrade component of the project (Stage 2), the key features of which include the following and are shown in **Figure 1-1**:

- Upgrade and reconfiguration of the Warringah Freeway from immediately north of the Sydney Harbour Bridge through to Willoughby Road at Naremburn
- Upgrades to interchanges at Falcon Street in Cammeray and High Street in North Sydney
- New and upgraded pedestrian and cyclist infrastructure
- New, modified and relocated road and shared user bridges across the Warringah Freeway
- Connection of the Warringah Freeway to the portals for the Western Harbour Tunnel mainline tunnels and the Beaches Link tunnels, which will consist of a combination of trough and cut and cover structures
- Upgrades to existing roads around the Warringah Freeway to integrate the Project with the surrounding road network
- Upgrades and modifications to bus infrastructure, including relocation of the existing bus layover along the Warringah Freeway, and improvements to the geometry and connectivity of the existing southbound bus lane
- Other operational infrastructure, including surface drainage and utility infrastructure, signage, tolling, lighting, CCTV and other traffic management systems.

This ASEMP outlines the environmental management practices and procedures to be implemented during the establishment of ancillary facilities and will be submitted to the Planning Secretary for approval one month before the installation of any ancillary facilities (excluding minor construction ancillary facilities as discussed in Section 7.1).

It is noted that the use of ancillary facilities for construction will not commence until the Construction Environmental Management Plan (CEMP), CEMP Sub-plans and relevant Construction Monitoring Programs have been approved by the Planning Secretary.

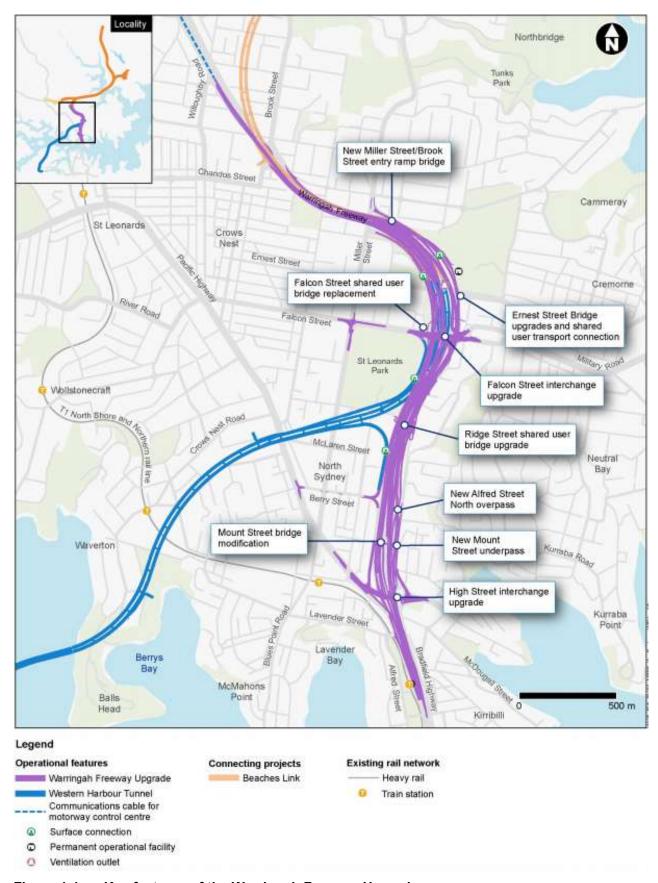


Figure 1-1 Key features of the Warringah Freeway Upgrade

1.3 Scope of ASEMP

As described in the Infrastructure Approval, an ancillary facility is a temporary facility for construction of the CSSI including an office and amenities compound, construction compound, material crushing and screening plant, materials storage compound, maintenance workshop, testing laboratory, material stockpile area and car parking facilities.

This ASEMP outlines the environmental management practices and procedures to be implemented for the establishment of ancillary facilities for the Warringah Freeway Upgrade in accordance with MCoA A17. The operation of ancillary facilities during construction will be covered by the Construction Environmental Management Plan (CEMP), in accordance with MCoA A18.

The key elements of this ASEMP include:

- 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)
- b. Figures illustrating the proposed operational site layout and the location of the closest sensitive land user(s).
- 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
- d. Details of how the site establishment activities described in subsection (a) of this condition will be carried out to:
 - meet the performance outcomes stated in the EIS and RtS
 - manage the risks identified in the risk analysis identified in (c) above
- e. A program for monitoring the performance outcomes, including a program for construction noise monitoring.

Ancillary facilities for construction of the Warringah Freeway Upgrade will include sites required for activities such as surface earthworks, bridgeworks, construction of retaining walls, utilities relocation and protection works, noise barrier construction, traffic staging, installation of motorway facilities, installation of stormwater drainage, and pavement construction.

As identified in Section 6.7 of the EIS, the following ancillary facilities will be established and operated by the Project:

- WFU2 High Street south
- WFU3 High Street north
- WFU4 Arthur Street
- WFU5 Berry Street east
- WFU6 Ridge Street east
- WFU7 Merlin Street
- WFU8 Cammeray Golf Course
- WFU9 Rosalind Street east.

An additional site not listed in the EIS which has been identified as a temporary ancillary facility:

 NH1 – Northern Hub support compound (this site is assessed against the requirements of MCoA 16 in Appendix F).

The locations of each ancillary facility are shown in **Figure 1-2**, **Figure 1-3** and **Figure 1-4** (original Figures extracted from Figures 6-22 and 6-23 of Chapter 6 in the EIS) and key features are outlined in **Tables 1-1** to **1-9**. The environmental risks of the ancillary facilities are assessed in **Table 6-1** and mitigation measures are detailed in **Appendix A**.

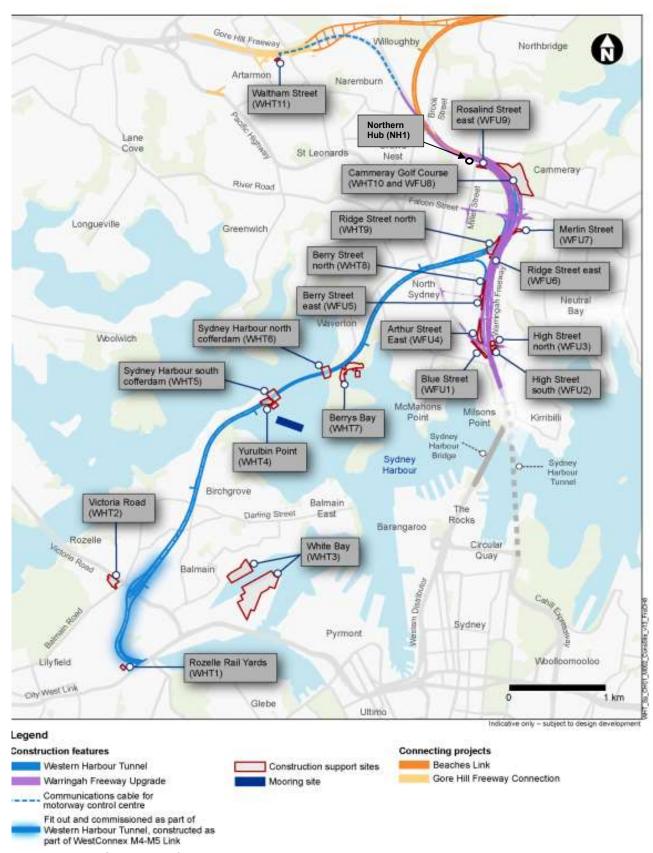


Figure 1-2 Overview of the construction support sites

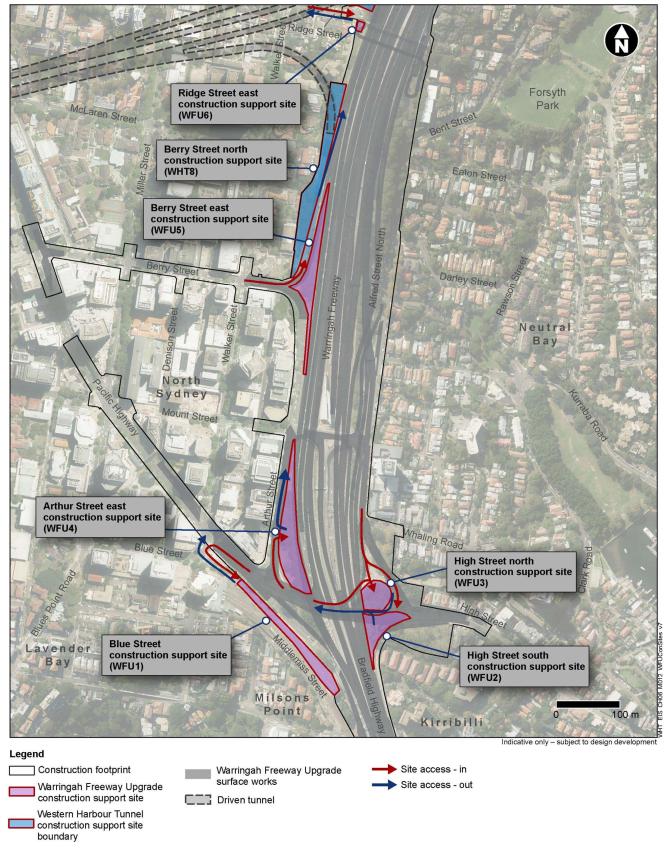


Figure 1-3 Warringah Freeway Upgrade construction support sites (Map 1)

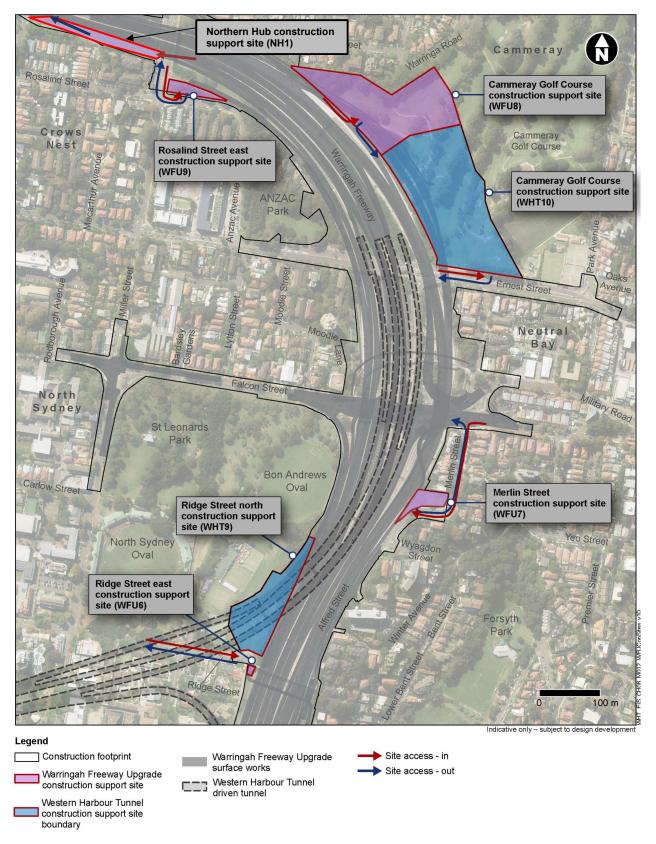


Figure 1-4 Warringah Freeway Upgrade construction support sites (Map 2)

Note: Please refer to Appendix B and E for specific details regarding the location and set-up of the Northern Hub Construction Support site (NH1)

WFU2 - High Street south

The High Street south ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-1 Key features of the High Street south ancillary facility (WFU2)

Key features	Summary
Site area	2100 m ²
Site description	The High Street south ancillary facility is located within the Warringah Freeway corridor at North Sydney on land bound by the Cahill Expressway to the west and south, the High Street off ramp to the east, and High Street to the north.
	The site currently consists of a mixture of planted native vegetation and maintained grass verges. The nearest residential receivers are located 40 metres north of the construction support site on High Street and 60 metres south on McDougall Street.
Key activities	The ancillary facility will be used to support construction activities for the High Street interchange upgrade, including bridge and surface works, as well as for the widening and surface works in the southern portion of the Warringah Freeway Upgrade.
Access arrangements	Access in and out of the site will be via High Street.

WFU3 - High Street north

The High Street south ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-2 Key features of the High Street north ancillary facility (WFU3)

Key features	Summary
Site area	1800 m ²
Site description	The High Street north ancillary facility is located within the Warringah Freeway corridor at North Sydney on land bound by Alfred Street North/Cahill Expressway to the west and High Street to the north, south and east.
	The site currently consists of a mixture of planted vegetation and maintained grass verges. The nearest residential receivers are located 40 metres east of the construction support site on High Street and 60 metres south on Whaling Street.
Key activities	The ancillary facility will be used to support construction activities for the High Street interchange upgrade, including bridgeworks, as well as for the widening and surface works in the southern portion of the Warringah Freeway Upgrade.
Access arrangements	Access in and out of the ancillary facility will be via Alfred Street North to the north or Pacific Highway via High Street to the west.

WFU4 - Arthur Street east

The Arthur Street east ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-3 Key features of the Arthur Street east ancillary facility (WFU4)

Key features	Summary			
Site area	5100 m ²			
Site description	The Arthur Street east ancillary facility is located within the Warringah Freeway corridor at North Sydney and is bound by the Warringah Freeway to the east, Arthur Street to the west, Mount Street to the north and High Street in the south.			
	The site currently consists of a mixture of planted vegetation and maintained grass verges. The Meriton Suites North Sydney Hotel and Serviced Apartments is located across the road from the ancillary facility on Arthur Street.			
Key activities	The ancillary facility will be used to support construction activities for the widening of the Warringah Freeway, and local road and intersection works along and near Arthur Street.			
Access arrangements	Access in and out of the site will be via Arthur Street to the west. Pedestrian access for construction workers will be provided from Arthur Street.			

WFU5 - Berry Street east

The Berry Street east ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-4 Key features of the Berry Street east ancillary facility (WFU5)

Key features	Summary		
Site area	3200 m ²		
Site description	The Berry Street east ancillary facility is located within the Warringah Freeway corridor at North Sydney on land bound by the Warringah Freeway to the east, Arthur Street and Berry Street/Warringah Freeway on ramp to the west and Doris Fitton Park to the south along Arthur Street to the west.		
	The site slopes heavily from the west down towards the Warringah Freeway and comprises a mixture of planted vegetation and maintained grass verges. High density residential apartments are located to the north-west of the site (Ridgemont Apartments) on the opposite side of Berry Street.		
Key activities	The ancillary facility will be used to support construction activities for the widening of the Warringah Freeway and surface road works associated with the Berry Street on ramp to the Western Harbour Tunnel.		
Access arrangements	Access in and out of the site will be via Berry Street to the west and vehicles exiting the site will be able to travel north via an access onto the Warringah Freeway.		
Other considerations	The site would be subject to relatively shallow overland flow at its northern and southern ends during storms which would result in the surcharge of the existing stormwater drainage system which controls surface runoff to its west.		

WFU6 - Ridge Street east

The Ridge Street east ancillary facility will be used for the duration of works associated with the Ridge Street shared user bridge.

Table 1-5 Key features of the Ridge Street east ancillary facility (WFU6)

Key features	Summary		
Site area	300 m ²		
Site description	The Ridge Street east ancillary facility is located within the Warringah Freeway corridor at North Sydney on land bound by the Warringah Freeway to the east, residential properties on Ridge Street to the south and west and St Leonards Park to the north.		
	The site currently consists of a combination of vegetated and paved surfaces. The closest residential properties are next to the southern and western boundaries of the construction support site along Ridge Street.		
Key activities	The ancillary facility will be used to support construction activities for the demolition of the existing Ridge Street pedestrian bridge and construction of an upgraded Ridge Street shared user bridge.		
Access arrangements	Access in and out of the site will be via Ridge Street to the north. Pedestrian and cyclist access across the Warringah Freeway will be maintained via the old bridge, until the new upgraded crossing is completed.		

WFU7 - Merlin Street

The Merlin Street ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-6 Key features of the Merlin Street ancillary facility (WFU7)

Key features	Summary		
Site area	1700 m ²		
Site description	The Merlin Street ancillary facility is located in Neutral Bay on the eastern side of Warringah Freeway within Merlin Street Reserve (owned by Transport for NSW). The site is bound by residential properties to the north, Merlin Street to the east, Alfred Street to the south and McIntosh Lane and Warringah Freeway to the west.		
	The site slopes from north-west to south-east towards Merlin Street and is covered in a mixture of planted native vegetation and areas of maintained lawn. A public footpath runs along the east and south of Merlin Street reserve and an electrical substation is located on the southern boundary.		
	The nearest residences are located next to the construction support site along Merlin Street to the north, and Wyagdon Street to the south.		
Key activities	The ancillary facility will be used to support construction activities for the realignment of Alfred Street North and construction of the new southbound bus lane bridge off Falcon Street.		

Key features	Summary
Access arrangements	The ancillary facility will be accessed via Military Road and Merlin Street. Some construction works associated with the construction of the new southbound bus lane bridge will result in temporary disruptions to access to the residential property at 1 McIntosh Lane.

WFU8 - Cammeray Golf Course

The Cammeray Golf Course ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-7 Key features of the Cammeray Golf Course ancillary facility (WFU8)

Key features	Summary		
Site area	18,000 m ²		
Site description	The Cammeray Golf Course ancillary facility is located within the north-west portion of the Cammeray Golf Course, next to the Warringah Freeway at Cammeray. The site consists of a mixture of planted vegetation and maintained lawn.		
	The site is bound by residential properties to the north, Cammeray Golf Course to the east, Warringah Freeway to the west and the Cammeray Golf Course ancillary facility (WHT10) (for the Western Harbour Tunnel) to the south.		
	The site currently consists of an operational nine-hole golf course. The golf course will remain operational during construction. The nearest residences are located to the north of the site on Warringah Road and Morden Street and along the eastern edge of Cammeray Golf Course on Park Avenue.		
Key activities	The ancillary facility will act as the main construction compound for the Warringah Freeway Upgrade.		
	It will support the use of the other Warringah Freeway Upgrade construction support sites. In addition, the site will provide a temporary bus layover area during the construction period when the existing Warringah Freeway bus layover area is removed and relocated.		
Access	Two access points will be established at the site:		
arrangements	Western access will be directly off the southbound lanes of Warringah Freeway		
	Southern access will be directly off Ernest Street.		

Key features	Summary	
Other considerations	Planted native vegetation occurring within an exclusion zone along the north-western perimeter of the site will not be removed.	
	Willoughby Creek is located downstream and to the north-east of the support site. Flat Rock Creek and Quarry Creek may also be potentially impacted.	
	The site may be subject to very shallow sheet flow during heavy rainfall events, principally due to runoff generated from within its extent. The existing stormwater harvesting dam will be dewatered and replaced in accordance with MCoA E209.	
	Cammeray Park (including Golf Course), Cammeray is listed in North Sydney Local Environmental Plan as being of local heritage significance. Archival recording and a thematic heritage study will be completed prior to ancillary site establishment.	
	It is noted that a temporary access road has been established by the Stage 1 – Early and Enabling Works from Ernest Street to the WFU8 – Cammeray Golf Course site. CPB Downer JV will formalise the access as part of site establishment works.	

WFU9 - Rosalind Street east

The Rosalind Street east ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-8 Key features of the Rosalind Street east ancillary facility (WFU9)

Key features	Summary		
Site area	1300 m ²		
Site description	The Rosalind Street east ancillary facility is located within the Warringah Freeway corridor at Cammeray. The site is bound by the Warringah Freeway northbound off ramp at Miller Street to the north and east, Rosalind Street to the south and Miller Street to the west.		
	The site is situated on flat land and comprises a mixture of planted native vegetation and maintained grass verges. The nearest residential receivers are located to the south on Rosalind Street.		
Key activities	The ancillary facility will support construction of the northern portion of the Warringah Freeway Upgrade, as well as local road and intersection upgrades and changes near Miller Street and Amherst Street.		
Access arrangements	The site will be accessed via Miller Street (to the east) and then Rosalind Street to the south. No access to the site will be permitted via Anzac Avenue.		
Other considerations	It is noted that a temporary access road has been established by the Stage 1 – Early and Enabling Works from Rosalind Street to the WFU9 – Rosalind Street site. CPB Downer JV will formalise the access as part of site establishment works.		

NH1 - Northern Hub

The Northern Hub ancillary facility will be used for the duration of construction of the Warringah Freeway Upgrade.

Table 1-9 Key features of the Northern Hub ancillary facility (NH1)

Key features	Summary	
Site area	3168 m ²	
Site description	The Northern Hub ancillary facility is located within the Warringah Freeway corridor at Cammeray. The site lies along the north bound verge and inner Brook Street exit lane of the Warringah Freeway from Miller Street to a point approx. 50m west of West Street adjacent to St. Thomas Rest Park.	
	The site is situated along a maintained grass verge and existing Warringah Freeway with no planted native vegetation. The nearest residential receivers are located along Metcalf Street behind an existing noise wall and between Edwin, Rosalind and Miller Streets overlooking the Warringah Freeway.	
Key activities	Construction of the northern portion of the Warringah Freeway Upgrade.	
	The Northern hub facilities are a critical link in the mobilisation of the work force onto the project work site at the beginning and end of shift as well as crib/ lunch and briefing facilities.	
	The Northern Hub primary purpose is to enable CPBDJV to manage the workforce within the project boundaries, eliminating unnecessary movements to off-site facilities / other support sites for briefings, breaks or ablution facilities. A small amount of storage will be maintained at the site to manage small tools and consumables, ie shovels, hand held tools etc	
Access arrangements	Vehicle access will be via the Northbound Warringah Freeway under static traffic management provisions (behind concrete barriers) with only Project approved vehicles to enter the compound under flashing amber lights. This will include the bussing in via mini-bus of Project workers from off-site.	
	Pedestrian access to the Northern Hub will be provided for people attending the site by foot or bicycle via a temporary structure accessible from West St. This is to encourage workers within the vicinity of the works to choose a greener form of transport and remove vehicles from the local area.	
Other considerations	Elevated demountable's (crib sheds and offices) will be positioned in front of the Metcalf Street noise barriers (130m long) and St Thomas Rest Park along the Warringah Freeway to allow work vehicle parking beneath. Only ground level demountables, sea containers or parking areas will be positioned along the Freeway immediately west of Miller Street.	
Note: An assessment against the requirements of MCoA A16 with regards to the Northern Hub ancillary facility (not previously assessed in the EIS) is included in Appendix F.		

Construction hours assessed in Section 6.8.1 of the EIS are outlined in **Table 1-11**.

Table 1-10 Proposed construction hours

Activity	Construction hours	Comments or exceptions
Early works and site establishment activities	Works would be primarily conducted during standard construction hours (7am to 6pm Monday to Friday, 8am to 1pm Saturday and no construction works on Sundays or public holidays).	As required by the road authority, the transport of oversized loads (demountable sheds) would likely be undertaken outside of standard hours in accordance with MCoA E68(a)(i).

Traffic management and access requirements for ancillary site establishment are outlined in Section 6.8.2 of the EIS and in **Figures 1-3** and **1-4**.

Construction plant and equipment that were assessed as likely to be used during ancillary site establishment are listed in Section 6.8.3 of the EIS.

High voltage power, potable water supply and a suitable connection for water discharge will be required at some sites. Requirements and potential sources are outlined in Section 6.8.4 of the EIS.

2 **Environmental Requirements**

2.1 Relevant Legislation

NSW and Commonwealth legislation that apply to the establishment of construction ancillary facilities include:

- Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act)
- Protection of the Environment Operations Act 1997 (NSW) (POEO Act)
- Protection of the Environment Operations (General) Regulation 2009
- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) (Commonwealth)
- Heritage Act 1977 (NSW) (section 146) requires that the Heritage Council be notified if a relic is uncovered during construction and if it is reasonable to believe that the Heritage Council is unaware of the location of the relic.
- Contaminated Land Management Act 1997 (NSW) (CLM Act) outlines the circumstances in which the notification of the NSW Environment Protection Authority (EPA) is required in relation to contamination of land.
- Waste Avoidance and Resource Recovery Act 2001 (NSW) (WARR Act) encourages the
 most efficient use of resources in order to reduce environmental harm in accordance with
 the principles of ecological sustainable development.
- Land Acquisition (Just Terms Compensation) Act 1991 (NSW), which applies to the
 acquisition of any land by an Authority of the State which is authorised to acquire the land
 by compulsory process.
- Local Government Act 1993 includes provisions for leases and permits in respect to works on community land that has not been acquired by the project.

2.2 Minister's Conditions of Approval

The MCoA relevant to this ASEMP are listed in **Table 2-1**. A cross reference is also included to indicate where the condition is addressed in this Plan or other Project management documents.

Table 2-1 Conditions of Approval relevant to the ASEMP

Ref#	Condition Requirements	Reference	How addressed
A1	The Proponent must carry out the CSSI in accordance with the terms of this approval and generally in accordance with the: (a) Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement – Volumes 1A-B and 2A-J (dated January 2020) (the EIS); and (b) Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions Report (dated September 2020) (the RtS).	This Plan	This Plan outlines the environmental management practices and procedures as required by the MCoA, REMMs and environmental performance outcomes. Relevant requirements are detailed in Table 2-1 , Table 2-2 and Table 2-3 together with how the matters are addressed.
A2	The CSSI must only be carried out in accordance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the documents listed in Condition A1 unless otherwise specified in, or required under, this approval.	This Plan	This Plan outlines the environmental management practices and procedures that will be implemented to ensure compliance with all procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the documents listed in Condition A1. Relevant requirements are detailed in Table 2-1 , Table 2-2 and Table 2-3 together with how the matters are 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:	Appendix G	This Plan has been prepared in consultation with North Sydney Council, Willoughby City Council and relevant government agencies in accordance with CoA A17. The Consultation Report is included in Appendix G .

Ref#	Condition Requirements	Reference	How addressed
	(a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document for approval;		
	(b) a log of the dates of engagement or attempted engagement with the identified party;		
	(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;		
	(d) outline of the issues raised by the identified party and how they have been addressed; and		
	(e) a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed.		
A15	With the approval of the Planning Secretary, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis.	Harbour Tunnel and Warringah Freeway Upgrade (SSI 8863) (October 2021, Revision this Plan is applicable to Stage 2 – Warringa	Upgrade (SSI 8863) (October 2021, Revision 1),
	Notes:		this Plan is applicable to Stage 2 – Warringah Freeway Upgrade.
	1. While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and		Treeway Opgrade.
	2. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.		

Ref#	Condition Requirements	Reference	How addressed
A16	Ancillary facilities Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 can only be established and used in each case if: (a) they are located within or immediately adjacent to the construction boundary; and (b) they are not located next to sensitive land user(s) (including where an access road is between the facility and the receiver), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location; and (c) they have no impacts on heritage items (including areas of archaeological constitution) threatened energies, populations or	Appendix E	The requirements of this condition are applicable to the proposed Northern Hub construction support site which was not identified by description and location in the documents listed in MCoA A1. An assessment against the requirements of MCoA A16 with regards to the Northern Hub construction support site is included in Appendix E .
	archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and (d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.		
A17	Ancillary Site Establishment Management Plan 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	Section 7.4 Appendix G	This ASEMP has been prepared in accordance with this Condition of Approval and describes the environmental management practices and procedures to be implemented during the site establishment of ancillary facilities. This Plan has been prepared in consultation with North Sydney Council, Willoughby City Council and relevant government agencies in

Ref#	Condition Requirements	Reference	How addressed
	construction ancillary facilities. The Ancillary Site Establishment Management Plan must be prepared in		accordance with CoA A17. The Consultation Report is included in Appendix G .
	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:		As detailed in Section 7.4, this Plan will be submitted to the Planning Secretary for approval one month before the establishment of any construction ancillary facilities.
	(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 4 Table 4-1	Section 4 of this Plan describes the activities to be undertaken during establishment of the construction ancillary facilities. The scheduling and duration of works at each site is detailed in Table 4-1 and Table 4-2 .
	(b) figures illustrating the proposed operational site layout and the location of the closest sensitive land user(s);	Appendix B	Appendix B provides the indicative site layout plans for the ancillary facilities to be established in accordance with this ASEMP.
	(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;	Section 6.1	The Site Establishment risk assessment outlined in Section 6.1 has been prepared by CPB Downer JV to supplement the Environmental Risk Analysis conducted as part of the EIS and RtS. The risk assessment will be reviewed within two weeks of the commencement of site establishment works and every six months thereafter.
	(d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to:	N/A	Refer to the responses provided below.

Ref#	Condition Requirements	Reference	How addressed
	(i) meet the performance outcomes stated in the documents listed in Condition A1, and	Section 2 Table 2-3	The relevant environmental performance outcomes listed in Appendix A of the EIS are presented in Table 2-3 , together with how each outcomes will be achieved.
	(ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and	Section 6.1 Appendix A	The risks identified as part of the Site Establishment risk assessment outlined in Section 6.1 will be mitigated and managed in accordance with measures outlined in Appendix A.
	(e) a program for monitoring the performance outcomes, including a program for construction noise monitoring.	Table 2-3 Section 6.2.7	The relevant environmental performance outcomes listed in Appendix A of the EIS are presented in Table 2-3 , together with how each outcome will be achieved and the relevant monitoring program. An outline of the noise and vibration monitoring
			program is provided in Section 6.2.7.
	Nothing in this condition prevents the Proponent from preparing individual Ancillary Site Establishment Management Plans for each construction ancillary facility.	N/A	The requirements of this condition are noted.
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 1.2.2. Section 7.4	As detailed in Section 1.2.2 and 7.4, the use of an ancillary facility for construction will not commence until the CEMP, relevant Sub-plans required by Condition C4 and relevant Construction Monitoring Programs required by Condition C11 have been approved by the Planning Secretary.

Ref#	Condition Requirements	Reference	How addressed
A19	Lunch sheds, office sheds, portable toilet facilities, car parking, material storage, and the like, can be established and used where they have been assessed in the documents listed in Condition A1 or satisfy the following criteria:	Section 7.1	Reflecting the requirements of this condition, the approval pathway for minor construction ancillary facilities is detailed in Section 7.1
	(a) are located within or adjacent to the construction boundary; and		
	(b) have been assessed by the ER to have -		
	(i) minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and		
	(ii) minimal environmental impact with respect to waste management and flooding, and		
	(iii) no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.		
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).	Section 6.2.13 Appendix B	Boundary screening will be installed within ancillary facilities adjoining or adjacent to residential and/or commercial properties in accordance with the requirements of this condition. The boundary screening will minimise visual, noise and air quality impacts on adjacent sensitive receivers. The location of boundary screening is shown in the site layout plans in Appendix B .

Ref#	Condition Requirements	Reference	How addressed
A35	The Department must be notified in writing of the dates of commencement of construction and operation at least one month before those dates.	Section 7.4	As detailed in Section 7.4, DPIE will be notified in writing of the dates of commencement of construction and operation at least one month before those dates.
A36	If the construction or operation of the CSSI is to be staged, the Department must be notified in writing at least one month before the commencement of each stage, of the date of the commencement of that stage.	Section 1.2.2 Section 7.4	The construction of the CSSI will be staged in accordance with the Staging Report, Western Harbour Tunnel and Warringah Freeway Upgrade (SSI 8863) (October 2021, Revision 1). DPIE will be notified in writing of the dates of commencement of construction and operation of Stage 2 (WFU) at least one month before those dates.
A43	The Planning Secretary must be notified via the Major Projects Website immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident.	Section 8.1 Appendix F	The TfNSW Environmental Incident Procedure (Appendix F) will be implemented by the CPB Downer JV as summarised in Section 8.1. In accordance with the requirements of this condition, the Planning Secretary will be notified via the Major Projects Website immediately after the Proponent becomes aware of an incident. The notification will identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident.
A44	Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix A.	Section 8.1 Appendix F	The TfNSW Environmental Incident Procedure (Appendix F) will be implemented by the CPB Downer JV as summarised in Section 8.1.
			In accordance with the requirements of this condition, subsequent notification will be

Ref#	Condition Requirements	Reference	How addressed
			provided and reports submitted in accordance with the requirements set out in Appendix A of the Planning Approval.
A45	The Planning Secretary must be notified via the Major Projects Website within seven days after the Proponent becomes aware of any non-compliance. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one), set out the condition/s that is non-compliant, the nature of the breach; the reason for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Section 8.2	After becoming aware of an environmental non-compliance, CPB Downer JV will immediately notify TfNSW and TfNSW will notify DPIE via the Major Projects Website within seven days. As detailed in Section 8.2, the notification will address the requirements of this condition.
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.	Section 6.2.13	In accordance with the requirements of this condition, all signage on hoardings surrounding the ancillary facilities will include the CSSI name, application number, telephone number, postal address and email address.
B1	A Community Communication Strategy must be prepared to provide mechanisms to facilitate communication about construction and operation of the CSSI with:	Section 7.6	Prior to establishment of ancillary facilities, a Community Action Plan will be prepared in accordance with the project Community
	(a) the community (including adjoining affected landowners and businesses, and others directly impacted by the CSSI); and		Communications Strategy. The Community Action Plan will include community and stakeholder management requirements to be implemented during works, including the site
	(b) the relevant councils, EPA, EESG, NSW Health, Heritage NSW, DPIE Water, and Sydney Water, as applicable.		establishment phase. The Community Engagement Team (CET) will engage with residential and commercial
	The Strategy must address who (the Proponent, Independent Appointments and/or construction contractor) will engage with		

Ref #	Condition Requirements	Reference	How addressed
	the community, relevant councils and agencies, how they will engage and the timing of engagements.		properties that adjoin or are adjacent to the ancillary facilities.
			Engagement methods will include door knocking residents impacted by the ancillary facilities, letter box drops and community updates as applicable.
В7	A Complaints Management System must be prepared and implemented before the commencement of any Work and maintained for the duration of construction and for a minimum for 12 months following completion of construction of the CSSI.	Section 7.6	The Complaints Management System is summarised in Section 7.6 of this Plan. During the site establishment phase, any comments, feedback or complaints relating to noise, air quality and other amenity issues will be addressed in accordance with the Communication Strategy and Complaints Management System.
B8	The following information must be available to facilitate community enquiries and manage complaints one month before the commencement of work and for 12 months following the completion of construction:	Section 7.6	To facilitate community enquiries and manage complaints, the communication mediums detailed in this condition will be established one month before commencement of work and remain in place for 12 months following the completion of construction.
	(a) a 24- hour telephone number for the registration of complaints and enquiries about the CSSI;		
	(b) a postal address to which written complaints and enquires may be sent;		
	(c) an email address to which electronic complaints and enquiries may be transmitted; and		
	(d) a mediation system for complaints unable to be resolved.		
	This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level.		

Ref#	Condition Requirements	Reference	How addressed
В9	A Complaints Register must be maintained recording information on all complaints received about the CSSI during the carrying out of any work and for a minimum of 12 months following the completion of construction. The Complaints Register must record the: (a) number of complaints received; (b) the date and time of the complaint; (c) the method by which the complaint was made; (d) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (e) nature of the complaint;	Section 7.6.1	During the site establishment phase, any comments, feedback or complaints relating to ancillary facilities will be addressed in accordance with the Communication Strategy and Complaints Management System. A Complaints Register will be maintained in accordance with the requirements of this condition for a minimum of 12 months following the completion of construction.
	(f) means by which the complaint was addressed and whether resolution was reached, with or without mediation; and		
	(g) if no action was taken, the reason(s) why no action was taken.		
	Complainants must be advised that the Complaints Register may be forwarded to Government agencies to allow them to undertake their regulatory duties.		
E1	Measures must be implemented to minimise and manage the emission of dust, odour and other air pollutants during construction and operation.	Section 6.2.13 Appendix B	Boundary screening will be installed within ancillary facilities adjoining or adjacent to residential and/or commercial properties. The boundary screening will minimise visual, noise and air quality impacts on adjacent sensitive receivers. The location of boundary screening is shown in the site layout plans in Appendix B .

Ref #	Condition Requirements	Reference	How addressed
E48	Within three months of the removal of any native trees, the Proponent must consult with local community restoration/ rehabilitation groups, Landcare groups, relevant councils, DPI Fisheries and any relevant public authorities to determine if there is an interest in the reuse of suitable timber and root balls for habitat enhancement and rehabilitation work. If there is an interest, native trees that are removed for the construction of the CSSI and that are greater than 25-30 centimetres in diameter and three metres in length must be salvaged and stored for a period of at least six weeks to enable collection by interested parties.	Section 6.2.17	The requirements of this condition are addressed in Section 6.2.17 of this Plan. Native trees that are removed for the construction of the Project that are greater than 25cm in diameter and three metres in length will be salvaged and offered to local community restoration/rehabilitation groups, Landcare groups, relevant councils, DPI Fisheries and any relevant public authorities to determine if there is an interest in the reuse. Consultation records will be retained to demonstrate compliance.
E50	The Proponent must take all reasonable steps so as not to harm, modify or otherwise impact Aboriginal objects except as authorised by this approval.	Section 5.13 Section 6.2.15 Appendix A	The EIS does not identify any Aboriginal heritage sites in the vicinity of the ancillary facilities. If any unexpected heritage items are encountered, the <i>Unexpected Heritage Items</i> , Heritage Procedure 02 (TfNSW, November 2015) will be implemented. The <i>Unexpected Heritage Items</i> , Heritage Procedure 02 (TfNSW, November 2015) has been submitted to the Planning Secretary for information.
E56	Prior to potential physical impact, archival recording must be undertaken for the following heritage items: (a) St Leonards Park (including W. Tunks Memorial Fountain, War Memorial, and North Sydney Oval), North Sydney; (b) North Sydney Sewer Vent; (c) Yurulbin Park, Birchgrove; and	Section 6.2.15	Prior to site establishment works with the potential to have physical impact, an archival recording will be prepared for Cammeray Park (including Golf Course) and Cammeray Conservation Area. The remaining heritage items listed in this condition are not impacted by ancillary facilities.

Ref #	Condition Requirements	Reference	How addressed
	(d) Balls Head Coal Loader Complex, Waverton.		
E63	An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds (including maritime discoveries) in accordance with any guidelines and standards prepared by Heritage NSW and submitted to the Planning Secretary for information before the commencement of construction.	Section 6.2.15	The <i>Unexpected Heritage Items</i> , Heritage Procedure 02 (TfNSW, November 2015) will be implemented during the establishment and operation of ancillary facilities. The <i>Unexpected Heritage Items</i> , Heritage Procedure 02 (TfNSW, November 2015) has been submitted to the Planning Secretary for information.
E64	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of construction. Note: Human remains that are found unexpectedly during the carrying out of work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.	Section 6.2.15	The <i>Unexpected Heritage Items</i> , Heritage Procedure 02 (TfNSW, November 2015) will be implemented during the establishment and operation of ancillary facilities.
E65	A detailed land use survey must be undertaken to confirm sensitive land user(s) (including critical working areas such as operating theatres and precision laboratories) potentially exposed to construction noise and vibration, construction ground-borne noise and operational noise. The survey may be undertaken on a progressive basis but must be undertaken in any one area before the commencement of work which generates construction or operational noise, vibration or ground-borne noise in that area. The results of the survey must be included in the Noise and Vibration CEMP Sub-plan required by Condition C4.	Section 5.4 Appendix A	A land use survey was prepared as part of the EIS. This land use survey will be refined prior to commencement of site establishment works to confirm sensitive receivers. Any potential land use and property impacts during site establishment activities will be managed in accordance with the land use and property environmental safeguards listed in Appendix A .
E68	Notwithstanding Conditions E66 and E67 work may be undertaken outside the hours specified in any of the following	Table 1-10	All site establishment works including those undertaken outside standard hours will be

Ref#	Condition Requirements	Reference	How addressed
	circumstances:	Section 6.2.9	undertaken subject to an EPL. Additional details
	(a) Safety and Emergencies, including:		on proposed out of hours works are provided in Table 1-10 and the process by which works will
	(i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or		be assessed and approved is detailed in Section 6.2.9.
	(ii) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm.		
	On becoming aware of the need for emergency work in accordance with Condition E68(a)(ii), the Proponent must notify the AA, the ER, the Planning Secretary and the EPA of the reasons for such work. The Proponent must use best endeavours to notify all noise and/or vibration affected sensitive land user(s) of the likely impact and duration of those work.		
	(b) Low impact, including:		
	(i) construction that causes L _{Aeq(15 minute)} noise levels: • no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, or • no more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land user(s); or		
	(ii) construction that causes L _{AFmax(15 minute)} noise levels no more than 15 dB(A) above the rating background level at any residence; or		
	(iii) construction that causes:		
	 continuous or impulsive vibration values, measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 		

Ref #	Condition Requirements	Reference	How addressed
	2006), or		
	 intermittent vibration values measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006). 		
	(c) By Approval, including:		
	(i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or		
	(ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition E69; or		
	(iii) negotiated agreements with directly affected residents and sensitive land user(s).		
	(d) By Prescribed Activity, including:		
	(i) tunnelling (excluding cut and cover tunnelling and surface works) and tunnel fit out works (excluding surface works) are permitted 24 hours a day, seven days a week; or		
	(ii) delivery of material that is required to occur outside of standard construction hours in Condition E66 to directly support tunnelling activities, except between the hours 10:00 pm and 7:00 am to/from WHT7 at Berrys Bay which could result in a sleep disturbance event for receivers in the proximity of Bay Road and Balls Head Road, Waverton; or		
	(iii) works within an acoustic shed where there is no		

Ref #	Condition Requirements	Reference	How addressed
	exceedance of the NMLs; or		
	(iv) trailer suction hopper dredging; or		
	(v) along the Warringah Freeway corridor in accordance with Condition E88.		
E75	Construction Noise and Vibration Impact Statements (CNVIS) must be prepared for any work that may exceed the noise management levels, vibration criteria and/or ground-borne noise levels specified in Condition E70 and Condition E71 at any residence outside construction hours identified in Condition E66, or where receivers will be highly noise affected. The CNVIS must include specific mitigation measures identified through consultation with affected sensitive land user(s) and the mitigation measures must be implemented for the duration of the works. A copy of the CNVIS must be provided to the AA and ER prior to the commencement of the associated works. The Planning Secretary may request a copy/ies of CNVIS.	Section 6.2.7	Potentially affected noise sensitive receivers will be identified within a Construction Noise and Vibration Impact Statement (CNVIS) for site establishment activities. This will include potential out of hours works necessary for site establishment. The CNVIS will be provided to the AA and ER prior to commencement of the associated works.
E114	Prior to the commencement of any work, erosion and sediment controls must be installed and maintained, as a minimum, in accordance with the publication <i>Managing Urban Stormwater:</i> Soils & Construction (4th edition, Landcom 2004) commonly referred to as the 'Blue Book'	Section 6.2.6	Reflecting the requirements of this condition and the 'Blue Book', preliminary erosion and sediment control plans (ESCPs) will be prepared for all ancillary facilities prior to site establishment activities.
E115	Prior to the commencement of any work that would result in the disturbance of moderate to high risk contaminated sites as identified in the documented listed in Condition A1, a Detailed Site Investigations must be undertaken by a Contaminated Land Consultant certified under either the Environment Institute of Australia or New Zealand's "Certified Environmental Practitioner" (Site Contamination) scheme (CEnvP(SC)) or the	Section 6.2.14	The process by which moderate and high risk contaminated sites will be investigated is detailed in Section 6.2.13 of this Plan. Detailed Site Investigations of moderate and high risk contaminated sites identified in the EIS will be undertaken by a certified Contaminated Land

Ref#	Condition Requirements	Reference	How addressed
	Soil Science Australia "Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme.		Consultant prior to commencement of works that would result in land disturbance.
E116	A Detailed Site Investigation Report must be prepared and submitted to the Planning Secretary for information following the completion of Detailed Site Investigations required by Condition E115.	Section 6.2.14	The process by which moderate and high risk contaminated sites will be investigated is detailed in Section 6.2.14 of this Plan. Detailed Site Investigation Reports will be prepared by a
	The report must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the Contaminated Land Management Act 1997 (NSW) and prepared by a Contaminated Land Consultant certified under either the Environment Institute of Australia or New Zealand's "Certified Environmental Practitioner" (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia "Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme.		certified Contaminated Land Consultant in accordance with compliance obligations and submitted to the Planning Secretary for information.
	Nothing in this condition prevents the Proponent from preparing individual Site Contamination Reports for separate sites.		
E117	The Detailed Site Investigation Report must provide details on: a) primary sources of contamination, for example potentially contaminating activities, infrastructure (such as underground storage tanks, fuel line, sumps or sewer lines) or site practices; b) contaminant dispersal in air, hazardous ground gases, surface water, groundwater, soil vapour, separate phase contaminants, sediments, infrastructure (e.g. concrete), biota, soil and dust;	Section 6.2.14	The process by which moderate and high risk contaminated sites will be investigated is detailed in Section 6.2.14 of this Plan.

Ref#	Condition Requirements	Reference	How addressed
	 c) contaminant characterisation and behaviour (volatility, leachability, speciation, degradation products and physical and chemical conditions on-site which may affect how contaminants behave); d) potential effects of contaminants on human health, including the health of occupants of built structures (for example arising from risks to service lines from hydrocarbons in groundwater, or risks to concrete from acid sulphate soils) and the environment; e) potential and actual contaminant migration routes including potential preferential pathways; f) the adequacy and completeness of all information available for use in the assessment of risk and for making decisions on management requirements, including an assessment of uncertainty; g) the review and update of the conceptual site model from the preliminary and detailed site investigations; h) nature and extent of any existing remediation (such as impervious surface cappings); and/or; i) whether the land is suitable (for the intended final land use) or can be made suitable through remediation. 		
E132	Local roads proposed to be used by heavy vehicles to directly access the construction boundary and ancillary facilities that are not shown in Figure 5-7 to 5-22 inclusive of Appendix F of the EIS must be approved by the Planning Secretary and included in the Traffic, Transport and Access Management CEMP Sub-plan.	Section 5.1.2	All local roads proposed to be used by heavy vehicles to access the ancillary facilities are as shown in Appendix F of the EIS. As such, the requirements of MCoA E132 are not triggered.
E136	Before any local road is used by a heavy vehicle for the purposes of the CSSI, a Road Dilapidation Report must be	Section 6.2.10	Road dilapidation reports will be prepared by a suitably qualified person for local roads (and

Ref#	Condition Requirements	Reference	How addressed
	prepared for the road. A copy of the Road Dilapidation Report must 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 CSSI.		associated infrastructure within the road reserve) proposed to be used by heavy vehicles for works associated with the CSSI. A copy of the Road Dilapidation Report will be provided to the relevant council in accordance with the requirements of this condition.
E139	Vehicles (including light and heavy vehicles) associated with the CSSI must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive land user(s); (d) not block or disrupt access across pedestrian or shared user paths at any time; and (e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the Traffic, Transport and Access Management CEMP Sub-plan.	Section 6.2.10 Section 6.2.11 Appendix A	 (a) CPB Downer JV will minimise our impact on the public roads by providing parking facilities where ancillary facilities cannot accommodate the proposed workforce. In addition, a shuttle bus service will be provided from the identified parking areas and nearby public transport hubs including St Leonards and North Sydney train stations (Section 6.2.11). (b) Heavy haulage trucks will be equipped with telematics (customised GPS tracking system) so that their movements are captured in real time. This enables monitoring of driver behavior such as speeding, idling, queueing or not using correct routes (Appendix A – T7) (c) A customised GPS tracking system will allow us to monitor trucks entering and exiting an area. Trucks will be directed to specific layover areas (marshalling yard) until they are able to continue their journey. Marshalling facilities are located away from sensitive receivers (Appendix A – T5).

Ref#	Condition Requirements	Reference	How addressed
			(d) CPB Downer JV will not block or disrupt access across pedestrian or shared user paths at any time (Section 6.2.10).
			(e) Local roads proposed to be used by heavy vehicles to access the construction boundary and ancillary facilities are detailed in Appendix C and sourced from Figures 5-19 and 5-20 of Appendix F of the EIS (Appendix A – T5 and T7).
E140	A Construction Parking and Access Strategy must be prepared to identify and mitigate impacts resulting from on- and off-street parking changes during construction of the CSSI. The Strategy must include, but not necessarily be limited to:	Section 6.2.11	Site establishment activities are not expected to reduce the availability of existing parking and therefore the requirements of this condition are not triggered for the purpose of this Plan.
	(a) achieving the requirements of Condition E139;		
	(b) confirmation and timing of the removal of on- and off-street parking associated with construction of the CSSI;		
	(c) parking surveys of all parking spaces to be removed or occupied by the CSSI workforce to determine current demand during peak, off-peak, school drop off and pickup, weekend periods and during special events;		
	(d) consultation with affected stakeholders utilising existing on- and off-street parking stock which will be impacted as a result of construction;		
	(e) assessment of the impacts to on- and off-street parking stock taking into consideration, occupation by the CSSI workforce, outcomes of consultation with affected stakeholders and considering the impacts of special events;		

Ref #	Condition Requirements	Reference	How addressed
	(f) identification of mitigation measures to manage impacts to stakeholders as a result of on and off-street parking changes including, but not necessarily limited to, staged removal and replacement of parking, provision of alternative parking arrangements, managed staff parking arrangements and working with relevant council(s) to introduce parking restrictions adjacent to work sites and compounds or appropriate residential parking schemes;		
	(g) where residential parking schemes already exist, off-road parking facilities must be provided for the CSSI workforce;		
	(h) mechanisms for monitoring, over appropriate intervals, to determine the effectiveness of implemented mitigation measures;		
	(i) details of shuttle bus service(s) to transport the CSSI workforce to construction sites from public transport hubs and off-site car parking facilities (where these are provided) and between construction sites;		
	(j) provision of contingency measures should the results of mitigation or monitoring indicate implemented measures are ineffective; and		
	(k) provision of reporting of monitoring results to the Planning Secretary and relevant council(s) at three monthly intervals.		
	The Construction Parking and Access Strategy must be submitted to the Planning Secretary for approval at least one month before the commencement of any construction that reduces the availability of existing parking. The approved Strategy must be implemented before impacting on on-street parking and incorporated into the Traffic, Transport and Access Management CEMP Sub-plan		

Ref#	Condition Requirements	Reference	How addressed
E155	The CSSI must be constructed in a manner that minimises visual impacts of construction sites, including providing temporary landscaping and vegetative screening of the construction sites, minimising light spill, and incorporating architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located.	Section 6.2.12 Section 6.2.13	Management and mitigation measures to minimise the visual impacts of ancillary facilities are detailed in Section 6.2.12 and 6.2.13, including lighting position/shields, and boundary screening.
E184	The CSSI must be designed to retain as many existing trees as possible. Replacement trees and plantings must be provided at a ratio of 2:1 and deliver an increase in tree canopy and aim to enhance the relevant council's position in respect of the Sydney Green Grid, unless otherwise agreed by the Planning Secretary.	Section 6.2.17	As far as practical, the ancillary facilities would be configured to avoid impact to trees that would not already be directly impacted by the Project. Where tree removal is required, replacement trees and plantings will be provided in accordance with the requirements of this condition.

2.3 Revised Environmental Management Measures

Relevant REMMs, as identified in Part D of the RtS, are listed in **Table 2-2.** A cross reference is also included to indicate where the REMM is addressed in this ASEMP or other Project management documents.

Table 2-2 Environmental management measures relevant to this ASEMP

Ref#	REMM	Reference	How Addressed
СТТ9	Where provision of construction on-site parking cannot accommodate the full construction workforce, feasible and reasonable management measures that minimise impacts on parking on local roads will be identified and implemented. Depending on the location, management measures may include workforce shuttle buses and the use of public transport.	Section 6.2.11	Site establishment activities are not expected to reduce the availability of existing parking and therefore the requirements of this REMM are not triggered for the purpose of this Plan.
CNV2	Detailed Construction Noise and Vibration Impact Statements will be carried out for all construction support sites and major construction works required for the project prior to the commencement of construction.	Section 6.2.7	A Construction Noise and Vibration Impact Statement (CNVIS) will be prepared for all ancillary facilities and site establishment activities. This will include potential out of hours works necessary for
	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 support site, 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 <i>Interim Construction Noise Guideline</i> (DECC, 2009) and the <i>Construction Noise and Vibration Guideline</i> (Roads and Maritime, 2016a).		site establishment. The CNVIS will be provided to the AA and ER prior to commencement of the associated works.

Ref#	REMM	Reference	How Addressed
CNV4	Construction noise and vibration impacts will be monitored periodically throughout all stages of the construction support sites to ensure that:	Section 6.2.8	Noise and vibration monitoring will be undertaken during site establishment activities and operation of ancillary facilities in accordance with the approved
	a) Impacts are consistent with the noise and vibration levels detailed in the relevant Construction Noise and Vibration Impact Statements		CNVIS.
	b) Noise and vibration impacts are being appropriately managed		
	c) Mitigation measures are effective		
SG5	Erosion and Sediment measures will be implemented at all work sites in accordance with the principles and requirements in 'Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004) and Volume 2D (NSW Department of Environment, Climate Change, 2008), commonly referred to as the 'Blue Book'.	Section 6.2.6	Reflecting the requirements of this REMM and the 'Blue Book', preliminary erosion and sediment control plans (ESCPs) will be prepared for all ancillary facilities prior to site establishment activities.
WQ1	Erosion and sediment measures will be implemented at all work sites and surface road upgrades in accordance with the principles and requirements in <i>Managing Urban Stormwater</i> – <i>Soils and Construction, Volume 1</i> (Landcom, 2004), <i>Managing Urban Stormwater: Volume 2D Main Road Construction</i> (NSW Department of Environment, Climate Change and Water, 2008) and relevant guidelines, procedures and specifications of Transport for NSW.	Section 6.2.6	Reflecting the requirements of this REMM and the 'Blue Book', preliminary erosion and sediment control plans (ESCPs) will be prepared for all ancillary facilities prior to site establishment activities. A soil conservation specialist will be engaged by both TfNSW and CPB Downer JV for site
	A soil conservation specialist will be engaged by both Transport for NSW and the Contractor for the duration of construction of the project to provide advice regarding erosion and sediment control including review of Erosion and Sediment Control Plans (ESCPs).		establishment and the duration of construction.

Ref#	REMM	Reference	How Addressed
F6	Site facilities will be located outside high flood hazard areas based on a 1% AEP flood.	Section 5.9	All ancillary facilities are located outside high flood hazard areas based on the 1% AEP flood.
F8	 Detailed construction planning will consider flood risk at construction sites and construction support sites. This will include: A review of site layout and staging of construction activities to avoid or minimise obstruction of overland flow paths and limit the extent of flow diversion required Identification of measures to not worsen flood impacts on the community and on other property and infrastructure during construction up to and including the 1% AEP flood event where reasonable and feasible Measures to mitigate alterations to local runoff conditions due to construction activities. 	Section 6.2.16 Appendix A	Ancillary facilities would be laid out such that flows will not be significantly impeded. Where the potential exists for the obstruction of overland flows or increased run-off (as a resulting of hardstand areas) a contingency plan will be prepared to manage potential flood events and will outline procedures to reduce risks including worker safety, removal of all plant/equipment and stabilising exposed areas. Management and mitigation measures are detailed in Appendix A of this Plan.
SE3	Ongoing engagement will be carried out with managers of social infrastructure located near to surface construction works/ construction support sites and sensitive social infrastructure above the tunnel alignment (for example, schools, places of worship, aged care, child care, health and medical facilities) about the timing and duration of construction works and management of potential impacts.	Section 7.6	Prior to establishment of ancillary facilities, a Community Action Plan will be prepared in accordance with the project Community Communications Strategy. The Community Action Plan will include community and stakeholder management requirements to be implemented during works, including the site establishment phase. The Community Engagement Team (CET) will engage with residential and commercial properties that adjoin or are adjacent to the ancillary facilities.

Ref#	REMM	Reference	How Addressed
			Engagement methods will include door knocking residents impacted by the ancillary facilities, letter box drops and community updates as applicable.
V1	Construction support sites will be developed to minimise visual impacts for adjacent receivers where feasible and reasonable.	Section 6.2.12 Section 6.2.13	Management and mitigation measures to minimise the visual impacts of ancillary facilities are detailed in Section 6.2.12 and 6.2.13, including lighting position/shields, and boundary screening.
V2	Storage areas and associated works will be located in cleared and otherwise disturbed areas away from residential areas where feasible and reasonable.	Section 6.2.17	As detailed in Section 6.2.17, storage areas and associated works will be located in cleared and otherwise disturbed areas away from residential areas where feasible and reasonable.
V3	Site hoardings will be in neutral colours and designs, in proximity to open space, to help blend them into the surrounding environment.	Section 6.2.13 Appendix B	Where ancillary facilities are located in proximity to open space, boundary screening will be in neutral colours and designs to help blend them into the surrounding environment. The location of boundary screening is shown in the site layout plans in Appendix B .
V4	Site hoarding and perimeter site areas will be maintained regularly to include the prompt removal of graffiti.	Appendix A	The requirements of this REMM are included in the management and mitigation measures detailed in Appendix A (VI1).
V5	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 4282 –2019 Control of the obtrusive effects of outdoor lighting.	Section 5.5 Section 6.2.12	Management and mitigation measures to minimise glare issues and light spillage are included in Section 6.2.12, including lighting position/shields, and boundary screening.

Ref#	REMM	Reference	How Addressed
V6	Hoardings and temporary noise walls will be erected as early as possible within the site establishment phase to provide visual screening.	Section 6.2.13	Boundary screening will be installed as early as possible within the site establishment phase to provide visual screening.
V7	High quality fencing suitable for parks and public spaces will be used where construction support sites are located in close proximity to sensitive residential receivers such as residents and users of recreational space.	Section 6.2.13	Boundary screening will be installed in accordance with the approved CNVIS to minimise impacts on adjacent sensitive receivers.
HR1	Dangerous goods and hazardous materials will be stored in accordance with supplier's instructions and relevant legislation, Australian Standards, and applicable guidelines and may include bulk storage tanks, chemical storage cabinets/containers or impervious bunds.	Appendix A	The requirements of this REMM are addressed in the safeguards detailed in Appendix A . Chemical storage and refuelling areas will be identified on Site Environment Plans and monitored during routine inspections. Flammable liquid cabinets will be included at each ancillary facility where liquid chemicals are being stored. Bunded pallets will be provided for storage of chemicals during works and returned to flammable liquid cabinets at the end of shift.

2.4 Environmental Performance Outcomes and Monitoring Program

The CPB Downer JV will aim to meet the performance outcomes from the EIS (Chapter 28, Table 28-4) as required by MCoA C2(d)(i). Relevant performance outcomes are detailed in Error! Reference source not found. including details on how the matter is addressed and the relevant monitoring program.

Table 2-3 Environmental Performance Outcomes relevant to this ASEMP

Performance Outcome	How Addressed	Monitoring Program
Consultation The project is developed with meaningful and effective engagement during project delivery	 Disseminate regular project updates and other information through the project website and engagement tools identified in the Community Communication Strategy Record and respond to complaints in a timely and appropriate manner, and within the timeframe specified in the Community Communication Strategy, to ensure all stakeholders' concerns 	• Audits
	 are managed effectively and promptly Consult with North Sydney Council, Willoughby City Council and relevant government agencies in accordance with CoA A17 during the preparation of this Plan. 	
 Traffic and Transport Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts The safety of transport system customers is maintained 	 Minimise impacts to local streets from road closures and heavy vehicle movements during site establishment Minimise impacts to road network efficiency during site establishment Enable access to properties to be maintained during site establishment Maintain pedestrian and cyclist safety along surface roads near 	Weekly inspections / observations
 Impacts on network capacity and the level of service are effectively managed 	the ProjectImplement the safeguards T1–T4 (Appendix A)	

Performance Outcome	How Addressed	Monitoring Program	
Works are compatible with existing infrastructure and future transport corridors			
Air Quality The project is constructed in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent	 Provide effective management of dust, odour and other emissions during site establishment Implement the safeguard: AQ1 (Appendix A) 	Weekly inspections / observations	
Health and Safety The project avoids or minimises any adverse health impacts arising from the project. The project avoids, to the greatest extent possible, risk to public safety.	 Incidents and risks to public safety will be minimised during site establishment Road users and the public will be protected during establishment of ancillary facilities Hazardous materials within project areas will be managed to protect human health Implement the safeguards: HM1 – HM6, CO1 – CO6, T1 – T4, AQ1 (Appendix A) 	Weekly inspections / observations	
Noise and Vibration – Amenity Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity	 Comply with the relevant criteria from the NSW Noise Policy for Industry (2017) Minimise increases in road traffic noise, where possible Include effective management of construction noise and vibration in accordance with relevant guidelines Minimise impacts to the local community by: Controlling noise and vibration at the source 	 Weekly inspections / observations Noise and vibration monitoring as required (refer section 6.2.7) 	

Performance Outcome	How Addressed	Monitoring Program
Noise and Vibration - Structural	 Controlling noise and vibration on the source to receiver transmission path Controlling noise and vibration at the receiver Implementing practicable and reasonable measures to minimise the noise and vibration impacts of site establishment works on local sensitive receivers Implement the safeguards: N1 – N7 (Appendix A) 	Weekly inspections /
Noise and Vibration - Structural Noise and Vibration (Structural) - Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on the structural integrity of buildings and items including Aboriginal places and environmental heritage.	 Controlling vibration at the source Controlling vibration on the source to receiver transmission path Implementing practicable and reasonable measures to minimise vibration impacts of site establishment activities on structures 	 Weekly inspections / observations Noise and vibration monitoring as required (refer section 6.2.7)
Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.	 Where practicable, the design would minimise the need to clear vegetation Potential impacts on biodiversity would be managed in accordance with relevant legislation, including the Environmental Planning and Assessment Act 1979, Biodiversity Conservation Act 2016 and the Environment Protection and Biodiversity Conservation Act 1999 Implement the safeguards: BI1 – BI6 (Appendix A) 	Weekly inspections / observations
Place making and urban design	Establish ancillary facilities to minimise adverse impacts on the visual amenity of the local community	Weekly inspections/observations

Performance Outcome	How Addressed	Monitoring Program
The project design complements the visual amenity, character and quality of the surrounding environment. The project contributes to the accessibility and connectivity of communities.	Implement the safeguards: VI1 – VI3 (Appendix A)	
Socio-economics, land use and property The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	Minimise impacts to businesses during site establishment	Weekly inspections/observations
 Water (Hydrology) Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved) 	 Consider opportunities for reuse of treated water during site establishment Environmental values of nearby, connected and affected water sources are improved and/or maintained 	Water Discharge Permits

Performance Outcome	How Addressed	Monitoring Program
Sustainable use of water resources		
Water (Quality) The project is constructed in a manner that protects the NSW Water Quality Objectives where they are being achieved, and contributes to the achievement of the Water Quality Objectives where they are currently not being achieved, including downstream of the project, to the extent of the project impact including estuarine and marine waters (if applicable).	Water discharged from ancillary facilities will meet discharge criteria that has been developed in consideration of the NSW Water Quality Objectives	Water Discharge Permits
Flooding Construction support sites and construction sites would be laid out such that flows are not significantly impeded.	 Construction support sites and construction sites will be laid out such that flows are not significantly impeded Implement the safeguard: F1-F5 (Appendix A) 	At all times
Soils The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	 Erosion and sediment controls will be implemented in accordance with Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom 2004) and Volume 2D (DECCW 2008), commonly referred to as the 'Blue Book' Contamination will be managed to protect environmental values and human health Effectively treat water to meet water quality discharge criteria Implement the safeguards: S1 – S4 (Appendix A) 	 Weekly inspections/observations Water Discharge Permits
Heritage The construction of the Project facilitates, to the greatest extent possible, the long	Establish archival recordings of items of heritage significance that will be impacted	Inspection records

Performance Outcome	How Addressed	Monitoring Program
term protection, conservation and management of the heritage significance of items of environmental heritage and Aboriginal objects and places.	 Minimise impacts on heritage items during site establishment Where practicable, avoid impacts on heritage items and archaeology Impacts on heritage will be managed in accordance with relevant legislation, including the <i>Environmental Planning and Assessment Act 1979, the Heritage Act 1977</i>, and relevant guidelines Implement the safeguards: H1-H2 (Appendix A) 	
Sustainability Conservation of natural resources is maximised.	Sustainability considerations are integrated throughout site establishment	At all times
Waste All wastes generated during the construction of the Project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.	 Clean spoil is recycled or reused either onsite or off-site where feasible and reasonable Off-site waste re-use will be managed in accordance with relevant NSW Environment Protection Authority resource recovery exemptions and requirements. Waste will be disposed of at appropriately licensed facilities Implement the safeguards: W1 – W7 (Appendix A) 	At all times

2.5 Additional Approvals, Licences, Permits and Requirements

Approvals and Permits that may apply to the Project

Approvals, permits and licences that may apply to the Project include:

- An environment protection licence for road construction under Chapter 3 of the Protection
 of the Environment Operations Act 1997. In accordance with section 5.24 of the
 Environmental Planning and Assessment Act 1979, such a licence cannot be refused for an
 approved project and is to be substantially consistent with any approval under Division 5.2
- Leases and/or permits in respect to works on community land that has not been acquired by the project in accordance with the Local Government Act 1993
- Road Occupancy Licences (ROL).

Contractor to confirm that no other approvals, permits, licences etc will be required.

Approvals not required for State significant infrastructure (SSI), and therefore the Project

A number of approvals are not required for a project approved under section 5.19 of Division 5.2 of the EP&A Act. Those approvals not required consist of:

- Permits under sections 201, 205 and 219 of the Fisheries Management Act 1994 (NSW)
- Approvals under Part 4 and excavation permits under section 139 of the Heritage Act 1977 (NSW)
- Aboriginal heritage permits under section 90 of the National Parks and Wildlife Act 1974 (NSW)
- Various approvals under the *Water Management Act 2000* (NSW), including water use approvals under section 89, water management work approvals under section 90, and activity approvals (other than aquifer interference approvals) under section 91.

Special dispensations for CSSI

Section 5.23(3) of the EP&A Act precludes the following directions, orders or notices being made to prevent or interfere with the carrying out of an approved CSSI project:

- An interim protection order (within the meaning of the National Parks and Wildlife Act 1974 (NSW))
- An order under Division 1 (Stop work orders) of Part 6A of the National Parks and Wildlife
 Act 1974 (NSW) or Division 7 (Stop work orders) of Part 7A of the Fisheries Management
 Act 1994 (NSW)
- A remediation direction under Division 3 (Remediation directions) of Part 6A of the National Parks and Wildlife Act 1974 (NSW)
- An order or direction under Part 11 (Regulatory compliance mechanisms) of the Biodiversity Conservation Act 2016 (NSW)
- An environment protection notice under Chapter 4 of the Protection of the Environment Operations Act 1997 (NSW)
- An order from a council to demolish or move a building, to repair or make structural alterations to a building, or to do or refrain from doing things under section 124 of the *Local Government Act 1993* (NSW).

2.6 Guidelines

Local, State and Commonwealth guidelines that apply to site establishment works include:

- Acid Sulfate Soil Guidelines, Acid Sulfate Soil Management Advisory Committee, August 1998
- (National) Acid Sulfate Soil Sampling and Identification Methods Manual, Department of Agriculture and Water Resources, June 2018
- AS 4282-1997 Control of the Obtrusive Effects of Outdoor Lighting
- AS/NZ ISO 31000:2009 Risk management Principles and guidelines
- AS/NZS ISO 14001:2015 Environmental management systems
- Australian and New Zealand Environment and Conservation Council (ANZECC) and Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) Australian and New Zealand Guidelines for Fresh and Marine Water Quality, 2018
- Biodiversity Guidelines: Protecting and managing biodiversity on RTA Projects, Roads Traffic Authority (RTA), 2011
- British Standard BS 7385-2:1993 Evaluation and measurement for vibration in buildings Guide to damage levels from ground borne vibration
- (German Standard) DIN 4150-3 4150-3 (1999-02) Structural vibration Effects of vibration on structures, Deutsches Institute fur Normung, 1999
- Department of Environment and Conservation (DEC), Assessing vibration: a technical guideline, February 2006
- Department of Environment and Climate Change (DECC), Interim Construction Noise Guideline, 2009
- Managing Urban Stormwater: Soils and Construction (4th Edition) Volume 1 (the "Blue Book"), Landcom, 2004
- Managing Urban Stormwater: Soils and Construction (4th Edition) Volume 2A: Installation of Services, DECC, 2008
- Managing Urban Stormwater: Soils and Construction Volume 2D: Main Road Construction, DECC, 2008
- National Environment Protection Council (NEPC), National Environment Protection (Ambient Air Quality) Measure, 2003b
- NSW EPA, Waste Classification Guidelines, 2014
- NSW EPA, NSW Waste Avoidance and Resource Recovery Strategy 2014–21, 2014
- NSW EPA, Guidelines on the duty to report contamination under the Contaminated Land Management Act 1997, 2015
- NSW EPA, Contaminated Land Guidelines Consultants reporting on contaminated land, 2020
- TfNSW, Guideline for the Management of Contamination, September 2013
- TfNSW, Noise Criteria Guideline, 2015
- TfNSW, Roads and Maritime's Noise Mitigation Guideline, 2015
- TfNSW, Standard Management Procedure: Unexpected Archaeological Finds, 2015
- TfNSW, Standard Management Procedure: Unexpected Heritage Items, 2015
- TfNSW, Construction Noise and Vibration Guideline, 2016
- TfNSW, Stockpile Site Management Guideline, 2015

- TfNSW, QA Specification G1 General requirements
- TfNSW, QA Specification G2-C2 General requirements (major contracts)
- TfNSW, QA Specification G36 Environmental Protection
- TfNSW, QA Specification G38 Soil and Water Management
- TfNSW, QA Specification R44 Earthworks
- TfNSW, Authority (RTA), Environmental Noise Management Manual, 2001
- TfNSW, Guide to Traffic Generating Developments, Version 2.2, 2002
- TfNSW, 'Section 8 Erosion and Sediment', Road Design Guideline, 2003
- TfNSW, Guideline for Construction Water Quality Monitoring, 2003
- TfNSW, Erosion and Sediment Management Procedure, 2009
- TfNSW, Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects, 2011.

3 Consultation

This ASEMP will be developed and finalised in consultation with North Sydney Council, Willoughby City Council and relevant government agencies in accordance with CoA A17. Consultation with each agency, including responses received and how any issues raised were addressed in the development of this ASEMP are included in the Consultation Report (**Appendix G**).

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

4 Site Establishment Works

4.1 Site Establishment Works Overview

The Western Harbour Tunnel and Warringah Freeway Upgrade EIS identified nine temporary ancillary facilities for delivery of the Warringah Freeway Upgrade. The EIS provided an assessment of the characteristics, likely activities and potential site impacts at each site.

All ancillary facilities required for the Project will be established in accordance with this ASEMP. These ancillary facilities are shown in **Appendix B** of this Plan and include:

- High Street south (WFU2)
- High Street north (WFU3)
- Arthur Street east (WFU4)
- Berry Street east (WFU5)
- Ridge Street east (WFU6)
- Merlin Street (WFU7)
- Cammeray Golf Course (WFU8)
- Rosalind Street east (WFU9)
- Northern Hub (NH1).

4.1.1 Site establishment activities

Site establishment activities refer to the works undertaken to establish an ancillary facility and enable it to be used to support construction of the CSSI. **Table 4-1** details the general site establishment works proposed and an indicative timing to complete each activity, noting that multiple activities may be undertaken simultaneously (refer to Section 4.1.2 for the individual ancillary facility program).

Table 4-1 General Site Establishment Works (high intensive noise activities in **bold**)

Activity	Description	Indicative Timing
Site preparation works	Provision of site security such as temporary fencing panels and perimeter hoarding	3 days
	Provision of minimum health and safety requirements including:	
	Toilet facilities	
	∘ Offices	
	Lunch rooms	
	Signage and pedestrian diversions	
	Installation of traffic barriers	
Site survey and site investigation	Ground investigation works	2 days
works	Utility investigation by potholing with a vacuum truck	

Activity	Description	Indicative Timing
	Detailed site investigation (MCoA E115)	
Initial environmental controls	 Erosion and sediment controls, including: Installation of rip rap Drainage sump Diversion of offsite flows Erosion, sediment and water flow controls Delineation of sensitive areas and temporary fencing/hoardings 	2 days
Remediation	Remediation of contaminated materials (if required, pending detailed site investigations)	Variable
Site levelling	 Clearing of vegetation and grubbing which will involve the use of chain saws and mulchers Site levelling, grading and compaction Temporary stockpiling of materials for site levelling 	2 days
Hardstand and site access	 Formalisation of access and egress points Sealing of hard stand areas, which will involve the use of vibratory rollers Installation of internal haul roads which will involve the use of bitumen milling or profiling equipment 	2 days
Demolition of non- heritage structures	 Removal of hazardous materials Internal strip out Structure disassembly and demolition which will involve the use of a jackhammer 	4 days
Utility works (note, these activities will be managed through the project Utility Management Strategy (UMS) and have been provided in this table for completeness)	 Protection of existing services (overhead wiring) Removal of redundant utilities Installation of services to the site e.g. water, sewer, power, communications (this will be managed in accordance with the utilities management strategy). This work may involve the use of power saws for cutting road pavement and concrete and jackhammers to remove concrete / rock in excavations. 	6 days
Installation of offices	 Layout, e.g. blockwork and foundations, completed for office installation Installation of office buildings and shipping containers Installation of staff amenities 	5 days

Activity	Description	Indicative Timing
Installation of remaining site infrastructure	 Chemical and hazardous material storage Designated stockpile / laydown areas Formalisation of on-site car parking (line marking etc) Installation of site lighting 	2 days

4.1.2 Site establishment activities program

An indicative site establishment program for each ancillary facility is provided in **Table 4-2.** Site establishment works are scheduled to commence in March 2022 and will be undertaken in accordance with this ASEMP. The low impact work described in this ASEMP becomes construction with the approval of a Construction Environmental Management Plan.

Table 4-2: Ancillary Facility Site Establishment Works – Indicative Duration

Ancillary Facility	Indicative Duration	
High Street south (WFU2)	2 weeks	
High Street north (WFU3)	2 weeks	
Arthur Street east (WFU4)	2 weeks	
Berry Street east (WFU5)	2 weeks	
Ridge Street east (WFU6)	2 weeks	
Merlin Street (WFU7)	2 weeks	
Cammeray Golf Course (WFU8)	3 weeks	
Rosalind Street east (WFU9)	2 weeks	
Northern Hub (NH1)	3 weeks	

5 Potential Environmental Impacts

5.1 Traffic and Transport

5.1.1 Parking

Through the provision on-site worker parking, site establishment activities are not expected to reduce the availability of existing parking in the vicinity of each ancillary facility.

5.1.2 Local Road Impacts and Vehicle Movements

The proposed site access for light and heavy vehicles during site establishment works are detailed in **Tables 1-1** to **1-10**. The maximum vehicle movements permitted during site establishment works are provided in **Table 5-1**.

All access and egress into the ancillary facilities are as per the EIS nominated routes, specifically Appendix F, Figures 5-15 through to 5-17 inclusive. As such, the requirements of MCoA E132 are not triggered. Access and egress requirements at the ancillary facilities will not impact on any existing active or public transport networks for the duration of the site establishment activities.

Given the low vehicle numbers associated with the site establishment works compared to the vehicle numbers described in the EIS and associated appendices, the impacts on local roads are expected to be negligible.

The volume of construction vehicles during the operation of the ancillary facilities will be addressed in the site specific Construction Traffic and Transport Management Plans.

Table 5-1: Vehicle movements during site establishment

Ancillary Facility	Location	Road classification	Anticipated Peak Daily Movements	
			Light	Heavy
WFU2	High Street	State	16	5
WFU3	High Street north	Regional	13	2
WFU4	Arthur Street	State	10	2
WFU5	Berry Street east	State	6	5
WFU6	Ridge Street east	Local	8	4
WFU 7	Merlin Street	State Local	5	2
WFU8	Cammeray Golf Course	Freeway Regional	30	8
WFU 9	Rosalind Street east	Regional Local	10	3

Ancillary Facility	Location	Road classification	Anticipated Peak Daily Movements	
			Light	Heavy
NH1	Northern Hub	State	15	5

5.2 Air Quality

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

- Dust generation due to:
 - Vegetation clearance, clearing and grubbing
 - Stockpiling of topsoil and mulched vegetation
 - Demolition of buildings and associated infrastructure where applicable
 - Wind erosion of exposed surfaces and stockpiles
 - Wheel-generated dust from vehicular traffic on unsealed roads and works site access points.
- Particulate matter (PM2.5/PM10) generation due to:
 - Operation of construction vehicles, plant and equipment
 - Dust generation activities set out above.

5.3 Noise and Vibration

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 of plant and equipment in use
- The number of plant and equipment simultaneously 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).

Proposed site establishment works may result in noise and vibration impacts due to using heavy machinery, hammering activities on hardstand areas, excavation and levelling works, demolition of structures and the disposal of materials.

Potentially affected noise sensitive receivers will be identified within a Construction Noise and Vibration Impact Statement (CNVIS) for site establishment activities. This will include potential out of hours works necessary for site establishment. The CNVIS will be provided to the AA and ER prior to commencement of the associated works.

The assessed site establishment activities will include site preparation works, erection of temporary fencing / hoardings, demolition, establishment of erosion and sediment controls, minor utility

connections, earthworks, installation of site offices, concreting works and installation of access points.

5.4 Land Use and Property

Existing land use in the area around the Warringah Freeway corridor is characterised by a mix of low, medium and high density residential development, business and retail uses, neighbourhood centres and commercial uses. The establishment of ancillary facilities will result in a temporary change in land use. The individual sites would not generally impact on the existing land use as most are currently zoned for (or being used for) infrastructure-related purposes. Exceptions to this are:

- Merlon Street ancillary facility (WFU7): The Merlin Street ancillary facility (WFU7) will temporarily occupy Merlin Street Reserve in Neutral Bay. WFU7 will be the main construction support site for the Alfred Street North realignment and new southbound bus lane bridge off Falcon Street. This ancillary facility is on land owned by TfNSW and is zoned for public recreation and high density residential.
- Cammeray Golf Course ancillary facility (WFU8): The Cammeray Golf Course ancillary facility (WFU8) will temporarily occupy the north-western portion of the existing golf course, located adjacent to the Warringah Freeway.

WFU8 will be located on government owned land zoned for public recreational use associated with the Cammeray Golf Club. WFU8 will be the main site supporting construction works for the Warringah Freeway Upgrade and will be located adjacent to a separate construction support site for the Western Harbour Tunnel works (WHT10).

The location and layout of WFU8 and the adjoining WHT10 within Cammeray Golf Course have been designed to minimise disruption to users of the golf course. It is expected that the Cammeray Golf Club would continue to operate as a nine-hole golf course during construction.

The Cammeray Park sports ground, tennis club, croquet club and skate park located to the south-east of WFU8 will not be directly impacted by the construction support site.

At completion of construction, a portion of the site will be used on an ongoing basis to support permanent project infrastructure and the future Beaches Link and Gore Hill Freeway Connection project construction support site (subject to a separate approval).

 Rosalind Street east ancillary facility (WFU9): The Rosalind Street east ancillary facility (WFU9) will temporarily occupy land bound by the Warringah Freeway northbound off ramp to Miller Street in the north and east, Rosalind Street to the south and Miller Street in Cammeray to the west.

WFU9 will be located on land owned by TfNSW and zoned for public recreation. Despite the land use zoning, the site is unsuitable for public recreational use as it is a relatively small parcel of land, is severed from any expansive open space area and is bordered by existing road infrastructure. Land use impacts at this location during construction are expected to be negligible. The site will be rehabilitated and returned to an equivalent state at the completion of construction.

A land use survey was prepared as part of the EIS. This land use survey will be refined prior to commencement of site establishment works to confirm sensitive receivers. In accordance with MCoA E65, results will be included in the Noise and Vibration Management Sub-plan.

5.5 Visual Amenity

Potential impacts to sensitive land users during site establishment works include dust emissions, visual impacts, and noise and vibration. In addition, lighting may be required at night for the purposes of illuminating required office buildings, providing security around compounds, or where works are required to be conducted under an ROL, including the delivery of oversized materials/plant, or potholing investigations.

Ancillary facilities will be constructed in a manner that minimises visual impacts. This includes providing temporary landscaping and vegetative screening of the sites (in accordance with CoA A20 and E155), minimising light spill, and incorporating architectural treatment and finishes within key elements of the temporary structures that reflect the context within which the construction sites are located.

5.6 Social and Economic

Site establishment works have the potential to cause localised social and economic impacts as a result of changed traffic and access conditions to facilitate site access and egress requirements. In addition, short term utility disruptions may be necessary to connect utilities to the ancillary facilities.

5.7 Soil and Water

The proposed site establishment works will involve surface excavation and earthmoving. Temporary exposure of soil to water runoff and wind could increase the potential for soil erosion. There is also potential for exposed soils – and other unconsolidated materials, such as spoil, sand and other aggregates – to be transported from the ancillary facility into surrounding waterways via stormwater runoff. Sedimentation in natural waterways can result in reduced water quality as well as smothering of vegetation and clogging of channels, impacting the natural flow paths of the waterway.

The greatest potential for soil erosion would be associated with the disturbance of soils on existing slopes during site establishment/construction, particularly at Arthur Street east (WFU4), Berry Street east (WFU5) and Ridge Street east (WFU6) ancillary facilities.

The majority of ancillary facilities are not characterised by significant undulating topography and the soil erosion hazard is unlikely to be significant.

There is low potential for acid sulfate soils to be encountered.

5.8 Contamination

Unsealed areas adjacent to Warringah Freeway, including the locations of construction support sites, may be contaminated with lead, hydrocarbons and asbestos as a result of the current and historical deposition of particulates from large volume traffic flows resulting in a moderate to high risk of land contamination. Additionally, possible filling of the site with materials of unknown quality (fill material potentially contaminated with contaminant compounds including heavy metals, hydrocarbons, pesticides, PCBs and asbestos) during construction of the Warringah Freeway may have impacted the site.

If contamination is present and not appropriately controlled, there is the potential for:

- Inhalation and/or ingestion risk to site workers and nearby residents of hazardous building materials via dust
- Cross-contamination associated with incorrect handling or disposal of spoil/unexpected finds
- Excavation activities mobilising and spreading buried contaminants
- · Accidental leaks and spills while using land for ancillary facilities

• Erosion and off-site transport of sediment and contamination via overland flow and stormwater runoff, affecting the water quality of local waterways entering Sydney Harbour.

5.9 Flooding and Drainage

With the exception of Arthur Street east (WFU4), Berry Street east (WFU5) and Cammeray Golf Course (WFU8)), the establishment and operation of the ancillary facilities is not expected to impact flood behaviour. As detailed in **Table 5-2**, minor inundation would occur for 1% Annual Exceedance Probability (AEP) and 10% AEP flood events at Arthur Street east (WFU4) and Berry Street east (WFU5). While the depth of inundation within the Cammeray Golf Course (WFU8) site exceeds 0.7m, the area of impact is limited to the Cammeray Golf Course dam which is outside of the ancillary facility boundary (**Appendix B**).

Table 5-2: Inundation for Flood Magnitude 1% AEP and 10% AEP

Ancillary Facility	Indicative Inundation Depth – 1% AEP and 10%	Description
WFU4 – Arthur Street	1% AEP <0.05m 10% AEP <0.05m	 Potential to obstruct overland flow which surcharges the eastern kerb line of Arthur Street. Obstructions to the passage of overland flow through the Arthur Street east construction support site have the potential to increase the depth of inundation on Arthur Street and along the frontage of several commercial properties that are located on its western side.
WFU5 – Berry Street	1% AEP <0.05m 10% AEP <0.05m	 Provision of hard stand areas within the confines of the Berry Street east (WFU5) construction support site are likely to increase the run-off potential of the area, which in turn will increase the rate at which flow discharges on to Warringah Freeway.
WFU8 – Cammeray Golf Course	1% AEP >0.7m 10% AEP >0.7m	 Provision of hardstand areas within the confines of the Cammeray Golf Course construction supports site (WFU8) has the potential to increase flooding conditions in existing residential development that is located along Warringa Road, Falls Street, Cammeray Road, and Grafton Street unless appropriate connection to the existing trunk drainage system are incorporated into the Project design.
		 Note that the area impacted by flooding is limited to the Cammeray Golf Course dam which is outside of the ancillary facility boundary (Appendix B).

Without appropriate management measures, inundation of ancillary facilities by floodwater has the potential to:

- Cause damage to the Project works and delays in construction programming
- Pose a safety risk to construction workers
- Detrimentally impact the downstream waterways as a result of transport of sediments and construction materials by floodwaters

 Obstruct the passage of floodwater and overland flow through the provision of temporary measures such as site sheds, stockpiles, noise walls and flood protection walls, which in turn could increase flooding conditions in existing development located outside the construction footprint.

5.10 Biodiversity

5.10.1 Flora and Fauna

Any work that may adversely affect threatened species or threatened ecological communities (per the meaning of the *Biodiversity Conservation Act 2016* or *Environment Protection and Biodiversity Conservation Act 1999*) cannot be undertaken under this ASEMP.

The EIS outlines that the majority of the Project footprint and surrounding area is modified and disturbed and contains urban exotic/native species and planted exotic trees and grassy weeds. The footprint is considered to be in a poor ecological condition.

Although seven *Eucalyptus nicholii* trees are located within the Rosalind Street construction support site (WFU9), the Project is not likely to have a significant impact on these threatened flora species, based on the low numbers of remnant trees to be removed and the fact that other trees are planted. It is noted that *Eucalyptus nicholii* is not a local native species. However, it is recognised that planted natives and exotic vegetation provide potential habitat for native fauna.

5.10.2 Trees

The Project will be designed to retain as many trees as possible and to provide a net increase in the number of replacement trees in accordance with CoA E184.

An arboricultural assessment has been carried out as part of the EIS based on the concept design to identify trees that will be impacted by site establishment and construction. All trees and vegetation to be removed during site establishment works – the majority of which are located within the Cammeray Golf Course (WFU8) site – will be identified during pre-clearance arboricultural assessments / inspections. Tree clearing will be undertaken in accordance with TfNSW Specification G40 "Clearing and Grubbing".

5.11 Groundwater

The site establishment activities are above ground, with some shallow excavation required for utility connections which will not impact the hydrogeological regime. As such, there are no anticipated impacts to groundwater.

Soil and water environmental safeguards for the storage and stockpiling of materials, fuel and wastes during site establishment including spill prevention and response procedures are included in Section 6 of this Plan in **Appendix A**.

5.12 Non-aboriginal Heritage

Demolition of any heritage item or potential heritage item will not be undertaken prior to the approval of the CEMP and the Heritage Management Sub-plan.

The ancillary facility site establishment works will not adversely affect any heritage items with the exception of the Cammeray Golf Course (WFU8) site. At this location there will be physical impacts to the heritage item due to the construction of the ancillary facility which will eventually house permanent operational infrastructure within the heritage boundary.

If any unexpected heritage items (including human remains) are encountered, works potentially affecting the find will cease immediately and the *Unexpected Heritage Items*, *Heritage Procedure* 02 (TfNSW, November 2015) will be followed.

Environmental safeguards in **Appendix A** will be implemented during site establishment works to mitigate potential impacts to non-Aboriginal heritage.

5.13 Aboriginal Heritage

The EIS does not identify any Aboriginal heritage sites within the vicinity of the proposed site establishment works.

All ancillary facilities are generally located within highly disturbed urbanised areas, and it is therefore unlikely the site establishment works will impact on Aboriginal heritage.

Aboriginal heritage environmental safeguards to avoid, minimise and mitigate impacts to previously unidentified items of Aboriginal heritage are included in **Appendix A**.

5.14 Greenhouse Gas

Greenhouse gas emissions relating to site establishment activities at the site are expected to be relatively minor, and typically associated with the use of plant, vehicles and electricity.

5.15 Resource and Waste Minimisation

Resources used for site establishment works will primarily include construction materials (concrete, asphalt, steel, fuel etc), water and power. The waste generated is expected to be mainly unsuitable fill material and demolition waste.

5.16 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.

5.17 Hazard and Risk

Potential hazard and risk impacts during site establishment works include accidental spills of fuels and/or chemicals which could result in contamination of soils and/or waterways, mismanagement of contaminated material and emission of gases from contaminated material.

5.18 Cumulative Impacts

Site establishment activities will be undertaken at the same time as other projects in the immediate vicinity of ancillary facilities and have the potential to exacerbate localised impacts.

Stage 1A (Critical Utilities Relocation), Stage 1B (Cammeray Golf Course Reconfiguration) and Stage 1C (Massey to Amherst Noise Wall) will be being undertaken at the same time as the Stage 2 site establishment activities detailed in this Plan.

Prior to commencing site establishment works, communication will be established with other projects in close proximity to the various ancillary facilities to ensure activities are scheduled and managed to minimise disruption to the local area.

6 Site Establishment Risk Assessment and Management Approach

6.1 Site Establishment Risk Assessment

An Environmental Risk Analysis has been undertaken in accordance with the principles of the Australian and New Zealand standard *AS/NZS ISO 31000: 2009 Risk Management – Principles and Guidelines*. The risk analysis involved:

- Ranking the risk of each identified potential impact by identifying the consequences of the impact and the likelihood of each impact occurring
- Considering the probable effectiveness of the proposed mitigation measures to determine the likely residual risk of each impact.

The Environmental Risk Register is provided in **Table 6-1**. The table identifies the construction aspects of the Project, the associated potential environmental impacts and a risk rating for those impacts. Applicable management measures are provide in the Construction Environmental Management Plan (CEMP) which are identified in **Table 6-1**. 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, are also included in the table.

Refer to **Table 6-2** for the consequence if an event occurs.

Refer to Table 6-3 for the likelihood of an event occurring

Refer to **Table 6-4** for the risk rating.

The risk assessment will be reviewed within two weeks of the commencement of site establishment works and every six months thereafter.

Table 6-1: Environmental Risk Assessment

Key establishment activities	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
 Site preparation works: Provision of site security such as perimeter hoarding, 	Failure to obtain external approvals to commence site establishment	21 (Very High)	EPL from NSW EPA	2 (Low)
signage Provision of WHS requirements including: Toilet facilities Unch rooms Survey and site investigation work Phase 2 contamination investigation Site establishment	Generation of dust as a nuisance to the residents in close proximity (e.g. Merlin Street – WFU7)	17 (Very High)	 Perimeter hoarding (including shade cloth where required) to be installed as soon as possible Storage of materials with the potential to result in dust will be minimised and managed appropriately (e.g. stockpiles will be covered) Access roads will be maintained and managed to reduce dust generation During high wind and/or dry conditions, programming of dust generating activities will be considered to reduce impacts to sensitive receivers Compact, seal or cover ancillary facility surfaces Stockpiles to be managed / covered as necessary to limit dust generation 	7 (Low)
Site access and environmental controls including:	Sediment tracking of mud on public roads	18 (Very High)	 Site exit points will be fitted with hardstand material, wheel washes and/or rumble grids as soon as possible to limit the amount of material transported off site Streetsweepers will be used to manage sediment tracking 	3 (Low)

Key e	establishment ties	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
0	Erosion and sediment controls Further site investigations (utility and geotechnical)	Noise and vibration impact to sensitive receivers	13 (High)	 Community updates will be provided throughout the site establishment works Minimise out of hours works where practicable Noise mitigation measures identified in the CNVIS to be implemented Monitor noise for compliance at sensitive receivers 	3 (Low)
o	Treatment of contaminated materials (if required)			 Monitor noise for compliance at sensitive receivers Review noise monitoring results and revise mitigation measures as appropriate 	
o	 Delineation of sensitive areas 	Traffic and parking impacts on local roads due to site access arrangements	18 (Very High)	 Undertake community notifications prior to works commencing which highlight any potential traffic impacts Schedule deliveries outside of peak traffic Minimise construction vehicle parking on public roads by 	8 (Moderate)
0	Signage and pedestrian diversions			 parking on site Encourage the use of public transport for all workers in site induction 	
0	traffic barriers Installation of site perimeter fencing and gates (formalisation of			 Queuing and idling of construction vehicles in residential streets to be minimised Measures identified in the relevant Traffic Control Plan (TCP) will be implemented for each ancillary facility/construction compound which requires direct access/egress onto the local/arterial road network 	

Key (establishment ities	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
1	access and egress points) tilities and ground orks Demolition of non-heritage structures Clearing and grubbing	Unexpected discovery of contamination during activities	12 (High)	 All unexpected discovery of contamination to follow the Unexpected Contaminated Lands and Asbestos Finds procedure (Appendix D) All staff to be trained in the Unexpected Contaminated Lands and Asbestos Finds procedure prior to commencement of site establishment Identified contaminated materials to be classified prior to offsite waste disposal 	7 (Low)
0	Site levelling, grading and compaction (including fill importation) Protection of	Inappropriate disposal of waste (including demolition, vegetation and hazardous/ special waste) or disposal at an unlicensed waste	19 (Very High)	 All on site personnel will undergo a site induction that will detail waste and resource management measures Additional targeted toolbox talks will be given on waste disposal from time to time HAZMAT surveys will be undertaken and removal of a beauty will be undertaken and removal of the control will be undertaken and removal. 	7 (Low)
0	existing services Removal of redundant utilities Installation of services to the	facility		Suitably licensed waste contractors will be used for the collection and transport of all non-domestic, retail commercial wastes and unsuitable fill material for offsite processing and/or disposal to an appropriately licensed facility. Receipts for waste transfer and disposal will be checked to ensure all details are correct and retained for	
	site (e.g. water, sewer, power, communications)			 audit purposes Site inspections undertaken on a regular basis to ensure disposal practices are being adhered to. 	

	establishment vities	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
0	blockwork and foundations completed for office installation)	Complete or partial loss of an unexpected heritage item while undertaking site establishment works.	12 (High)	 Any excavations, intrusive works or other operations that have the potential to impact areas of known heritage, cultural or archaeological items must not be undertaken Any item of potential Aboriginal archaeological/cultural heritage conservation significance, or human remains discovered during the site establishment works will be managed in accordance with the TfNSW Standard Management Procedure – Unexpected Heritage Items March 2015 undertaken as required 	11 (Moderate)
0	Internal haul roads installed Minor stockpiling			 A heritage induction will be delivered to all workers which will cover the Unexpected Heritage Items procedure Area fenced off with permit for entry 	
• Ir	of materials Installation of offices Installation of office blocks and shipping Containers	of materials Impact to Stormwater Harvesting Dam at Cammeray Golf Course Course		 Area fenced off Appropriate ERSED controls installed Location of water infrastructure identified by appropriate signage Location included in induction 	7 (Low)
0	Crane			Preparation of a dewatering plan (including methodology for relocating native fauna)	
	movements for heavy objects including site offices	Contamination of soil or water due to a spill or leak from plant/equipment	13 (High)	Hazardous substance storage and handling and use will be conducted away from drainage or stormwater lines and, wherever possible, within defined bunds	7 (Low)

Key establishment activities	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
			Any refuelling undertaken on site will be undertaken in designated areas only and well away from drainage or stormwater inlets	
			Any spills or leakages will be immediately contained and absorbed	
			Spill kits will be placed at all site locations	
	Potential clearing of	13	Daily pre-start outlining the vegetation areas to be cleared	11
	vegetation outside the project boundary or beyond the project approval (removal of vegetation identified to be retained)	(High)	 Pre-clearance survey to be conducted prior to clearing activities 	(Moderate)
			All site personnel to undertake a site induction outlining that no vegetation or tree removal will be undertaken without prior approval	
			Delineation of the project footprint prior to clearing	
			Clear identification of trees to be retained / removed	
			Where trees that can be retained will be located within ancillary facilities, exclusion fencing will be erected to protect these trees from construction activities	
			Undertake pre-clearance inspections, hold points and tree clearing in line with TfNSW Specification G40 Clearing and Grubbing	
	Potential clearing of Eucalyptus nicholii trees within the Rosalind Street	13 (High)	As far as practical, configure the Rosalind Street ancillary facility (WFU9) so as to not directly impact on trees that would not already be directly impacted by the project	11 (Moderate)

Key establishment activities	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
	ancillary facility (WFU9).		Where trees that can be retained will be located within ancillary facilities, exclusion fencing will be erected to protect these trees from construction activities	
			 Undertake pre-clearance inspections, hold points and tree clearing in line with TfNSW Specification G40 Clearing and Grubbing 	
	Spreading of noxious weeds via personnel, plant, equipment, topsoil		Targeted toolbox talks regarding the location and treatment of weeds Wood removed / was of approved barbinides.	6 (Low)
			 Weed removal / use of approved herbicides Ecologist to review site for weeds prior to clearing 	
	Erosion and sedimentation impacting downstream	17 (Very High)	Erosion and sediment control plans will be prepared for all work and implemented before and during disturbance. All plans will be approved by an Environmental Advisor	11 (Moderate)
	waterways due to exposed land, inadequate controls or control failure		All on site personnel will undergo a site induction and ongoing toolbox talks that will detail erosion and sediment control management measures	
	Gond of familiars		 A soil conservation specialist will be engaged if relevant to provide advice regarding erosion and sediment control 	
			 Hardstand areas and surrounding public roads will be cleaned as required using methods such as brooms, bobcat attachments or street sweepers 	
	Obstruction of overland flow through the Arthur Street east (WFU4) ancillary facility and	7 (Low)	Flood emergency management measures will be developed for Arthur Street east (WFU4), Berry Street east	6 (Low)

Key establishment activities	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
	increased depth of inundation during flood events		 (WFU5) and Cammeray Golf Course (WFU8) ancillary facilities Spoil management and stockpile areas will be located 	
	Increase in flood water run-off due to hardstand areas within Berry Street east (WFU5) and Cammeray Golf Course (WFU8)	7 (Low)	 outside the 10% AEP flood extent Where practicable, liquid chemical and fuel storage areas will not be located within 50 metres of natural surface drainage areas, storm drainage systems, poorly drained or flood prone areas or any area with a slope steeper than 10% Key staff including the Project Manager and Site Foreman shall register with a weather forecast service provider to receive timely warnings of flood risk 	6 (Low)
	Missed opportunities to maximise beneficial reuse of waste	3 (Low)	 All recyclable solid wastes (paper/ cardboard/ plastic/glass/timber/metals/fluorescent lighting/printer cartridges/ICT equipment) will be segregated for recycling purposes and volumes to be reported Wherever possible, packaging should be avoided or minimised to prevent unnecessarily waste 	1 (Low)
	Loss of service to surrounding residents and business as a result of utility impacts	13 (High)	Positive identification of utilities in accordance with the Permit to Excavate process	11 (Moderate)
	Light spill impacting nearby residents	8 (Moderate)	Lighting will be directed towards the work area and adjacent sensitive receivers	6 (Low)

Key establishment activities	Key potential impacts	Risk level prior to mitigation	Mitigation measures	Risk level following mitigation
	Surrounding visual amenity / aesthetic reduced (e.g. Merlin Street – WFU7)	8 (Moderate)	 Maintain work area in an orderly manner Site sheds will be maintained in a clean condition and be established at locations and positions that will minimise the impact on adjoining properties and residents Position site sheds to shield sensitive and residential receivers from works activities Temporary fencing / hoarding will be applied on boundary of ancillary facilities Materials and machinery will be stored behind fencing/hoarding to minimise visual impact 	6 (Low)

Table 6-2: Consequence Criteria

Consequence	1	2	3	4	5	
Rating	ing Negligible Minor		Moderate	Major	Substantial	
Safety and Health			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 6-3: 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 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 100 years
1	Rare	Conceivable but only in exceptional circumstances	May occur in exceptional circumstances 0% – 10%	Less than 1 event per 100 years

Table 6-4: Risk Matrix

	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)

6.2 Site Establishment Management Approach

6.2.1 Environmental Management System

This ASEMP utilises the CPB Contractors' Management System (CMS) and the requirements of the CSSI approval. The CMS is certified to AS/NZS ISO 14001:2015 Environmental management systems – requirements with guidance for use.

The CMS has been developed and implemented to ensure a consistent approach to Project delivery, and comprises the following components:

- **Policies** statements of strategic intent and commitment. They define the mandatory requirements CPB Downer JV expects at all levels of the Project organisation.
- **Project Management Plan** outlines how the Project will be managed and supported by a suite of functional management plans.
- **Procedures and Work Instructions** specify how to undertake and control specific activities. They define roles and accountabilities and list the tools or knowledge documents to be used.
- **Tools** pre-formatted documents such as forms and templates that are required to be completed as part of a Procedure.
- **Knowledge documents** reference material which provides context, additional information or guidance to a Policy or Procedure.
- Business Applications Business Applications are the software tools used to manage our business and support operations.

6.2.2 Site Establishment Management Plan

This ASEMP has been prepared for the Project to outline the environmental management practices and procedures that are to be followed during the ancillary facility site establishment phase of the Project.

The ASEMP outlines specific environmental management and mitigation measures identified to address potential impacts for a range of environmental factors in accordance with CoA A17.

The ASEMP must be submitted to the Secretary of DPIE for approval prior to commencement of site establishment works. Operation and decommission of the ancillary facilities would be managed in accordance with the approved CEMP and sub-plans as per CoA C1.

6.2.3 Site Environment Plans

A Site Environment Plan (SEP) is an internal construction document prepared to assist in the planning and management of specific areas. Environmental and socially sensitive areas including vegetation, heritage, sensitive receivers, waterways and contamination may be included in an SEP.

A series of SEPs will be prepared prior to the establishment of ancillary facilities. These SEPs will be used to inform construction planning and will be included in applicable Work Packs, which consist of relevant construction documents to assist supervisors to manage specific packages of work. The SEPs will serve as a simple but effective tool to identify key risk areas and to promote ongoing communication to construction personnel throughout the Project.

Leveraging the Sensitive Area Maps (**Appendix C**), the SEPs will be used in conjunction with Environmental Work Method Statement (EWMS) to identify key risk areas and detail management and mitigation measures to be implemented by construction personnel. The SEPs are considered

to be live documents and will be regularly reviewed to reflect the ground conditions and any new environmentally sensitive areas.

6.2.4 Environmental Work Method Statement

Environmental Work Method Statements (EWMS) will be prepared for activities within or near environmentally sensitive areas and will include protection measures that minimise the risk of impacting the sensitive areas.

The requirement for EWMS is directed by REMM G2, TfNSW Specification D&C G36 – Environmental Protection and by the Construction Environmental Manager for those activities deemed to carry an inherent level of environmental risk.

Appropriate EWMS will be prepared prior to the establishment of ancillary facilities and will incorporate relevant mitigation measures and controls from this document. As a minimum, EWMS will include (D&C G36):

- · A description of the work activity, including any plant and equipment to be used
- An outline of the sequence of tasks for the activity, including interfaces with other construction activities
- Identification of any environmental and/or socially sensitive areas, sites or places
- Identification of potential environmental risks/impacts due to the work activity
- Mitigation measures to reduce the identified environmental risk, including assigned responsibilities to site management personnel
- Process/es for assessing the performance of the implemented mitigation measures.

Each EWMS will be reviewed by the relevant Project Manager and then approved by the Construction Environmental Manager.

Relevant conditions of the EWMS will be incorporated into Work Packs as required.

6.2.5 Utilities Management Strategy

Utility works required for ancillary site establishment will be undertaken in line with the Utilities Management Strategy (UMS) contained in Appendix D of the EIS

Under the Infrastructure Approval for the Project, utility works may or may not be captured within the definition of construction. Utility works being undertaken for the establishment of ancillary facilities under this ASEMP would be relatively low scale and low impact. Residents will be informed prior to any planned changes / interruptions to access/utilities. Specific environmental risk assessment and management and mitigation measures would require the approval of the ER prior to the commencement of works.

6.2.6 Erosion and Sediment Control Plan

Initial site establishment preliminary erosion and sediment control plans (ESCPs) will be prepared for all ancillary facilities prior to site establishment activities.

Preliminary ESCPs contain site-specific details including identification of indicative locations for sediment basins, clean and dirty water flow paths, critical drainage infrastructure, site boundary and compound areas. These plans will be developed as the Project progresses and as the site conditions evolve to meet construction and permanent facilities requirements.

Site establishment activities will be undertaken to avoid impacts to the Stormwater Harvesting Dam at Cammeray Golf Course (WFU8) and nearby Willoughby Creek.

The ESCPs will incorporate the following:

 Location of erosion, sedimentation and water quality control measures proposed to treat stormwater before disposal

- Layout of the site cleared and protected areas and stockpiling areas
- · Construction period and staging.

Information relevant to the preparation of the ESCPs will be obtained from Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2006) (the Blue Book) and Volume 2D Main Roads Construction (DECCW 2008) and site-specific soil data.

Environmental personnel, in consultation with the Superintendent/Foreman and Construction Environmental Manager, will prepare and update the progressive ESCPs.

A soil conservation specialist will be engaged by both Transport for NSW and the Contractor for site establishment and the duration of construction.

The impacts on soil and water quality will be managed through these controls and the additional environmental safeguards in **Appendix A** of this ASEMP. With these controls in place, the project should not significantly impact on soil and surface water during site establishment.

6.2.7 Construction Noise and Vibration Impact Statement

In accordance with CoA E75, works associated with the establishment of each ancillary facility will be assessed within a site establishment Construction Noise and Vibration Impact Statement (CNVIS), which will be developed before any works that result in noise and vibration impacts commence. The CNVIS will include specific mitigation measures identified through consultation with affected sensitive receivers.

A noise model has been prepared by suitably qualified acoustic consultants to predict the extent of noise and vibration impacts on surrounding receivers during the site establishment phase. The noise and vibration level predictions have been prepared considering the anticipated establishment scenarios (including size and type of equipment and operating times) and existing environment to predict the Based on the predicted impacts, appropriate mitigation measures will be implemented on a site-specific basis.

Specific mitigation measures detailed within the CNVIS will be implemented along with Project-wide measures identified in **Appendix A**.

The CNVIS will be a document controlled separately to this ASEMP or other applicable plans. Therefore, an update to the CNVIS will not require this ASEMP to be updated.

6.2.8 Construction Noise and Vibration Monitoring

6.2.8.1.1 Noise Monitoring during Site Establishment

During site establishment, monitoring of noise levels will be undertaken as follows:

- Monitoring will be carried out at the commencement of activities for which a location and
 activity specific noise and vibration impact assessment has been prepared to confirm that
 actual noise and vibration levels are consistent with noise and vibration impact predictions
 and that the management measures that have been implemented are appropriate
- Where a change in methodology, plant or equipment is anticipated to result in a significant increase in noise impact
- Where appropriate in response to a noise related complaint(s) (determined on a case-by case basis)
- As otherwise required by the CNVIS or Out of Hours Works (OOHW) Protocol
- Following implementation of mitigation measures or noise attenuation as a result of exceedance of predicted noise levels
- Ongoing spot checks for noise intensive plant and equipment will be undertaken during site
 establishment to ensure compliance with the maximum noise level goals for plant and
 equipment.

Noise monitoring locations will vary and will be determined on a case-by-case basis by a CNVIS, the Project's noise predictive noise and vibration tool or in response to complaints.

In accordance with the Interim Construction Noise Guideline (ICNG) the duration and amount of noise monitoring will depend on the scale of activities and extent of expected noise impacts. Noise monitoring will cover a representative period of the activity.

Where possible, monitoring will be undertaken at the most affected noise sensitive receiver/s location in proximity to the activities.

Noise monitoring locations will consider factors including:

- · The location of previous monitoring sites
- The proximity of the receiver to a Project worksite
- · The sensitivity of the receiver to noise
- · Background noise levels
- The expected duration of the impact.

All environmental noise monitoring will be taken with the following meter settings:

- Time Constant: Fast (i.e. 125 milliseconds)
- Frequency Weightings: A-weighting
- Sample period: 15 minutes.

Environmental noise monitoring will be recorded over 15-minute sample intervals, where every 15 minutes the data is to be processed statistically and stored in memory. The minimum range of noise metrics to be stored in the memory for later retrieval include the following A-weighted noise levels: Lago, Lag

For spot checks of noise intensive plant and equipment, the duration of monitoring will depend on the source of noise being monitored. Sources of continuous noise (such as generators), measurements will be monitored over one to two-minute intervals. For dynamic plant, such as front-end loaders, spot checks will capture a representative activity, such as one truck-and-dog load cycle.

6.2.8.1.2 Vibration Monitoring during Site Establishment

Attended vibration monitoring is to be undertaken as follows:

- At the commencement of operation for each plant or activity on site which has the potential
 to generate significant vibration levels, where the vibration screening criteria is likely to be
 exceeded or as determined by a CNVIS
- At the commencement of vibration generating activities that have the potential to impact on heritage items to confirm the minimum working distances to prevent cosmetic damage
- Where vibration sensitive locations are determined to fall within the 'safe working distances' established for each item of plant, so to refine the indicative minimum working distances
- Where deemed to be relevant to site establishment activities in response to a vibration related complaint
- As otherwise required by the CNVIS or OOHW Protocol.

Where human comfort is a concern, vibration monitoring results will be assessed and reported against the values set out in Tables 2.2 and 2.4 of the EPA's Assessing Vibration – a technical guideline.

Where property damage is a concern, vibration monitoring results will be assessed and reported against the German Standard DIN4150-1999 Structural vibration Part 3: Effects of vibration on Structures.

Vibration monitoring equipment will be mounted directly to the buildings' foundation using bees wax or other suitable means, where possible. Selected monitoring locations will be solid and rigid to best represent the vibration entering the structure of the building under investigation. Any alternative mounting techniques will be determined by an appropriately experienced person in accordance the relevant standards and guidelines.

Where attended vibration monitoring is not feasible due to extended periods of vibration intensive civil works, unattended vibration monitoring system could be installed to warn plant operators (via flashing light etc.) that there is potential cosmetic damage to buildings and structures.

Where unattended vibration monitors are left in place on a private property, they will be collected from the resident at a mutually agreed time.

The following vibration metrics will be stored in memory and reported:

- Vibration Dose Values (VDVs): for the assessment of human comfort concerns
- Peak-Particle Velocity (PPV): for the assessment of cosmetic damage concerns.

All short term attended vibration monitoring will be recorded over a representative sampling interval where the worst-case vibration levels can be captured. Where unattended vibration monitoring is proposed, monitoring will be undertaken continuously while the vibrating plant is operational to capture the worst-case vibration levels within the pre-determined 'safe working distance' from the potentially affected building.

6.2.9 Out of Hours Works (OOHW)

All site establishment works including those undertaken outside standard hours will be undertaken subject to an EPL. In line with CoA E68, the key justification for OOHW during site establishment will include the following:

- Delivery of materials required by the NSW Police Force or other authority for safety reasons
- Where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm
- Where works are deemed low impact as per CoA E68(b)
- Construction hours as permitted by an EPL
- Negotiated agreements with affected residents and land users.

For any proposed OOHW the following process will be undertaken:

- 1. An OOHW Permit will be prepared that summarises the activities, equipment required, location and duration and includes a detailed justification for works
- 2. The OOHW Permit will be submitted to the Environment Team, who will undertake a noise and vibration assessment for the OOHW. Predicted noise impacts and appropriate mitigation measures will be determined as per TfNSW CNVG
- 3. The CPB Downer JV Construction Environmental Manager will determine whether the justification for the OOHW works is satisfactory
- 4. The OOHW Permit will be submitted to the AA and ER for review / approval
- 5. Community notification will be undertaken.

6.2.10 Traffic Management

Road dilapidation reports will be prepared by a suitably qualified person for local roads (and associated infrastructure within the road reserve) proposed to be used by heavy vehicles for works associated with the CSSI, before the commencement of use by such vehicles as described in MCoA E136. 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 CSSI.

Any new or modified local roads, parking, pedestrian and cycle infrastructure will be designed to meet relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management. Reflecting the requirements of MCoA E139, CPB Downer JV will not block or disrupt access across pedestrian or shared user paths at any time.

Independent Road Safety Audits will be undertaken to ensure safety performance is aligned with the relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Management. Site access points will only be implemented once the road safety audit is complete and any identified actions have been implemented.

Where required, Traffic Control Plans (TCPs) will be prepared in accordance with the principles and measures outlined in AS1742.3-2009 and TfNSW Traffic Control at Worksites Manual Version 6

TCPs and ROLs required during ancillary facility establishment may be required for the delivery of oversized items (such as site sheds) and may also be required for demolition activities.

A Traffic Control Plan (TCP) is a diagram identifying signs and devices in specific locations to allow the public and workers at the work site to be safely separated from traffic, while minimising disruption and risk to road users. A TCP generally details:

- Traffic control signage and traffic flow arrangement
- · Site establishment boundary
- Speed limits
- Construction traffic access and egress
- Pedestrian and cyclist access for workers and public.

A TCP can only be prepared by someone certified in Work Site Traffic Management Plan as required under legislation.

Where new site access points are required to ancillary facilities, these will only be installed once a site-specific Construction Traffic and Transport Management Plan has been approved.

A wide range of environmental safeguards have been recommended to mitigate the effects of site establishment works on local traffic and transport including scheduling project related transport movements to avoid peak traffic, identifying heavy vehicle routes and communicating these to the drivers (**Appendix A**). With these environmental safeguards in place, traffic and transport is anticipated to have a low impact.

6.2.11 Parking

During site establishment activities it is expected that all construction vehicles required for site establishment works will park within the construction support sites and therefore will have no impact on on-street parking. As such, the Construction Parking and Access Strategy required by CoA E140 is not required to be approved prior to these works.

To minimise the need for on-site parking, a shuttle service will be implemented and will service the ancillary facilities and the North Sydney train station and other local transport hubs.

6.2.12 Light Spill

Ancillary facility lighting will be constructed in a manner that minimises light spill. Lights will be located as far away as possible and pointed away from neighbours and away from sensitive areas such as bedroom windows. If there is no alternative, shields and baffles will be used to help keep light spill to a minimum. All practical and reasonable steps will be taken to mitigate temporary lighting impacts as described in the urban design and visual amenity environmental safeguards listed in **Appendix A**.

6.2.13 Boundary Screening Approach

Boundary screening will be installed within ancillary facilities adjoining or adjacent to residential and/or commercial properties in accordance with CoA A20 and CoA E155. The boundary screening (detailed in **Appendix B**) will minimise visual, noise and air quality impacts on adjacent sensitive receivers as per MCoA E1 and will be installed as early as possible within the site establishment phase to provide visual screening.

Where ancillary facilities are located in proximity to open space, boundary screening will be in neutral colours and designs to help blend them into the surrounding environment. The location of boundary screening is shown in the site layout plans in **Appendix B**.

Noise walls will be erected where recommended by the CNVIS. As well as minimising noise impacts, noise walls will minimise visual and air quality impacts by providing a barrier between ancillary facilities and receivers.

Where noise walls are not required, plywood hoarding or chain wire fencing with cloth shade will be erected. Plywood hoarding and chain wire fencing with shade cloth will also reduce visual and air quality impacts by providing a barrier between work sites and receivers.

In accordance with CoA A48, all signage on hoardings surrounding the ancillary facilities will include the CSSI name, application number, telephone number, postal address and email address and will be in place prior to the commencement of construction.

The noise and vibration, air quality, urban design and visual amenity environmental safeguards provided in **Appendix A** have been provided to avoid, reduce and managed identified potential visual impacts during site establishment.

6.2.14 Contamination

Conditions E115 and E116 require a detailed site investigation followed by the preparation of a Detailed Site Investigation Report for those sites that are identified as having a moderate to high risk of contamination (all 10 construction support sites fall into these categories). The Detailed Site Investigation Reports will be undertaken by a certified Contaminated Land Consultant and address the requirements of MCoA E117. The contaminated land consultant will be certified under either the Environment Institute of Australia or New Zealand's "Certified Environmental Practitioner" (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia "Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. On completion, all Detailed Site Investigation Reports will be submitted to the Planning Secretary for information.

If an ancillary facility site is identified as requiring remediation, a Remediation Action Plan (RAP) will be prepared and implemented. Remediation works are outside of the scope of this ASEMP and will be undertaken in accordance with the CEMP (Contaminated Land Management Sub-plan).

In the event of encountering unexpected finds of contamination the Unexpected Contaminated Land and Asbestos Finds in **Appendix D** will be followed.

The contamination environmental safeguards in **Appendix A** will be implemented during site establishment to minimise risks arising from disturbance and excavation of land and disposal of soil.

6.2.15 Heritage

Prior to site establishment works with the potential to have physical impact, and in-line with MCoA E56 and REMM NAH5, archival recording of Cammeray Park (including Golf Course) and Cammeray Conservation Area will be undertaken.

If any unexpected heritage items (including human remains) are encountered, works potentially affecting the find will cease and the TfNSW Management Procedure – Unexpected Heritage Items (November 2015).

6.2.16 Flooding

Ancillary facilities will be laid out such that flows are not significantly impeded noting that for all sites (except Arthur Street east (WFU4), Berry Street east (WFU5) and Cammeray Golf Course (WFU8)) the establishment and operation of the construction support sites is not expected to impact flood behaviour. Through the implementation of the environmental safeguards detailed in **Appendix A**, flood impacts are anticipated to be effectively mitigated.

Where the potential exists for the obstruction of overland flows or increased run-off (as a result of hardstand areas) a contingency plan will be prepared to manage a potential flood event and will outline procedures to reduce risks including worker safety, removal of all plant/equipment and stabilising exposed areas.

6.2.17 Trees

As far as practical, ancillary facilities will be configured so as to not directly impact on trees that would not already be directly impacted by the Project. Storage areas and associated works will be located in cleared and otherwise disturbed areas away from residential areas where feasible and reasonable. Where trees can be retained, exclusion fencing will be erected to protect these trees from construction activities.

The clearing of vegetation for ancillary facilities will be limited to the minimum amount necessary to construct the Project.

Pre-clearance inspections, hold points and tree clearing would be undertaken in line with TfNSW Specification G40 Clearing and Grubbing. The inspection and relocation of any effected native fauna will be undertaken for both threatened and non-threatened species.

As required by MCoA E48, within three months of the removal of any native trees, the Project will consult with local community restoration/rehabilitation groups, Landcare groups, relevant councils, DPI Fisheries and any relevant public authorities to determine if there is an interest in the reuse of suitable timber and root balls for habitat enhancement and rehabilitation work. If there is an interest, native trees that are removed for the construction of the CSSI and that are greater than 25-30 centimetres in diameter and three metres in length must be salvaged and stored for a period of at least six weeks to enable collection by interested parties.

In line with MCoA E184, the project will be designed to retain as many existing trees as possible. Replacement trees and plantings will be provided at a ratio of 2:1 with the aim to deliver an increase in tree canopy and enhance the relevant council's position in respect of the Sydney Green Grid, unless otherwise agreed by the Planning Secretary.

7 Review and Improvement

7.1 Ancillary Facility Approval Pathways

Approval pathways for ancillary facilities are identified in the Planning Approval as follows:

- Ancillary facilities identified in the EIS and Submissions Report or meeting the requirements
 of MCoA A16: Establishment of these ancillary facilities (listed in Section 4) will commence
 following approval of this ASEMP (as per MCoA A17) and prior to approval of the CEMP.
 The ASEMP will be submitted to DPIE for review and approval. Activities described under
 the ASEMP become construction with the approval of the CEMP, and
- Minor construction ancillary facilities not detailed in the EIS or Submissions Report: Minor construction ancillary facilities not detailed in the EIS or Submissions Report which would be of minimal environmental impact may be approved by the Environmental Representative (ER) under MCoA A19. Minor ancillary facilities are defined as:
 - Lunch sheds, office sheds, portable toilet facilities, car parking, material storage, and the like, can be established and used where they have been assessed in the documents listed in Condition A1 or satisfy the following criteria:
 - a. are located within or adjacent to the construction boundary; and
 - b. have been assessed by the ER to have -
 - minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and
 - ii. minimal environmental impact with respect to waste management and flooding, and
 - iii. no impacts on biodiversity, soil and water, and heritage items beyond those already.

There are no minor construction ancillary facilities proposed during the site establishment works. In the event that minor construction ancillary facility is identified following approval of the CEMP, an assessment will be undertaken in accordance with MCoA A19 and submitted to the ER for approval.

7.2 Continuous Improvement

Continuous improvement will be achieved through ongoing measurement and evaluation, audit and review of the effectiveness of this ASEMP. Regular compliance activities, such as weekly inspections, observations and monitoring will be undertaken throughout the site establishment of the ancillary facilities. Subcontractors' works will also be monitored as part of the general weekly inspections, observations, monitoring and audits. This will be implemented through the program for monitoring the performance outcomes in Section 2.

Environmental controls will be inspected weekly to ensure their ongoing suitability and effectiveness. Environmental monitoring will be carried out to establish pre-construction benchmarks, confirm compliance with the conditions of environmental Approvals, licences and laws and to provide early indication of potential adverse impacts to the environment or community.

7.3 ASEMP Update and Amendment

This Plan will be updated:

To add/amend ancillary facilities identified in the EIS

- To reflect changes to the environment or generally accepted environmental management practices, new risks to the environment, any hazardous substances, contamination or changes in law
- Where requested or required by DPIE or any other Authority
- In response to internal or external audits or quarterly management reviews.

The updated ASEMP will be endorsed by the Construction Environmental Manager and approved internally by the Project Director.

Minor amendments to this ASEMP must be approved by the Environmental Representative (ER) and Acoustics Advisor (AA). Major amendments will require approval by DPIE.

7.4 Document Approval

This Plan has been prepared with the review of the ER, TfNSW and the CPB Downer JV Project Director and Construction Environmental Manager prior to submission to DPIE. Submission to DPIE is required no later than one month prior to the establishment of any construction ancillary facilities.

A suitably qualified and experienced AA, who is independent of the design and construction personnel, has been nominated and engaged for the duration of the works. The AA will review the noise and vibration impacts of construction ancillary facilities and endorse minor amendments made to the ASEMP.

The ASEMP must be approved by the Secretary of DPIE prior to the commencement of site establishment activities. Approval of changes to the ASEMP will be determined on a case-by-case basis in consultation with the ER and where required will be endorsed by the ER and AA or approved by DPIE.

The use of an ancillary facility for construction will not commence until the:

- CEMP, relevant Sub-plans required by Condition C4 have been approved by the Planning Secretary
- Construction Monitoring Programs required by Condition C11 have been approved by the Planning Secretary
- DPIE has been notified in writing of the dates of commencement of construction and operation of Stage 2 at least one month before those dates.

7.5 Training and Awareness

All Project personnel, including employees, contractors and sub-contractors, are required to complete an induction containing relevant environmental information before they are authorised to work on the Project. The induction addresses general and Project-specific environmental issues including:

- CPB Downer JV Environmental Policy
- CPB Downer JV Sustainability Policy
- Purpose and objectives of the EMS
- Requirements of due diligence and duty of care
- · Conditions of environmental licences, permits and approvals
- Potential environmental emergencies on-site and the emergency response procedures
- Reporting and notification requirements for pollution and other environmental incident

- High-risk activities and associated environmental safeguards, e.g. earthworks, vegetation clearing, night works, operation and maintenance of concrete washouts, and washing, refuelling and maintenance of plant and equipment
- Awareness and procedures for handling potential asbestos containing materials and/or contaminated fill material and procedures for unexpected finds
- Potential and procedures for unexpected heritage finds
- Working in or near environmentally sensitive areas.

An assessment will be conducted upon completion of the induction. Records of all training activities, including inductions, will be maintained. Records will include the name and role of the attendee, the name of the course and, where applicable, reference to the document-controlled version of the material presented, and a copy of the assessment completed.

Key Project personnel will undertake targeted training relevant to their position and/or responsibility. Ongoing training and awareness will enable Project personnel to competently perform their duties and meet environmental obligations. Training and awareness activities include:

- General inductions
- Daily pre-start or activity specific pre-start briefings
- Regular toolbox talks
- Targeted environmental training, appropriate to personnel role and/or responsibility
- Meetings or forums dedicated to training and awareness activities or included as an agenda item
- Emergency drills.

7.6 Community Engagement

Prior to establishment of ancillary facilities, a Community Action Plan will be prepared in accordance with the project Community Communications Strategy which will include community and stakeholder management requirements including during the site establishment phase.

The Community Engagement Team (CET) will engage with residential and commercial properties that adjoin or are adjacent to the ancillary facilities.

Engagement methods will include door knocking residents impacted by the ancillary facilities, letter box drops and community updates as applicable.

Any comments or feedback regarding boundary screening and noise walls will be considered by CPB Downer JV. The site design plan will detail the type and height of the boundary screens for each location.

A public liaison officer will be appointed for the construction ancillary facility(s) in accordance with CoA B6 and the communications strategy to assist the public with questions and complaints they have at any time during site establishment.

In accordance with CoA B8, the following mediums will be available one month prior to the site establishment phase to facilitate public communication with the Project:

- A 24-hour toll-free telephone number for the registration of complaints and enquires about the CSSI
- A postal address to which written complaints and enquires may be sent
- An email address to which electronic complaints and enquires may be transmitted
- A mediation system for complaints unable to be resolved.

The above information will be accessible to all in the community regardless of age, ethnicity, disability or literacy level.

The project will undertake community consultation activities as detailed in the Community Consultation Strategy required by MCoA B1 – B5.

The telephone number, postal address and email address, as well as relevant Project information as required by MCoA B8 would be included on designated pages of the Project website.

7.6.1 Complaints Management

During the site establishment phase, any comments, feedback or complaints relating to noise, air quality and other amenity issues will be addressed in accordance with the Communication Strategy and Complaints Management System. A Complaints Register will be maintained for a minimum of 12 months following the completion of construction and the following information will be recorded:

- Number of complaints received
- The date and time of the complaint
- The method by which the complaint was made
- Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect
- Nature of the complaint
- Means by which the complaint was addressed and whether resolution was reached, with or without mediation
- If no action was taken, the reason(s) why no action was taken.

Complainants will be advised that the Complaints Register may be forwarded to Government agencies to allow them to undertake their regulatory duties.

8 Environmental incidents and noncompliances

8.1 Environmental Incidents

In the event of an environmental incident, the TfNSW Environmental Incident Procedure (Incident Procedure) will be implemented (**Appendix F**).

The Incident Procedure details:

- Incident types
- Criteria for classifying environmental incidents
- Processes and legal requirements (eg Acts, Regulations, EPL), for reporting and notification
 of an environmental incident.

The Incident Procedure covers the management of events including:

- Spills of fuels, oils, chemicals and other hazardous materials
- Unauthorised discharge from sediment basins or other containment devices
- · Potential contamination of waterways or land
- Accidental starting of a fire or a fire breaking out of containment
- Any potential breach of legislation, including a potential breach of a condition of an EPL requirement, MCoA or any agency permit condition
- Unauthorised dumping of waste
- Unauthorised clearing or clearing beyond the extent of the Project boundary or premises
- Inadequate installation and subsequent failure of temporary erosion and sediment controls
- Unauthorised damage or interference to threatened species, endangered ecological communities or critical habitat
- Unauthorised harm or desecration to Aboriginal objects and Aboriginal places
- Works undertaken that are not in accordance with a Project approval.

Environmental incidents that would be or have the potential to be classified as Category 1 under the Incident Procedure, will be notified verbally immediately to the TfNSW representative and TfNSW Environmental Manager.

Incident reports will be provided to TfNSW Representative and the Environmental Representative in accordance with the Incident Procedure, including lessons learnt from each environmental incident and proposed measures to prevent the occurrence of a similar incident. All efforts will be undertaken immediately to avoid and reduce impacts of incidents and suitable controls put in place. Incidents will be closed out as quickly as possible, taking all required action to resolve each environmental incident. This notification process is in addition to other regulatory incident reporting requirements, including a Pollution Incident Response Management Plan (PIRMP) required by an EPL.

In accordance with MCoA A43 and A44, the Planning Secretary must be notified via the Major Projects Website immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident. Subsequent notification must be given and reports submitted in accordance with the requirements set out in Appendix A of the MCoA.

The EPA will be notified of any pollution incidents on or around the site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the Protection of the Environment Operations Act 1997 (NSW) (POEO Act). The circumstances where this will take place include:

- i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- ii. it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations).

Where an incident involves a potential impact to an Aboriginal site, relevant Heritage NSW and Registered Aboriginal Parties will be notified and their input sought in closing out the incident.

All other environmental incidents, reportable events and regulatory action would be reported to TfNSW as outlined in the Roads and Maritime's Environmental Incident Classification and Reporting Procedure.

The Contractor will provide all records of the environmental incidents and regulatory action to TfNSW Project team.

8.2 Environmental nonconformities

Any member of the Project team may raise a non-conformance or improvement opportunity. The Quality Plan describes the process for managing non-conforming work practices and initiating corrective/preventative actions or system improvements.

The ER, TfNSW Representative or public authority may also raise a non-conformance or improvement opportunity using the same process.

A non-conformance is the failure or refusal to comply with the requirements of this CEMP and supporting documentation.

For each non-conformance identified a corrective/preventative action (or actions) must be implemented. In addition, any environmental management improvement opportunities can be initiated as a result of incidents or emergencies, monitoring and measurement, audit findings or other reviews. Improvement opportunities may also result in the implementation of corrective/preventative actions.

Corrective/preventative actions and improvement opportunities will be entered into the contractor's quality system database and include detail of the issue, action required and timing and responsibilities. The record will be updated with date of close out and any necessary notes. The database will be reviewed regularly to ensure actions are closed out as required.

Non-conforming activities may be stopped, if necessary, by the Construction Environmental Manager, Environmental Coordinator or Project / Site Engineer following consultation with the Construction Manager or delegate. The works will not commence until a corrective / preventative action has been closed out. The ER may also stop works in these circumstances. In such circumstances a non-conformance report must be prepared in accordance with the Quality Plan.

After becoming aware of an environmental non-compliance, CPB Downer JV will notify TfNSW immediately of becoming aware of a non-compliance and TfNSW will notify DPIE via the Major Projects Website within seven days in accordance with MCoA A45. The notification must identify the CSSI (including the application number and the name of the CSSI), set out the condition/s that is non-compliant, the nature of the breach; the reason for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. The ER may also include environmental non-compliances within the Environmental Representative Monthly Report.

MCoA A46 states that a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management are also documented in the Compliance Tracking Program

(see Section 3.9.4). Following corrective action, the CPB Downer JV Construction Environmental Manager, will close out the noncompliance.

Appendix A – Management and Mitigation Measures

Ref#	Management and Mitigation Measures	Timing	Responsibility
Genera			
G1	Environmental awareness training and inductions must be provided to all workers prior to commencing work on site. This training will include (at a minimum):	Pre-Construction	Construction Environmental Manager
	environmental risks		
	environmental procedures, management measures and conditions of approval		
	environmentally sensitive locations and exclusion zones		
	requirement to report and the process for reporting environmental issues on site		
	requirement to report and the process for reporting damaged environmental controls		
	erosion and sediment control		
	incident management process		
	site staff environmental responsibilities.		
G2	Toolbox talks are to include environmental issues and controls when works commence in a new area, a new activity and/or when environmental issues arise on site.	Construction	Construction Environmental Manager
G3	Environmental Work Method Statements (EWMS) are required for the following activities/locations (at a minimum):	Pre-construction & Construction	Construction Environmental Manager
	clearing and grubbing		
	earthworks		
	drainage works		
	utilities works		

Ref#	Management and Mitigation Measures	Timing	Responsibility
	works within or adjacent to a watercourse		
	any other activities as requested by the Principal.		
	All EWMS will be submitted to the Principal's Environment staff for review and endorsement prior to commencement of works.		
	The EWMS must include but not be limited to the following:		
	description of the works/activities including machinery		
	outline of the sequence of work/activities, including interfaces with other construction activities (for example the interface between cut and fill areas, stabilisation of exposed areas, excavation for an installation or upgrade of culverts)		
	identification of potential environmental risks/impacts due to the works/activities which is to include risks associated with wet weather events		
	evaluation of methods to eliminate/reduce the environmental risk		
	mitigation measures to reduce environmental risk		
	any safeguards resulting from consultation with public authorities and other stakeholders, where appropriate		
	a map / diagram indicating the locations of sensitive locations (such as exclusion zones, threatened species, heritage items etc), the likely potential environmental impacts and work areas as well as environmental controls		
	identification of works areas and exclusions areas		
	details of a process for progressive review, for example monitoring processes and mitigations to eliminate/reduce environmental risks/impacts.		
G4	Site inspections to monitor environmental compliance and performance will be undertaken during construction at appropriate regular intervals.	Construction	Construction Environmental Manager
			Project Manager

Ref#	Management and Mitigation Measures	Timing	Responsibility
			Site Foreman
G5	TfNSW Environmental Incident Classification and Management Procedure is to be followed in the event of an incident.	Construction	Construction Environmental Manager Project Manager Site Foreman
Biodive	ersity		
BI1	Tree protection fencing must be established around the perimeter of the TPZ. If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with AS 4970-2009 - Protection of trees on development sites. Existing fencing and site hoarding may be used as tree protection fencing.	Construction	Project Manager Site Foreman
BI2	Parking of vehicles and storage of plant/equipment is to occur on existing paved areas. Where this is not possible, vehicles and plant/equipment are to be kept away from environmentally sensitive areas and outside the dripline of trees.	Construction	Project Manager Site Foreman
BI3	Where possible, stockpiling or storage of construction materials will occur in areas already cleared.	Construction	Project Manager Site Foreman
BI4	Works impacting hollow-bearing trees will be supervised by a qualified wildlife carer and/ or ecologist to enable any fauna to be captured and relocated into suitable habitat nearby.	Construction	Construction Environmental Manager Site Foreman
BI5	Invasive weeds are to be managed according to requirements under the <i>Biosecurity Act</i> 2015 (NSW) and the RTA Biodiversity Guidelines 2011.	Construction	Project Manager Site Foreman

Ref#	Management and Mitigation Measures	Timing	Responsibility
BI6	Minimise soil transportation within, into or out of the site to reduce the spread of weeds. Machinery will be free of weed material before entering and exiting the work area.	Construction	Project Manager Site Foreman
BI7	Ecologist will undertake an inspection for weeds prior to clearing.	Construction	Construction Environmental Manager
B18	Pre-clearance inspections, hold points and tree clearing will be undertaken in line with TfNSW Specification G40 Clearing and Grubbing. The inspections and relocation of any effected native fauna will be undertaken for both threatened and non-threatened species.	Pre-Construction	Construction Environmental Manager
B19	Where reasonable and feasible, consider whether the palm tree within the WFU6 – Ridge Street East site can be retained.	Pre-Construction	Project Manager
B20	North Sydney Council will be invited to site prior to tree clearing to discuss measures taken to minimise clearing (where feasible).	Pre-Construction	Construction Environmental Manager

Ref#	Management and Mitigation Measures	Timing	Responsibility
Soils ar	nd Water Quality		
S1	 An ESCP will be prepared prior to construction and is to include as a minimum: identify site catchment and sub-catchments, high risk areas and sensitive areas sizing of each of the above areas and catchments the likely run-off from each sub-catchment separation of on-site and off-site water the direction of run-off and drainage points during each stage of construction direction of flow of on-site and off-site water the locations and sizing of sediment basins or sumps and associated catch drains and/or bunds the locations of other erosion and sediment control measures (e.g. rock check dams, swales and sediment fences) controls/measures to be implemented on wet weather events a mapped plan identifying the above a dewatering procedure for onsite water and basins a process for reviewing and updating the plan on a fortnightly basis and/or when works alter. 	Pre-Construction	Construction Environmental Manager Project Manager Site Foreman
S2	If dewatering is required, a procedure will be prepared for dewatering activities. The dewatering procedure is to comply with <i>RMS Technical Guideline – Environmental Management of Construction Site Dewatering.</i> The procedure will include at a minimum: • a map showing areas of the proposal that will require dewatering	Pre-Construction	Construction Environmental Manager

Ref#	Management and Mitigation Measures	Timing	Responsibility
	detailed description and justification of all selected dewatering methods.		
	description of onsite water reuse requirements.		
	a map showing proposed discharge locations for any offsite discharge.		
	 design requirements for each offsite discharge location to prevent erosion at the discharge location or in the receiving environment. 		
	water quality objectives relevant to the type of dewatering activity.		
	description of the water quality treatment techniques to be used.		
	 water sampling and testing regime to validate water quality prior to and (if required) during dewatering, including to establish appropriate waste disposal methods. 		
	requirements to manage encounters with groundwater or contaminated water.		
S3	Should groundwater be encountered during excavation works, groundwater will be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014) and Water Discharge and Reuse Guidelines (TfNSW, 2015).	Construction	Construction Environmental Manager Project Manager Site Foreman
S4	A contingency plan will be prepared to manage a potential flood event during construction and will outline procedures to reduce risks including worker safety, removal of all plant/equipment and stabilising exposed areas.	Pre-Construction	Construction Environmental Manager Project Manager Site Foreman
S5	All stockpiles will be designed, established, operated and decommissioned in accordance with the RMS Stockpile Site Management Guideline, 2011.	Pre-Construction & Construction	Project Manager Site Foreman
S6	Controls are to be implemented at exit points to minimise tracking soil and particulates onto pavement surfaces.	Construction	Project Manager Site Foreman

Ref#	Management and Mitigation Measures	Timing	Responsibility
S7	Any material transported onto pavements will be swept and removed at the end of each working shift and prior to rainfall where practicable and safe to do so.	Construction	Project Manager Site Foreman
S8	Erosion and sediment controls to be installed in all construction areas where soil disturbance is going to occur, prior to soil disturbance occurring.	Construction	Project Manager Site Foreman
S9	 Erosion and sediment controls will be installed to: Minimise sediment moving off-site and sediment laden water entering any water course, drainage lines, or drain inlets Reduce water velocity and capture sediment on site Minimise the amount of material transported from site to surrounding pavement surfaces Divert off site water around the site. 	Construction	Project Manager Site Foreman
S10	Erosion and sedimentation controls are to be checked and maintained on a regular basis and after a rain event of 10mm or greater (including clearing of sediment from behind barriers) and records kept and provided on request.	Construction	Project Manager Site Foreman
S11	Weather conditions and forecasts (including rainfall prediction maps) will be monitored daily and the relevant information passed on to site personnel allow for adequate planning for significant rain events.	Construction	Construction Environmental Manager Project Manager Site Foreman
S12	Erosion and sediment control measures are not to be removed until the works are complete, and areas are stabilised.	Construction	Project Manager Site Foreman

Ref#	Management and Mitigation Measures	Timing	Responsibility
S13	Work area are to be stabilised progressively during the works.	Construction	Project Manager Site Foreman
S14	Vehicle wash down and/or cement truck washout is to occur in a designated bunded area and least 50 metres away from water bodies and surface water drains.	Construction	Project Manager Site Foreman
Storage	e and Use of Hazardous Materials		
HM1	The storage of hazardous materials, and refuelling/maintenance of construction plant and equipment to be undertaken in clearly marked designated areas that are designed to contain spills and leaks.	Construction	Project Manager Site Foreman
HM2	Spill kits, appropriate for the type and volume of hazardous materials stored or in use, to be readily available and accessible to construction workers. Kits are to be kept at hazardous materials storage locations, in site compounds and on specific construction vehicles. Where a spill to a watercourse is identified as a risk, spill kits are to be kept in close proximity to potential discharge points in support of preventative controls.	Construction	Project Manager Site Foreman
НМ3	All hazardous materials spills and leaks to be reported to site managers and actions taken immediately to remedy spills and leaks.	Construction	Project Manager Site Foreman
HM4	All refuelling and storage of fuels, chemicals and liquids are to be within an impervious bunded area within the construction compound, located a minimum of five metres away from:	Construction	Project Manager Site Foreman
	rivers, creeks or any areas of concentrated water flow		
	areas at risk of flooding		
	• slopes above 10%.		

Ref#	Management and Mitigation Measures	Timing	Responsibility
HM5	Any fuel, oils or other liquids stored on site will be stored in an appropriately sized impervious bunded at least 120% larger than the greatest container and in an area least 50 metres away from water bodies.	Construction	Project Manager Site Foreman
HM6	Training in the use of spill kits to be given to all personnel involved in the storage, distribution or use of hazardous materials.	Construction	Project Manager Site Foreman
Contan	nination		
CO1	In the event that indications of contamination are encountered (known and unexpected, such as odorous or visually contaminated materials), work in the area will cease until a contamination assessment can be prepared to advise on the need for remediation or other action, as deemed appropriate.	Construction	Project Manager Site Foreman
CO2	If Asbestos Containing Material (ACM) is encountered during construction activities, work in the area will cease until an assessment can be prepared to advise on the appropriate course of action.	Construction	Project Manager Site Foreman
CO3	Where required, any materials classified as Hazardous Waste will be treated, or an immobilisation approval obtained in accordance with Part 10 of the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> prior to off-site disposal.	Construction	Project Manager Site Foreman
CO4	Contaminated soil will be segregated from other materials and based on the contamination present. Contaminated soils will be appropriately contained prior to waste classification and ultimate disposal.	Construction	Project Manager Site Foreman
CO5	Any material requiring off-site disposal will be transported by a suitably licensed contractor and disposed of at an appropriately licensed facility.	Construction	Project Manager Site Foreman
CO6	During excavation, site workers will be provided with appropriate training as part of the project induction regarding the identification and response actions for the management	Construction	Project Manager Site Foreman

Ref#	Management and Mitigation Measures	Timing	Responsibility
	of potential contamination, such as presence of waste and/or other imported materials, odours, soil colouring etc.		
CO7	Identified contaminated materials will be classified prior to offsite disposal	Construction	Project Manager Site Foreman
Traffic			
T1	Vehicular property access is to be maintained throughout construction. Where property access will have to be temporarily closed during construction:	Construction	Project Manager Site Foreman
	property owners will be notified at least seven calendar days prior to the access closure		
	alternative access will be provided if available		
	 access closure will be minimised, and access will be returned to the property owners as soon as possible 		
T2	There will be advance notification of any construction works that affect pedestrians and cyclists, including signage outlining diversion routes.	Construction	Community and Stakeholder Manager
Т3	Vehicle delivery times will be scheduled where feasible to avoid peak hour traffic.	Construction	Project Manager Site Foreman
T4	Site workforce to consider vehicle sharing to minimise parking impacts on local roads.	Construction	All personnel
T5	Workers and subcontractors to be advised of approved haulage routes during ancillary facility access. Marshalling of construction vehicles is not permitted near sensitive land users. Trucks will be directed to specific layover areas (marshalling yard) until they are able to continue their journey.		All personnel
T6	The following rules will be communicated to truck drivers using local roads:	Construction	All personnel

Ref#	Management and Mitigation Measures	Timing	Responsibility
	Compression brakes and horns will only be used in emergencies		
	Trucks must give way to pedestrians and other vehicles in the roadway		
	Trucks must watch for vehicles exiting from driveways		
	Trucks must not transfer debris or dirt onto public roads		
	Trucks must be turned off when not in use.		
Т7	Heavy haulage trucks will be equipped with telematics (customised GPS tracking system) so that their movements are captured in real time. This enables monitoring of driver behavior such as speeding, idling, queueing or not using correct routes	Construction	Project Manager Site Foreman
Noise a	nd Vibration		
N1	Management measures adopted during construction will include but will not limited to the following:	Construction	Project Manager Site Foreman
	Planning and conducting works in a manner to minimise the reversing of vehicles with audible reversing alarms		oke i greman
	Use of two way radios at the minimum effective volume		
	Avoiding use of radios during work outside normal hours		
	Avoiding shouting and slamming doors		
	Not using vehicle warning devices, such as horns, as signalling devices		
	Undertaking regular maintenance of plant and equipment, including silencers		
	where practical, operating machines at low speed or power and switching off when not being used rather than left idling for prolonged periods		
	minimising reversing		
	Avoiding metal-to-metal contact		

Ref#	Management and Mitigation Measures	Timing	Responsibility
	Avoiding dropping material from a height into unlined metal trays		
N2	Ancillary site layout to be arranged so that primary noise sources including noisy plant items (generators, pumps, fixed plant) are located away from nearby noise sensitive receivers, with solid structures (sheds and containers) placed between sensitive receivers and noise sources (and as close to the noise sources as is practical) where practicable.	Pre-Construction and Construction	Construction Environmental Manager Project Manager Site Foreman
N3	Non-tonal reversing alarms to be used on vehicles and mobile construction equipment, subject to WHS compliance requirements and risk assessments.	Construction	Contractor
N5	During work hours, a community liaison phone number and site contact will be provided to enable complaints to be received and responded to.	Construction	Project Manager Site Foreman
N6	If deemed necessary, attended compliance noise and vibration monitoring will be undertaken upon receipt of a complaint. Monitoring will be reported as soon as possible. In the case that exceedances are detected, the situation will be reviewed in order to identify means to minimise the impacts to residences.		Project Manager Site Foreman
N7	The environmental induction program will include specific noise and vibration issues awareness training.	vibration issues Construction Construction Environn	
N8	Undertake noise monitoring and review monitoring results and revise mitigation measures as appropriate Construction		Construction Environmental Manager
Air Qua	lity		
AQ1	Management measures adopted during construction will include but will not limited to the following: • vehicles transporting soils, spoil, waste or other materials that have a potential to produce odours or dust are to be covered during transportation	Construction	Project Manager Site Foreman

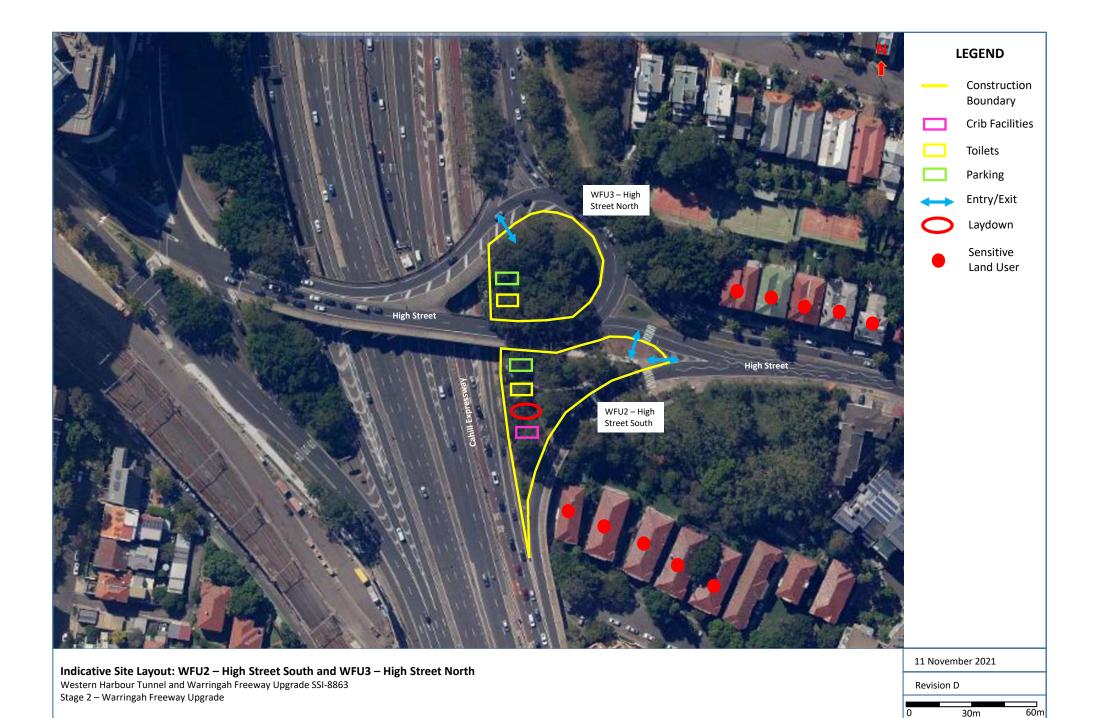
Ref#	Management and Mitigation Measures	Timing	Responsibility
	 dust will be suppressed on stockpiles and unsealed or exposed areas using methods such as water sprays, water trucks, temporary stabilisation methods, soil binders or other appropriate practices 		
	disturbed areas will be minimised in extent and rehabilitated progressively		
	speed limits will be imposed on unsealed surfaces		
	stockpiles will be located as far away from residences and other sensitive receivers as practicable		
	 works (including the spraying of paint and other materials) will not be carried out during strong winds or in weather conditions where high levels of dust or air borne particulates are likely 		
	 plant, vehicles and equipment will be maintained in good condition and in accordance with manufacturer's specifications 		
	plant and machinery will be turned off when not in use		
	no burning of any timbers or other combustible materials will occur on site		
	 visual monitoring of air quality will be undertaken to verify the effectiveness of controls and enable early intervention 		
	work activities will be reprogrammed if the management measures are not adequately restricting dust generation.		
Visual i	mpacts		
VI1	Graffiti to be removed or covered (as agreed with the Principal): • within 24 hours for graffiti of an offensive nature	Construction	Construction Environmental Manager
	within 24 hours for granti or an oriensive nature within one week for any other graffiti		Project Manager
	within one week for any other graniti		Site Foreman

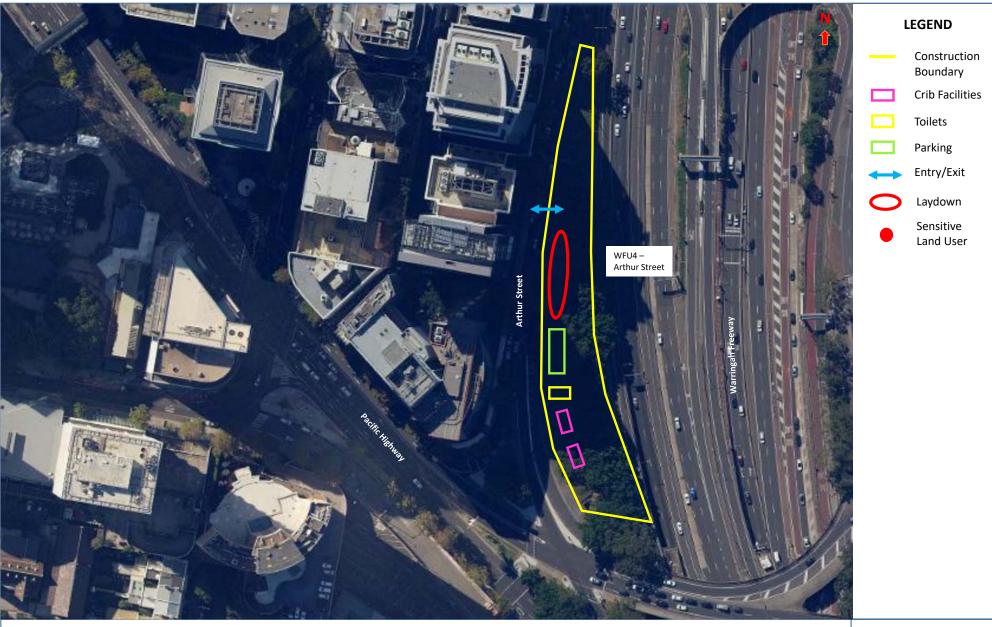
Ref#	Management and Mitigation Measures	Timing	Responsibility	
VI2	Temporary hoardings, barriers, traffic management and signage to be removed when no longer required.	Construction	Project Manager Site Foreman	
VI3	Areas impacted by construction to be restored with appropriate landscape treatments.	Construction	Project Manager Site Foreman	
Socio-e	conomic			
SE1	Residents will be informed prior to any interruptions to utility services that may be experienced as a result of utilities relocation.	Construction	Community and Stakeholder Manager	
SE2	Road users, pedestrians and cyclists will be informed of changed conditions, including likely disruptions to access during construction.	Construction	Community and Stakeholder Manager	
Waste a	and Resource Management			
W1	The following resource management hierarchy principles will be followed: avoid unnecessary resource consumption as a priority avoidance will be followed by resource recovery (including reuse of materials, reprocessing, and recycling and energy recovery)		Contractor	
	 disposal will be undertaken as a last resort (in accordance with the Waste Avoidance and Resource Recovery Act, 2001). 			
W2	Procurement will endeavour to use materials and products with a recycled content where that material or product is cost and performance effective.	ed content Pre-Construction Sustainability Manager Project Manager		
W3	construction so that runoff from the washing of concrete machinery, equipment and		Project Manager Site Foreman	

Ref#	Management and Mitigation Measures	Timing	Responsibility
W4	All wastes will be managed in accordance with the <i>Protection of the Environment Operations Act 1997</i> (NSW).	Construction	Project Manager Site Foreman
W5	Types of waste collected, amounts, date/time and details of disposal are to be recorded in a waste register.	Construction	Project Manager Site Foreman
W6	Works sites will be maintained, kept free of rubbish and cleaned up at the end of each working day.	Construction	Project Manager Site Foreman
W7	Suitable waste disposal locations will be identified and used to dispose of litter and other wastes on-site. Suitable containers will be provided for waste collection.		Project Manager Site Foreman
Heritage	e		
H1	If any unexpected heritage items (including human remains) are encountered, works potentially affecting the find will cease and the TfNSW Management Procedure – Unexpected Heritage Items (November 2015)	Construction	Construction Environmental Manager Project Manager Site Foreman
H2			Construction Environmental Manager
Flood			
F1	Flood emergency management measures will be developed for Arthur Street east (WFU4), Berry Street east (WFU5) and Cammeray Golf Course (WFU8) ancillary facilities.	Pre-Construction	Project Manager

Ref#	Management and Mitigation Measures	Timing	Responsibility
F2	Measures to manage the diversion of floodwater either through or around the construction areas will be planned, implemented and maintained.		Project Manager Site Foreman
F3	The 10% AEP flood extent will be marked on the Site Environment Plan and EWMS. Where feasible, spoil management and stockpile areas will be located outside the 10% AEP flood extent.	Pre-Construction Construction	Project Manager Site Foreman
F3	Where possible ensure that excavated materials are not placed within 20m of drainage Construction lines.		Project Manager Site Foreman
F4	Where practicable, liquid chemical and fuel storage areas will not be located within 50 metres of natural surface drainage areas, storm drainage systems, poorly drained or flood prone areas or any area with a slope steeper than 10%.		Project Manager Site Foreman
F5	Key staff including the Project Manager and Site Foreman shall register with a weather forecast service provider to receive timely warnings of flood risk.	Pre-Construction Construction	Project Manager Site Foreman
Cumula	tive Impacts		
CI1	Prior to commencing site establishment works, communication will be established with other projects in close proximity to the various support sites to ensure activities are scheduled and managed to minimise disruption to the local area	Construction	Construction Environmental Manager Community and Stakeholder Manager

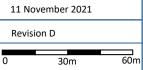
Appendix B – Indicative Site Layouts						

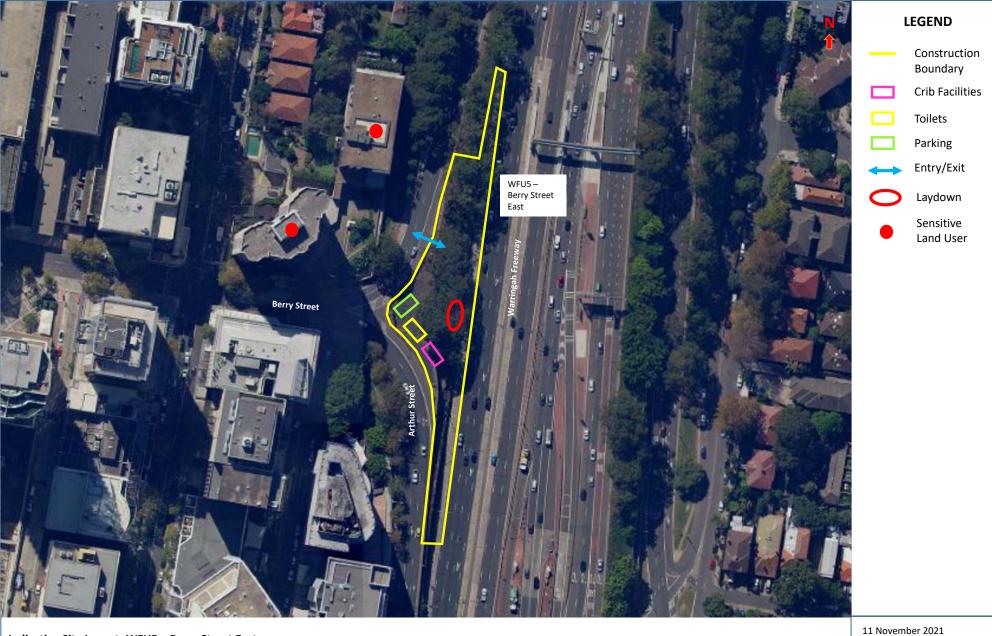




Indicative Site Layout: WFU4 – Arthur Street

Western Harbour Tunnel and Warringah Freeway Upgrade SSI-8863 Stage 2 – Warringah Freeway Upgrade



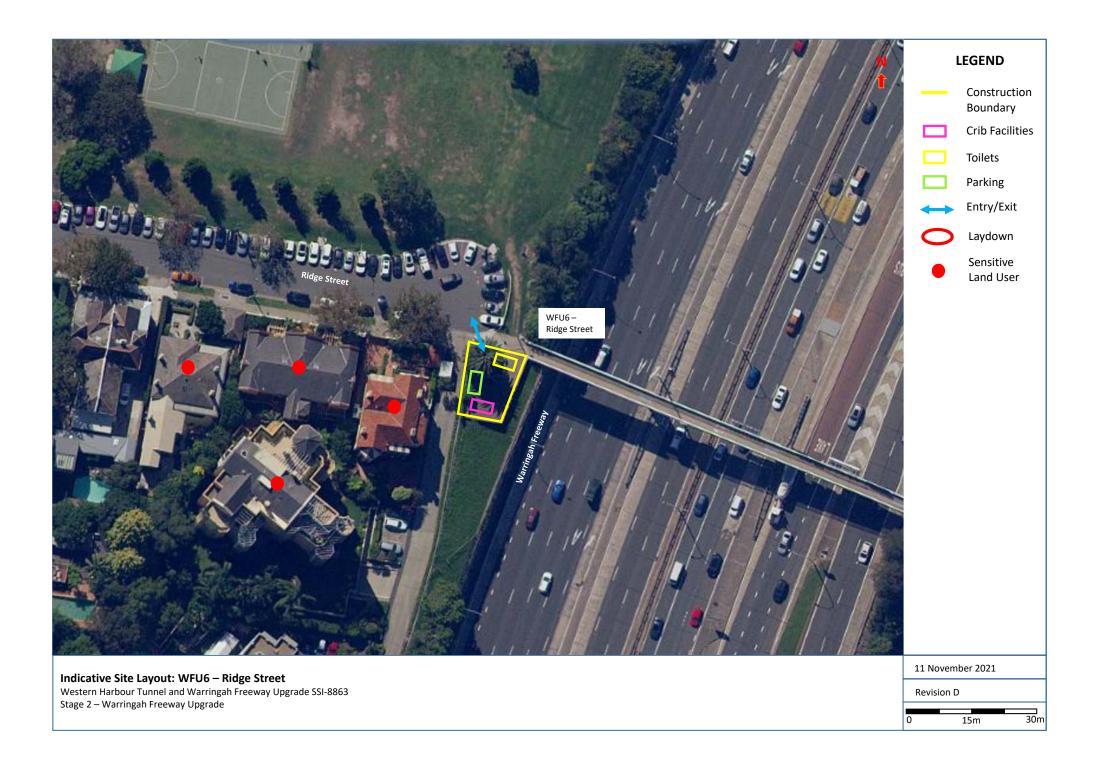


Indicative Site Layout: WFU5 – Berry Street East

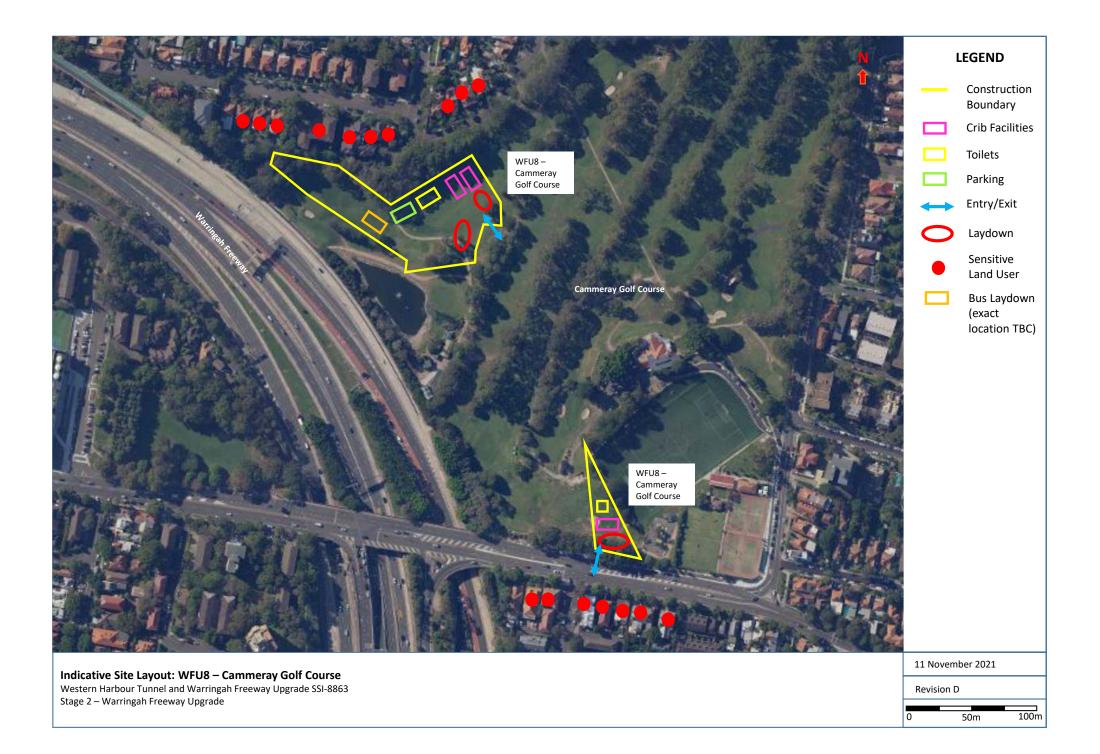
Western Harbour Tunnel and Warringah Freeway Upgrade SSI-8863 Stage 2 – Warringah Freeway Upgrade 11 November 2021

Revision D

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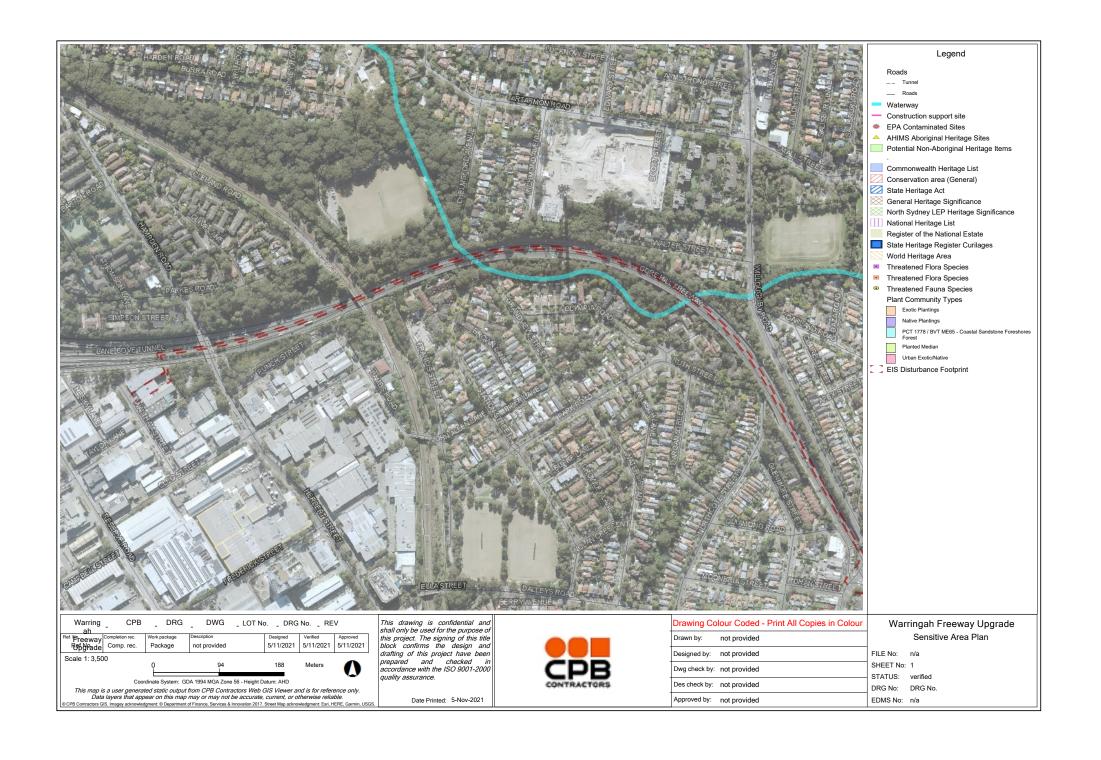


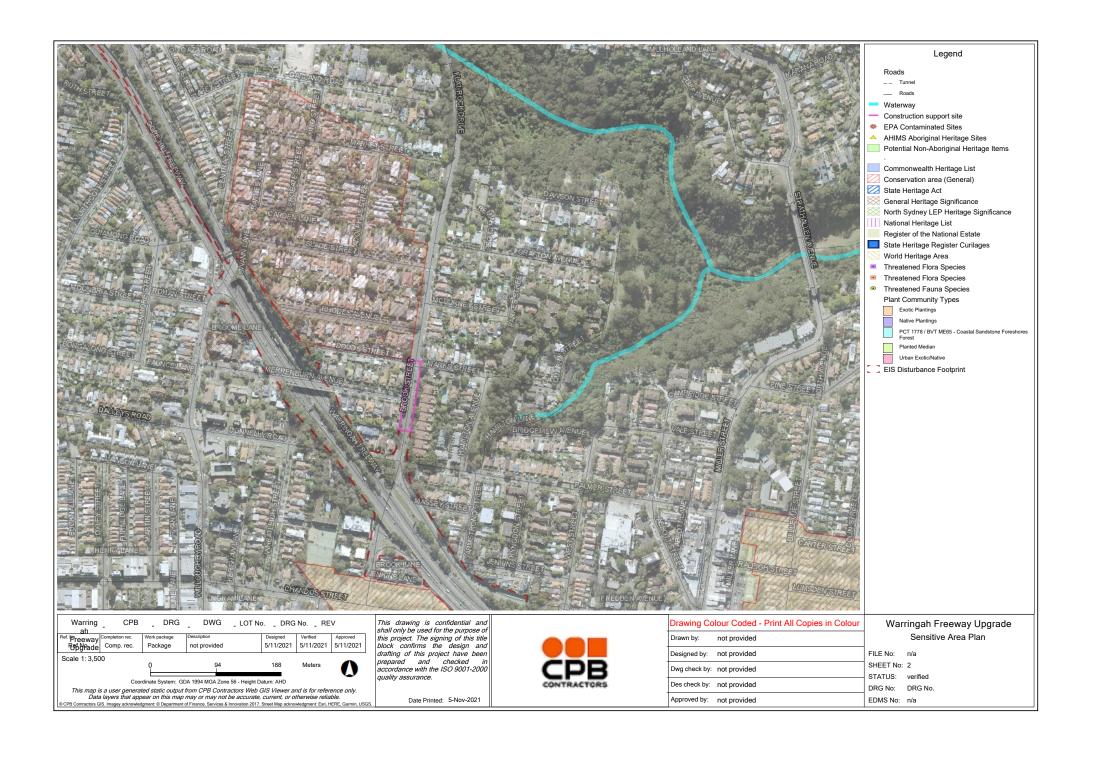


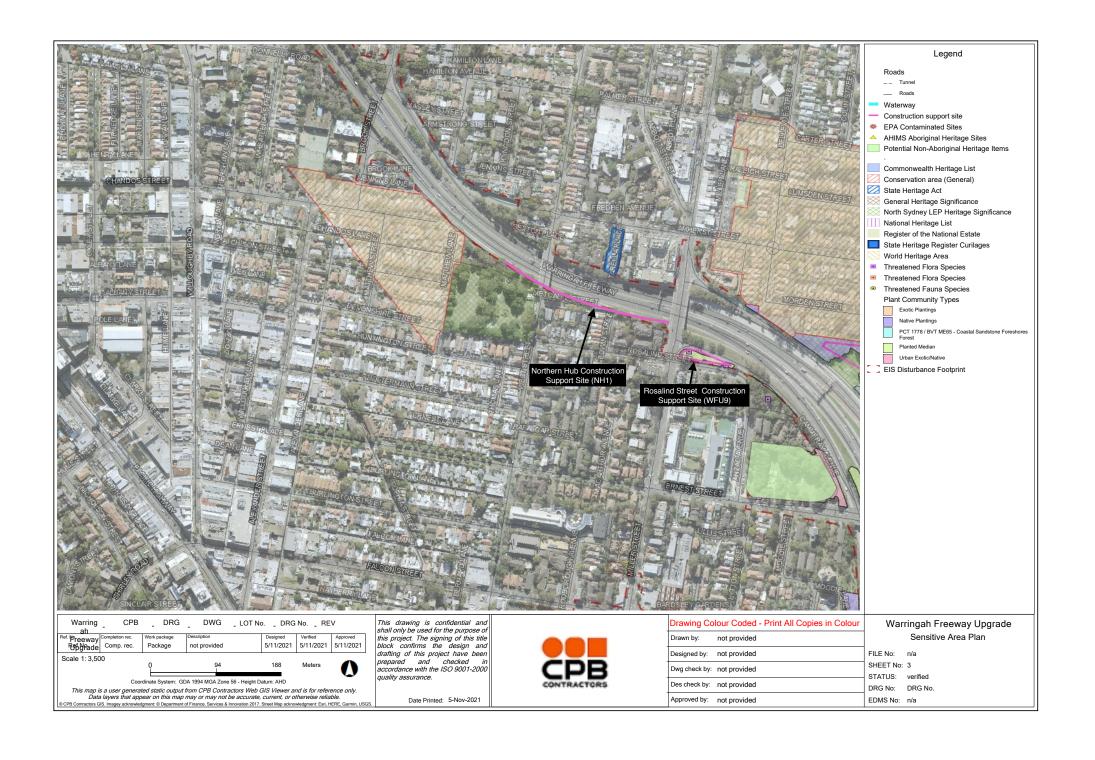




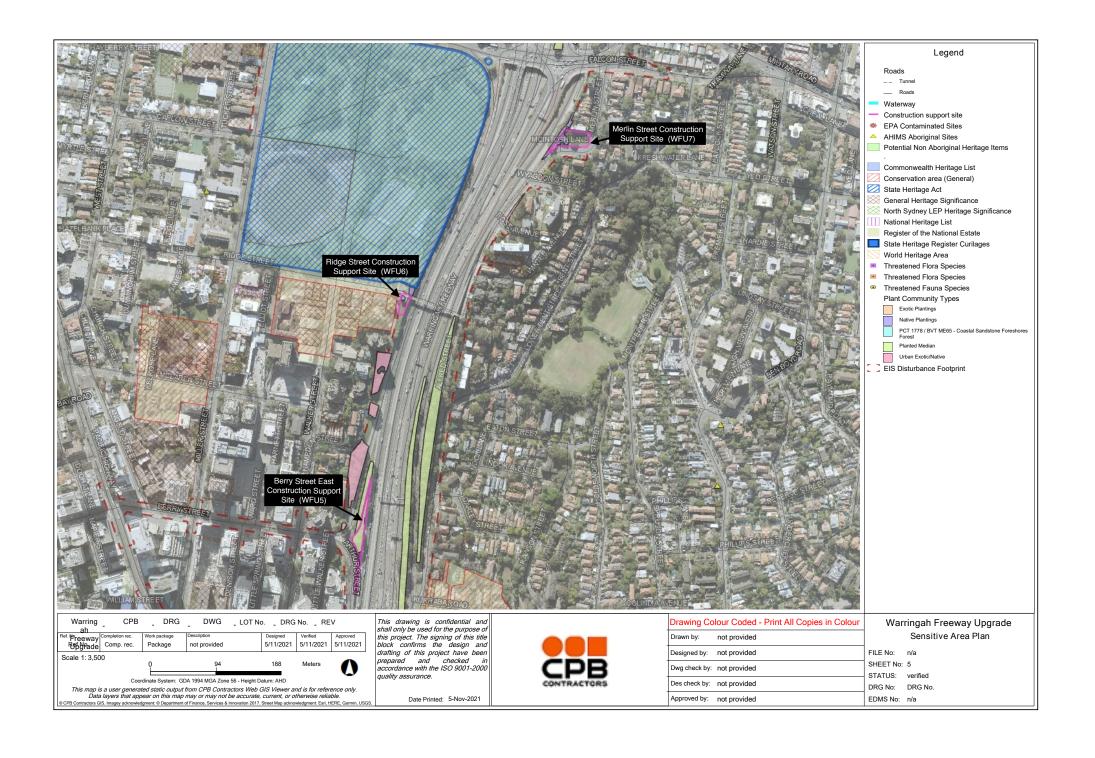
Appendix C – Sensitive Area Plans						

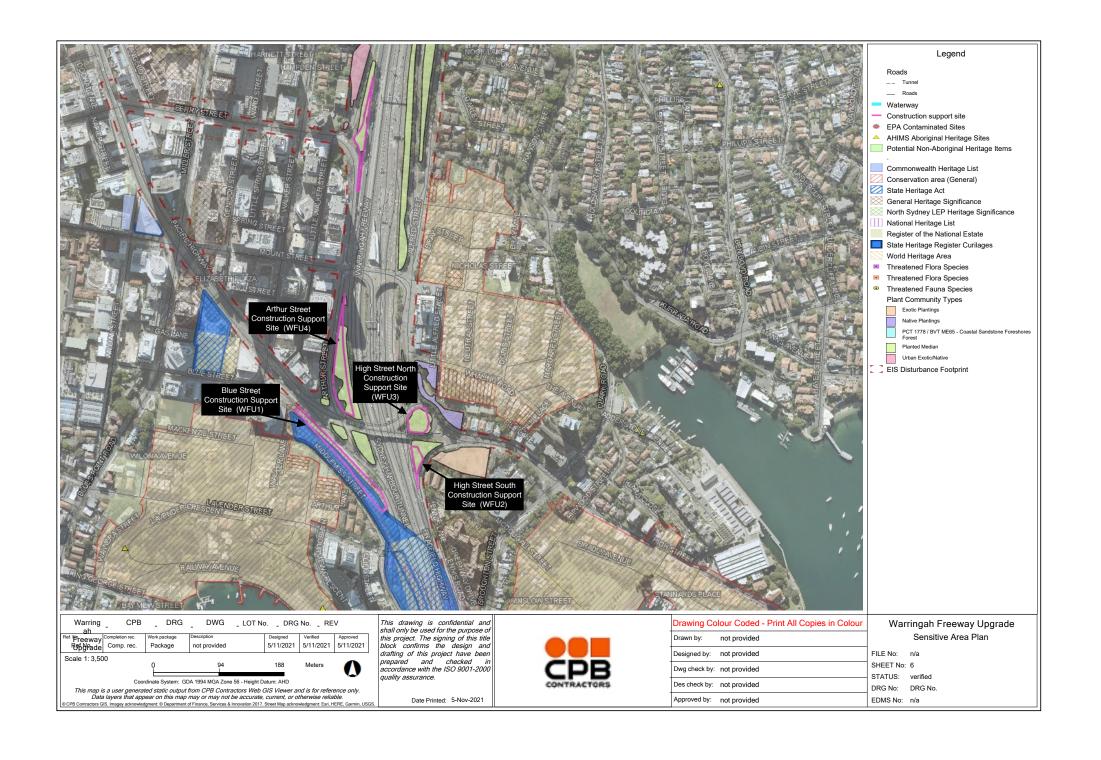


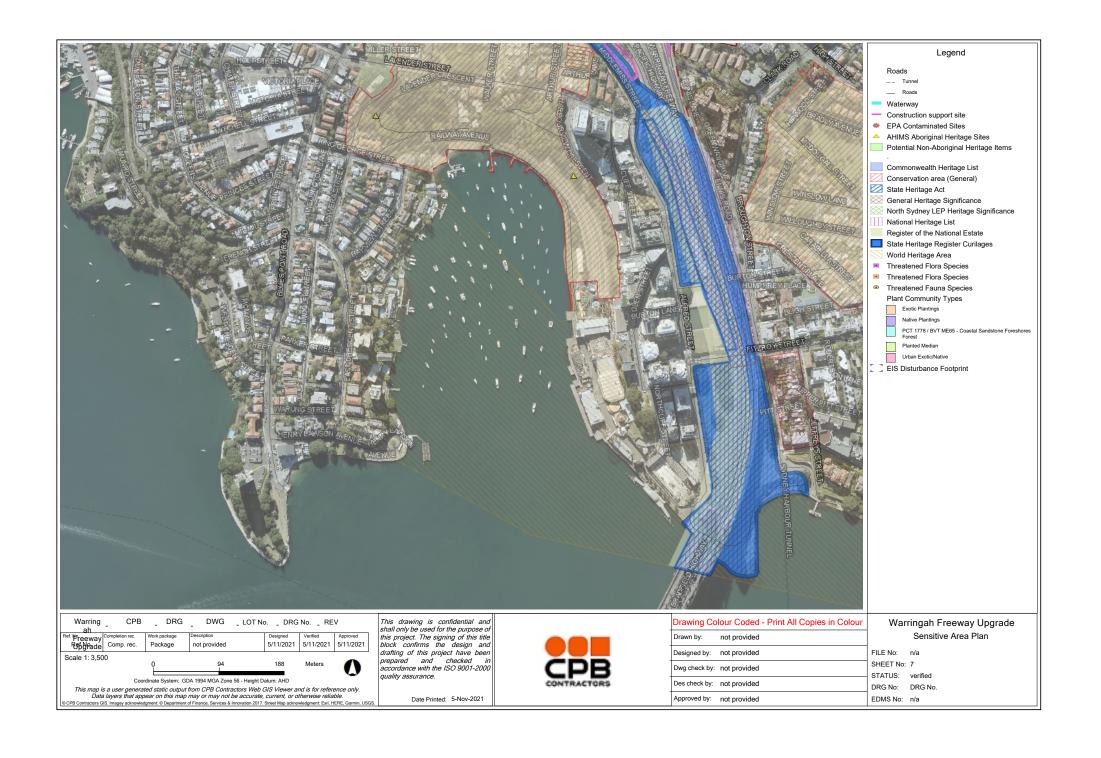


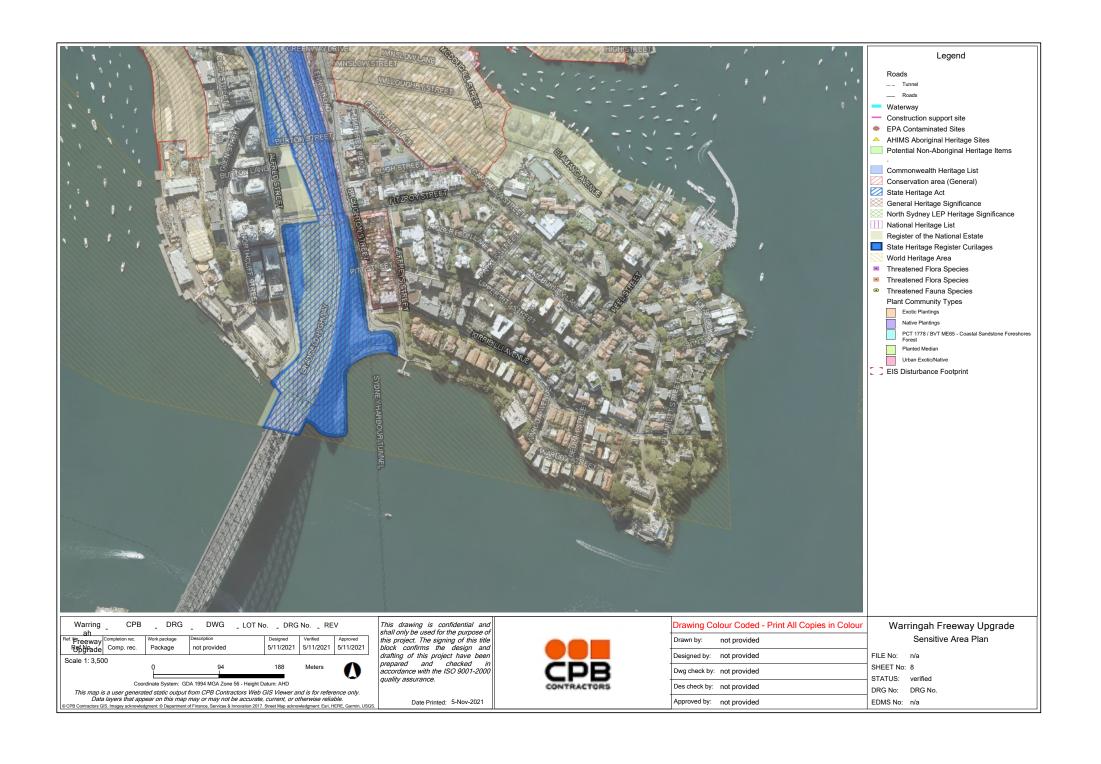












Appendix D – Unexpected Contaminated Lands and Asbestos Finds Procedure			

Purpose

The purpose of this procedure is to define the responsibilities and necessary controls to manage unexpected contamination and asbestos that may be encountered during construction works.

Scope

This procedure is applicable to all activities conducted by CPB Downer JV workers that have the potential to uncover contaminated land and asbestos. This procedure will be implemented for the duration of the Project.

Unexpected Find

An unexpected find is defined as potential contaminated land or asbestos that was not previously identified in the EIS, Detailed Site Investigation or Remediation Action Plan. Unexpected finds that may be encountered during construction works are summarised in **Table A-1**.

Table A-1 Potential Unexpected Finds

Unexpected Find	Description
Fuels or oils	Fuel or oil contamination may be identified by odour, coloured sheen or staining/discolouration of soils. The 'oily' odour can vary in strength from weak (just detectable) to very strong.
Buried waste	Buried waste includes construction and demolition materials (e.g. wood, plastic, metal, bricks, etc) as well as landfill material (domestic putrescible waste).

Unexpected Find	Description
Buried Asbestos Containing Material (ACM), asbestos fines/friable asbestos	Cement-bound ACM may be present in building waste or conduits. Friable asbestos is more commonly associated with lagging and insulation. Laboratory analysis is typically required to identify asbestos fines and fibres.
	Licenced Non-Friable Asbestos
	Requires Class B license
	 Greater than 10 meters squared of Non–Friable (bonded) asbestos or Asbestos containing material (ACM);
	 Asbestos Contaminated Dust or Debris (ACD) that is associated with removal of 10 square meters or more of non- friable asbestos or Asbestos containing material (ACM)
	Unlicenced Asbestos
	No license required
	 10 meters squared or less of Non–Friable (bonded) asbestos or Asbestos Contaminated Material (ACM);
	 Asbestos Contaminated Dust or Debris (ACD) that is not more than a minor contamination and is associated with the removal of 10 square meters or less of non-friable asbestos or Asbestos Contaminated Material (ACM).
	Asbestos Removal from Soil
	May require Class A or Class B license depending on type (Friable or Non-Friable) Asbestos-contaminated soil comprising non-attached pieces of asbestos cement products and other material containing asbestos uncovered in soil.
Storage tanks or conduits	Underground storage tanks and former pipelines are typically metal, concrete or plastic. Storage tanks may be full, partially full or decommissioned. Indications of contamination (staining or odour) may be present in the surrounding soils.
Ash or slag	Ash material is typically light weight, grey and white sand. Slag varies in consistency (loose or cemented) and colour (grey, blue, green).

Procedure

Where unexpected contamination or asbestos is identified or suspected, the Unexpected Finds Procedure for Contamination and Asbestos will be implemented (**Figure A-1**).

Figure A-2 Unexpected Finds Procedure for Contamination and Asbestos

Unexpected contamination or asbestos

- Site Supervisor in conjunction with the Environmental Coordinator authorises stop work in the immediate area as soon as it is safe to do so
- Assess the potential risk to worker health and the surrounding environment; evacuate or contact emergency services if required
- Install environmental controls around the site to contain the contaminated material, including diversion of water to minimise potential spread via surface water runoff
- If it is determined that there is a risk of environmental harm from the potential contamination, the EPA will be notified immediately in accordance with the Roads and Maritime Environmental Incident and Classification Procedure.
- Recommence works in an alternative area where practicable.

Health, safety and environmental controls

- Site Supervisor to establish an exclusion zone around the impacted area with para-webbing and appropriate signage
- Prior to any contamination investigation, management or remediation activities, appropriate safe work method statements (SWMS) and EWMS will be prepared.
- Refer to the Work Health and Safety Plan for Personal Protective Equipment requirements
- Cover potential ACM with weighted plastic sheeting or geofabric
- Divert clean water from the area of excavation in accordance with the Soil and Water Management Sub-plan

Notification

- Site Supervisor to notify the Construction Environmental Manager who will notify the TfNSW Environmental Manager, Environmental Representative and landowner (where relevant)
- Notify the EPA where required in accordance with the 'Guidelines on the Duty to Report Contamination under the CLM Act 1997' (Office of Environment and Heritage, 2009)

Asbestos: Notification

Prior to the commencement of licensed asbestos removal works, a minimum of 5 days prior notification to SafeWork NSW is required.

Assessment

- Construction Environment Manager (in consultation with TfNSW Environment Manager) to engage a Contaminated Land Consultant (where necessary) to:
 - Conduct a preliminary assessment of the nature of the contamination and the immediate management controls

- Provide advice on additional assessment and/or remediation works
- Characterise suspected or identified contamination with consideration of the National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC, 2013)

Management and Reporting

- Construction Environment Manager to implement necessary management and/or mitigation actions to minimise risk to human health and the environment, and ensure the site will be suitable for the proposed use
- Record details of the unexpected find in the Contamination
 Register (Contaminated Land Management Sub-plan, Appendix B)
- Consider whether changes are required to the Contaminated Land Management Sub-plan

Asbestos: Asbestos Removal

Asbestos removal will be undertaken by suitably qualified personnel and/ or subcontractors who are licensed by SafeWork NSW.

An Asbestos Removal Control Plan (ARCP) is required to be completed in accordance with Work Health and Safety Regulation 2017 (Regulation 464). The ARCP will be developed prior to undertaking any asbestos removal works. The aim of the plan is to outline the specific methods and processes that will be used to ensure the removal is safe and effective.

Asbestos: Site Establishment and Signage

The boundaries of the "Asbestos Works Area" and the "Asbestos Removal Site" must be determined and defined by the nominated asbestos removal supervisor.

In determining the asbestos removal boundaries, consideration shall be given to:

- The use and suitability of various types of enclosures and asbestos removal methods; and
- The impacts of the asbestos removal work, including potential exposures in the surrounding region.

In determining the distance between barriers and the asbestos work area a risk assessment should take account of:

- Whether the ACM are friable or non-friable;
- Activity around the asbestos work area (other workers, visitors, neighbours, the public, etc.);
- The methods of ACM removal;
- Any existing barriers (walls, doors, etc.);
- · The quantity of ACM to be removed; and
- The type of barrier used (e.g. boarding or tape).

The asbestos removal site boundary must be clearly and securely delineated to ensure persons do not enter inadvertently or without authority. Signage must warn persons that asbestos removal work is being carried out, of the dangers of exposure to asbestos and of PPE

and other site entry requirements. All boundary delineation and warning/danger signs must remain in place until a clearance to reoccupy has been granted.

All warning/danger signage must comply with AS 1319 Safety signs for the occupational environment.

Asbestos: Air Monitoring

All air monitoring will be conducted by licensed asbestos assessor (LAA) and in accordance with Safe Work Australia – Code of Practice on How to Safely Remove Asbestos (2016). The location and layout of the air monitors will be detailed within the ARCP.

Asbestos: Clearance

Following removal of asbestos / ACM, the licensed asbestos removalist will arrange for a clearance inspection of the area to facilitate the issue of a clearance certificate and allow construction to recommence in the affected area. The clearance inspection is conducted by:

- an independent licensed asbestos assessor, for work that was carried out by a Class A licensed asbestos removalist.
- an independent competent person, for asbestos work that is not required to be carried out by a Class A licensed asbestos removalist

Asbestos: Decontamination

Decontamination applies to all workers exiting the asbestos work area, all plant, equipment and tools used in the asbestos work area (at the completion of the asbestos work or at their earlier removal from the area) and, at the completion of the asbestos removal work, the asbestos work area itself.

The methods used for decontamination are based on the Code of Practice How to Safely Remove Asbestos 2016

Recommence Works

- Recommence works at the direction of the Construction Environmental Manager when the following criteria have been satisfied:
 - Site is safe to access
 - Management and/or mitigation actions have been implemented
 - Site has been validated as suitable for the proposed use

Roles and Responsibilities

The CPB Downer JV Project Team's organisational structure and overall roles and responsibilities are outlined in Section 3.3 of the CEMP. Additional roles and responsibilities specific to this procedure are detailed in **Table A-2**.

Table A-2 Unexpected Finds Roles and Responsibilities

Role	Responsibilities	
All employees and subcontractors	Notify of potential contamination and asbestos finds	
Site Supervisor	Communicate the discovery of unexpected contamination or asbestos to the Construction Environmental Manager	
Construction Environmental Manager	Ensure adequate resources are allocated to achieve compliance with the requirements of this procedure	
	Engage a suitably qualified Contaminated Land Consultant to support delivery of this procedure	
Environmental Coordinator	 Implement the requirements of this procedure within the work site 	
Contaminated Land Consultant	Conduct an assessment of unexpected contamination or asbestos	
	Determine necessary management and mitigation measures to minimise risk to human health and the environment, and ensure the site will be suitable for the proposed use	

Training

All employees and subcontractors working on the Project will attend site induction training including the following elements related to unexpected contamination and asbestos finds:

- Visual and olfactory indicators of contamination and asbestos
- Requirements of this procedure.

Monitoring and Inspection

Requirements and responsibilities in relation to inspections and monitoring are documented in Section 3.9.1 and Section 3.9.2 of the CEMP.

Reporting

Unexpected contamination and asbestos finds will be reported in the Contamination Register (Appendix B of the Contaminated Land Management Sub-plan). In addition to detailing the proposed future land use of each area of land, the Contamination Register will reference assessments and investigations undertaken.

Appendix E – MCoA A16 Assessment of NH1 – Northern Hub Ancillary Facility

Table E-2 MCoA A16 Assessment of NH1 - Northern Hub

MCoA#	Condition text	Assessment	Compliance with requirement
A16	Ancillary facilities Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 can only be established and used in each case if:		
	(a) they are located within or immediately adjacent to the construction boundary; and	The NH1 – Northern Hub ancillary facility is located within the Warringah Freeway corridor at Cammeray. The site lies along the north bound verge and inner Brook Street exit lane of the Warringah Freeway from Miller Street to a point approximately 50m east of West Street adjacent to St. Thomas Rest Park (Figure E-1).	Yes
	(b) they are not located next to sensitive land user(s) (including where an access road is between the facility and the receiver), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location; and	The site is wholly located within the Warringah Freeway corridor with the majority of the site located behind an existing 130m long noise wall (located along Metcalf Street) or adjacent to the St. Thomas Rest Park. While residential receivers are located on the other side of the noise wall (approximately 10 metres from the site), they do not have a line of sight to the ancillary facility or the Warringah Freeway (Figure E-2).	Yes
		It is noted that the existing noise wall does not extend to the section of the site between Miller Street overpass and Edwin Street (approximately 50m) where a number of apartments are located. As such, activities in this area will be limited to vehicle parking and operation of a single-storey demountable shed. These activities would	

MCoA#	Condition text	Assessment	Compliance with requirement
		generate considerably lower noise impacts as compared to the adjacent Warringah Freeway. In addition, due to the elevated position of the nearby apartments, the demountable would be located below the line of sight from the nearby apartments (Figure E-3).	
	(c) they have no impacts on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and	The EIS has not identify any heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities that would be impacted within or adjacent to the ancillary facility.	Yes
	(d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.	The establishment and use of the site will be undertaken within the current Warringah Freeway corridor. The site will be primarily used as a construction office servicing the northern section of works and will include crib sheds, ablutions and parking. The site will not be used for materials / chemical storage or laydown. In addition, the site is predominantly hardstand with some grassed verge and therefore the establishment and operation of this support site is not expected to have measurable impacts on water quality.	Yes
		The site is predominantly located behind existing noise walls or adjacent to the St. Thomas Rest Park in addition to being set down within the Freeway corridor. Site establishment works will be undertaken during daytime hours with some out of hours works necessary for the receiving of oversize demountables (if required). Noise impacts as a result of site establishment and operation are not expected to be above existing noise levels from the Freeway.	
		Vehicular access to and from this site will be via direct access from and to the existing Freeway. Construction personnel will be	

MCoA#	Condition text	Assessment	Compliance with requirement
		transported to site via a project shuttle bus which will access the site via the Warringah Freeway. The provision of both on-site parking and a shuttle bus will ensure construction vehicle parking on local streets is minimised.	

Additional Information:

Blue collar / Worker facilities

- 10 crib / lunch facilities (12m x 3m) double stacked behind noise wall / beneath West St bridge
- 6 change rooms (12m x 3m) double stacked behind noise wall / beneath West St bridge
- Ablutions: 8 x Male. 3 x female (12m x 3m) double stacked behind noise wall / beneath West St bridge where possible

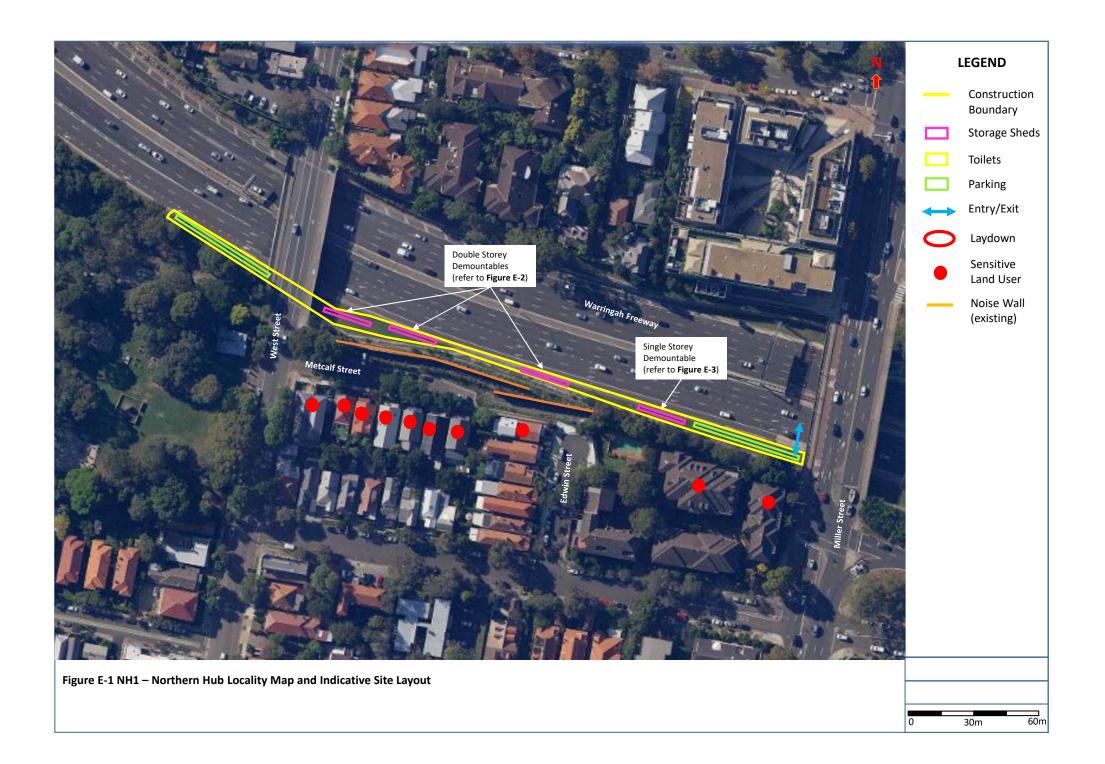
Site Management / Engineers office

Office space for 30 people

• 5 No 12m x 6m offices – double stacked behind noise wall

Storage and Parking

- 10 No storage containers for minor / small tools
- Parking for site vehicles, mini buses
- Hard standing for mini-bus worker drop offs



LEGEND

Approximate
Outline of
Double-Storey
Demountable



Figure E-2 Proposed Double-Storey Storage Shed Location – Metcalf Street Noise Wall



Figure E-3 Proposed Single-Storey Storage Shed Location – Miller Street Overpass to Edwin Street

LEGEND

Approximate
Outline of
Single-Storey
Demountable

Sensitive Land User

Appendix F – TfNSW Environmental Incident Procedure			

Appendix A6

Environmental Incident Classification and Reporting Procedure

Warringah Freeway Upgrade

October 2021

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Environmental Incident Procedure



Procedure Number: EMF-EM-PR-0001 Environmental Incident Procedure

Effective Date: 19/07/2021 **Review Date:** 19/07/2023

1 Who is this document for?

All Ongoing / Temporary/ Seconded/Casual staff of TfNSW	YES
Transport Service Senior Managers and Executives	YES
Labour Hire, Consultants and Professional Service Contractors	YES
Delivery Partners / Contractors	YES

2 Purpose and Scope

2.1 Purpose

The purpose of this document (Procedure) is to set out the procedure to be followed if, during an activity being carried out by or on behalf of TfNSW, there is:

- a report-only event
- a non-compliance
- regulatory action received
- an environmental incident.

The Procedure sets out the steps for the:

- identification,
- classification and
- reporting

of report-only events, non-compliances, regulatory action and environmental incidents.

2.2 Scope

The Procedure sets out internal only reporting processes for environmental events and the additional process for 'notifiable events', which are environmental incidents that must be reported externally (see section 3.3).

The Procedure is applicable to all TfNSW activities where report-only events, non-compliances, regulatory action and environmental incidents may occur. The requirements of the Procedure must be communicated to all TfNSW employees and contractors (e.g. during inductions) who undertake those activities.

This includes (but is not limited to):

- Activities undertaken by contractors on behalf of TfNSW
- Temporary activities, such as preliminary investigations (e.g. geotechnical and environmental surveys)
- Construction and maintenance of TfNSW assets
- Activities at TfNSW properties and facilities (including TAHE)
- Maritime vessels operated by TfNSW.

The procedure does NOT cover report-only events, non-compliances, regulatory action and environmental incidents relating to:

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- Operating agencies embedded within TfNSW, such as Sydney Metro. At the time of release of the Procedure, there was a Corporate Functions Review underway, which sought to incorporate Sydney Trains and NSW TrainLink into TfNSW. The single operating model may involve the future amalgamation of environmental incident procedures. Regardless, it is noted that all agencies provide their incident data to Environment and Sustainability (E&S) Branch for the purposes of cluster reporting;
- Operational road and traffic activities of the general public (e.g. vehicle accidents, fires caused by discarded cigarette butts);
- Boating accidents (except those involving TfNSW Maritime vessels);
- Dumping of materials by members of the public on TfNSW managed land (except where hazardous materials are unexpectedly found during construction or maintenance activities);
- Marine oil and chemical spills covered by the National Plan for Maritime Environmental Emergencies (Australian Maritime Safety Authority, 2014).

The Procedure does not provide guidance on management responses or corrective actions required following environmental incidents and non-compliances, which are site specific and should be addressed by those with responsibility for the activity that caused the incident or non-compliance.

However, TfNSW E&S Branch is available to provide advice on appropriate responses and corrective actions in relation to individual incidents or non-compliances.

3 Requirements

3.1 Environmental incidents, report-only events, non-compliances and regulatory action

This Procedure is applicable to a range of environmental incidents, report-only events, non-compliances and regulatory action that may occur during activities undertaken by, or on behalf of, TfNSW. Each of these events and their reporting requirements are described in the following sections.

Personnel using this Procedure should consider the definitions of each of these events when reporting. Definitions are provided in Section 6.

Note that a set of circumstances may be both a non-compliance and an environmental incident. An environmental incident could also result in regulatory action.

3.1.1 Environmental incidents

Environmental incidents are defined in section 6. Reporting requirements are detailed in section 3.2.

The person responsible for operational management of the site/activity that caused the incident should assume responsibility for reporting in accordance with this Procedure, together with coordinating the response to the incident, including directing actions as necessary.

The TfNSW Environment Manager will classify reported incidents for the purposes of internal environmental performance reporting and analysis of environmental incident trends (as outlined in Figure 3.2.1).

Environmental incident classifications are described in Table 3.1.1, below. The classification system is aligned to the consequence levels (C6 – C1) from the <u>TfNSW Enterprise Risk</u> Management Standard and considers the key risk areas of:

Environment

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3

- Reputation and Integrity
- Regulations and Compliance.

The appropriate consequence level for each of the three key risk areas will be recorded for each incident, but only the highest recorded consequence level will be used as the incident classification for reporting purposes.

Note that not all criteria described for each consequence level in Table 3.1.1 need to be met in order to assign an incident classification – the most appropriate criteria should be considered when determining the consequence level for each key risk area for each incident.

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Table 3.1.1: Environmental Incident Classification

	Incident Category					
Key risk area	C6 Insignificant	C5 Minor	C4 Moderate	C3 Major	C2 Severe	C1 Catastrophic
Environment	No appreciable changes to environment.	Change from existing conditions that can be rectified immediately (< 1 day) with available resources.	Short-term (< 1 year) and/or well-contained environmental impact. Minor remedial actions probably required.	Short to medium term (between 1 and <5 years) environmental impact. Considerable remedial actions probably required.	Medium-term (>5 years) environmental impact. Extensive remedial actions probably required.	Long-term (>10 years) large-scale environmental impact. Extensive and ongoing remedial actions probably required.
Reputation and integrity	Single negative article in local media. Limited social media commentary. Goodwill, confidence and trust retained. Confined to the Branch. Local council may want to discuss.	Series of negative articles in local media (District / electorate based adverse media). Some social media commentary. Confidence remains - minor loss of goodwill. Confined to Branch but requiring notification to Division. Council requires written explanation. Recoverable with little effort or cost. Some continuing scrutiny/attention.	Extended local media coverage with some broader Regional media coverage. Extended negative social media coverage. Confidence and trust of stakeholders dented (recoverable at modest cost within existing budget and resources). Division formal response needed to State Government/Regulator.	State media coverage, short term negative national media coverage. Widespread social media coverage Confidence/trust impaired. Project/activity credibility under question. TfNSW and/or Ministers Department requires update.	Sustained negative State media coverage. Regular 'talk-back' programs questioning credibility and capability. Confidence and trust are severely damaged. Widespread negative social media coverage. Regular updates demanded by Minister. Stakeholders withdraw their support recoverable at considerable cost, time and staff effort.	Sustained, high profile media attention at National level. Material change in the public perception of the Agency. Extensive negative social media coverage Confidence and trust non-existing. Government forced to reverse decision. Stakeholders are actively campaigning against the organisation.

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Table 3.1.1: Environmental Incident Classification

			Incident	Category		
Key risk area	C6 Insignificant	C5 Minor	C4 Moderate	C3 Major	C2 Severe	C1 Catastrophic
Regulations and compliance	Low-level/Technical non-compliance with legal and/or regulatory requirement or duty by individuals or TfNSW- not reportable. Minor non-compliance to a low impact contract clause – little or no interest by either party to pursue or rectify.	Non-compliance with whole or significant aspects of Government policy not reportable but requiring internal activity to put in place. Formal investigation and/or formal notification to regulator. Minor breach of contract by either party rectified through local management discussion.	Non-compliance with key Government policy - reportable and/or explanation required – need to put in place as soon as possible. Non-compliance – key obligation. Formal notification to regulator. Agency on notice. Breach of contract by either party rectified at Branch level management discussion. Small fine and no disruption to services.	Technical non- compliance with a minor Government Policy - not reportable. Low level non- compliance. Technical non- conformance. Minor non-compliance to a low impact contract clause – little or no interest by either party to pursue or rectify. Substantial fine and no disruption to services.	Non-compliance with high profile, outward facing Government policy or Ministerial decree - immediately reportable to Government body (e.g. Treasury) and action to put in place required immediately (high priority). Continuous breach resulting in prohibition notices. Breach of significant, key aspects of contract by either party leading to lodgement (threat) to sue and recompense at severe financial levels Cessation of contract may occur. Large fines as a result of non-compliance. Licence or accreditation restricted or conditional affecting ability to operate.	Non-compliance with high profile Government policy or Ministerial decree - immediately reportable to Ministerial level requiring actions to put in place immediately (high priority) and progress to be reported to the Minister on an agreed and appropriate schedule. Litigation and potentially imprisonment. Loss of Operating licenses. Continued breach cannot be tolerated. Major contract breach by either party leading to significant litigation and financial costs . Total breakdown and cessation of contract. Criminal prosecution as a result of non-compliance.

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3.1.2 Significant environmental incidents

Significant Incidents are environmental incidents that are serious in nature and have significant consequences warranting escalation to TfNSW senior management.

An environmental incident is to be defined and treated by the TfNSW Environment Manager as a potential Significant Incident if it meets one or both of the following:

- the severity of the incident is likely to be classified as C3, C2, or C1 in accordance with Section 3.1.1
- the history of the project, past performance and/or previous regulatory interest, indicate the project is likely to be the subject of a penalty notice or prosecution

Potential Significant Incidents are escalated by TfNSW to the Executive Director Environment and Sustainability, who will determine whether the incident is deemed to be a Significant Incident and require further escalation to the Secretary and other senior management, to ensure they are aware of the incident and can implement or authorise any required responses.

The Significant Incident escalation process is detailed in Appendix A and Figure 3.2.1.

3.1.3 Report-only events

Report-only events are defined in section 6. Reporting requirements are detailed in section 3.2. Examples of report-only events include:

- Environmental incidents caused by weather events that are beyond the design capacity
 of environmental controls and/or mitigation measures in accordance with project specific
 requirements;
- Environmental incidents caused by persons or entities not associated with an activity being undertaken by TfNSW;
- Pre-existing conditions not associated with an activity being undertaken by TfNSW;
- Unexpected finds that are managed in accordance with relevant procedures / guidelines. Despite these events being outside the scope of control of an activity, it is likely that a management response will be required to address them. As such, it is important that they are still reported (see section 3.2) to understand any resulting environmental impacts, inform trend

still reported (see section 3.2) to understand any resulting environmental impacts, inform treanalysis and any future activities in that location and allow any required management responses to be developed.

Report-only events can be considered to be unavoidable and so not reflecting the performance of a site, and will not be included in performance reporting. However, the response to a report-only event should be taken into account when considering site performance, as a deficient or inappropriate management response could result in a non-compliance and/or an environmental incident.

Where a report-only event relates to an unexpected find and the same issue can then reasonably expected to be found at the same location in future, additional finds from that location need not be reported.

3.1.4 Non-compliances

Non-compliance is defined in section 6. Reporting requirements are detailed in section 3.2.

A non-compliance could also be an environmental incident.

3.1.5 Regulatory action

Regulatory action is defined in section 6. Reporting requirements are detailed in section 3.2.

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Regulatory action includes, but is not limited to:

- Prosecutions
- Penalty notices
- Clean up notices
- Prevention notices
- Official cautions
- Formal warnings
- EPA show cause notifications.

Copies of any regulatory action issued by an environmental regulator must be provided as part of the reporting that is undertaken in accordance with section 3.2.

3.2 Reporting process

3.2.1 Standard reporting process

The standard reporting process for all environmental incidents, significant environmental incidents, report-only events, non-compliances and regulatory action is detailed in Figure 3.2.1.

Where the reporting process requires submission of a written report to TfNSW, the person making the report must use the following formats and meet the information requirements detailed within each:

- Road based and maritime projects: Environmental Event Reporting Form (624/400)
- Rail based projects: INX reporting system

Information included in reporting must be factual and accurate.

For the initial 24-hour email notification for road projects, the following information must be provided:

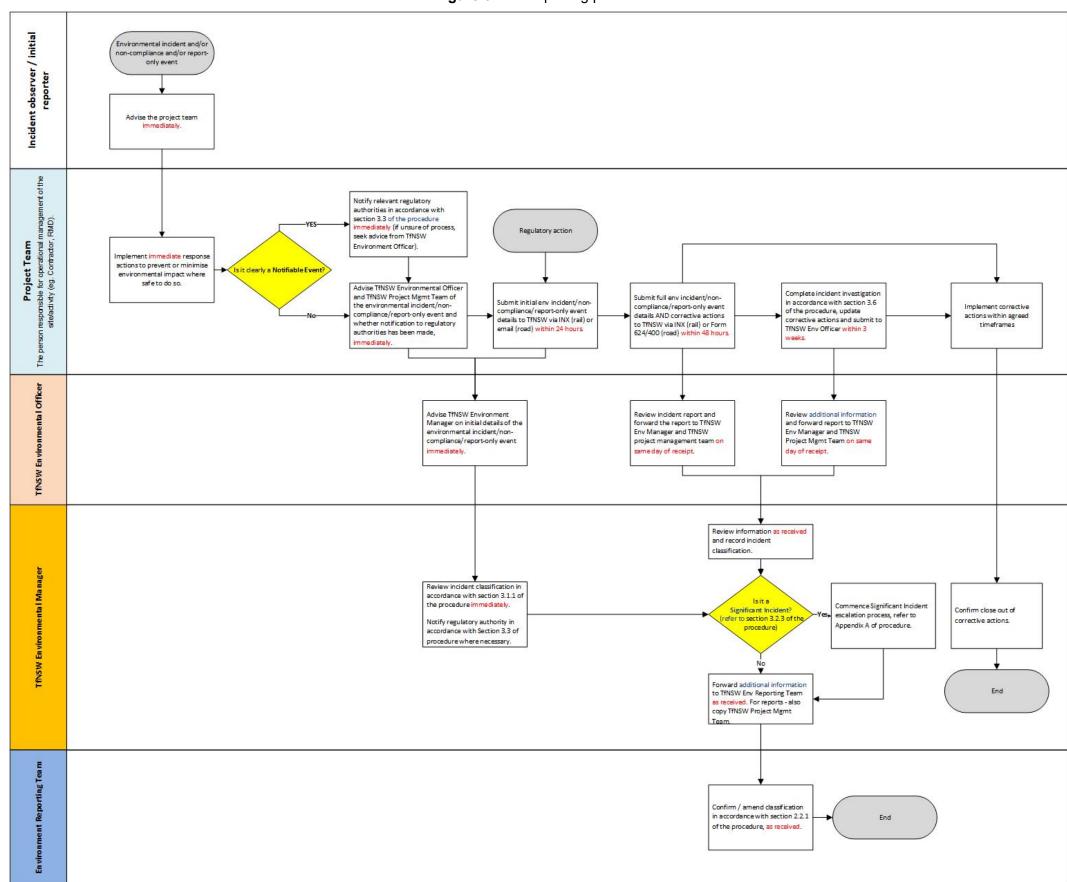
- Date of event
- Project / site name
- Type of event that has occurred (ie- environmental incident, incident and non-compliance, non-compliance, report-only or regulatory action)
- Description of the event
- Quantity / volume
- Immediate response actions that were implemented
- Notification/s undertaken.

In the case that regulatory action is received relating to a previously reported environmental incident, non-compliance or report-only event, reference to the relevant event must be made in the report for the regulatory action.

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Figure 3.2.1: Reporting process



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3.2.2 Other internal notifications

When reporting in accordance with Figure 3.2.1, TfNSW project management teams should also undertake the following internal notifications as appropriate:

- Corporate Communications / Media for any environmental incidents, report-only events, non-compliances and regulatory action that have potential for negative community or media attention;
- Legal Branch, for any environmental incidents, report-only events, non-compliances and regulatory action that could result in a (further, in the case of the latter) regulatory response against TfNSW. In these instances, limit written commentary on the incident by all staff, including emails;
- Safety Branch for any incidents that involve actual or potential risks to the health and safety of workers or the general public.

3.3 Notifiable events

A notifiable event is any environmental incident, report-only event or non-compliance (see section 3.1, above) that triggers a specific statutory requirement to notify an authority.

The key notification requirements are described below. Note each statutory requirement to notify may specify a particular person who is responsible to make the notification as well as the timing of when this must occur. The details of any notification conducted must be included in the reporting that is undertaken in accordance with section 3.2.

3.3.1 Material Harm pollution incidents

Under Part 5.7 of the POEO Act, there is a duty to immediately notify (i.e. promptly and without delay) each relevant authority (see section 3.3.2) of a pollution incident where material harm to the environment is caused or threatened.

The POEO Act states that a pollution incident should be considered Material Harm if:

- "(i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000"

Material Harm only relates to pollution incidents. Other environmental incidents, such as conservation, heritage and planning breaches, are not included in the definition of a pollution incident.

3.3.2 Notification of Material Harm pollution incidents

The relevant authorities that must be notified for a Material Harm pollution incident are listed in tables 3.3.2a and 3.3.2b below. It is important to note the order of notification and phone numbers to use can vary depending on the nature of the pollution incident, as detailed in the two tables.

All of the authorities listed (whether considered relevant or not) <u>must</u> be contacted for each Material Harm pollution incident to satisfy POEO Act requirements. Serious penalties apply to both individuals and corporations for failing to notify Material Harm pollution incidents:

- Maximum penalty for individuals \$500,000
- Maximum penalty for corporations \$2,000,000.

Western Lands Commissioner for the Western Division (except any

part of the Western Division within

the area of a local council).



Western Lands Commissioner – phone 6883

Table 3.3.2a: Authorities to notify for Material Harm pollution incidents that present an immediate threat to human health or property Order **Authority Contact number** 1 Fire and Rescue NSW 000 2 131 555 NSW EPA environment line Contact 1300 066 055 to be directed to the Ministry of Health (via the local Public local Public Health Unit, or visit the NSW 3 Health Unit)* **Health Website** SafeWork NSW 131 050 The Appropriate Regulatory Authority*, Local council - contact Office of Local being either: Government on 4428 4100, or visit the Office Local council of Local Government website 5

Table 3.3.2b: Authorities to notify for Material Harm pollution incidents that do **NOT** present an immediate threat to human health or property

5400

Order	Authority	Contact number
1	NSW EPA environment line	131 555
2	 The Appropriate Regulatory Authority*, being either: Local council Western Lands Commissioner for the Western Division (except any part of the Western Division within the area of a local council). 	Local council - contact Office of Local Government on 4428 4100, or visit the Office of Local Government website Western Lands Commissioner – phone 6883 5400
3	Ministry of Health (via the local Public Health Unit)*	Contact 1300 066 055 to be directed to the local Public Health Unit, or visit the NSW Health Website
4	SafeWork NSW	131 050
5	Fire and Rescue NSW	1300 729 579

^{*} The appropriate contact for the Appropriate Regulatory Authority and Public Health Unit will vary according to the geographic location of the activity. These contact numbers should be found in advance and stored for immediate access (e.g. in a project's Construction Environmental Management Plan and/or on site notice boards) should a pollution incident need to be notified.

When notifying authorities, do not speculate on the origin, causes or outcomes of a pollution incident. Rather, state very simply and concisely the following only:

a) The time, date, nature, duration and location of the incident

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

If further information becomes known after the initial notification, that information must immediately be notified to all authorities in accordance with Section 150 of the POEO Act. The verbal notification must be followed by written notification to each relevant authority within seven days of the date on which the incident occurred, setting out the above information.

3.3.3 Summary of other regulatory agency notification requirements

A summary of the other key statutory notification requirements that could arise from TfNSW environmental incidents, report-only events and non-compliances is provided in Table 3.3.3.

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	Table 3.3.3: Regulatory agency notification requirements			
Event type	Legislation	Part / section	Agency	Notification requirement
Discover Aboriginal object	National Parks and Wildlife Act 1974	Section 89A	Heritage NSW	Notify the Secretary of the Department of Planning, Industry and Environment in writing using the form approved by the Secretary (if any) within a reasonable time after becoming aware
Discover Aboriginal remains	Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984	Section 20	Commonwealth Department of Agriculture, Water and the Environment	Notify the Commonwealth Minister in writing as soon as practicable after becoming aware, giving particulars of the remains and their location
Discover non- Aboriginal relic	Heritage Act 1977	Section 146	Heritage NSW	Notify the Heritage Council in writing within a reasonable time after becoming aware
Fires	Rural Fires Act 1997	Section 64	NSW Rural Fire Services	Notify an appropriate fire officer of the inability to extinguish any fire burning during a bush fire danger period applicable to the land.
Land	Contaminated Land	0 " 00(4)	ED 4	Notify EPA in writing as soon as practicable after becoming aware of the contamination, where required as prescribed in the EPA
contamination	Management Act, 1997	Section 60(1)	EPA	'Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997'
Non-compliance	Various	N/A	Various	Requirements to notify the relevant regulatory authority when a non-compliance has occurred (eg- with a Condition of Approval issued under Division 5.2 of the EP&A Act)
Pollution incident (material harm)	Protection of the Environment Operations Act, 1997	Part 5.7	EPA	See section 3.3.2
Pollution incident in water supply catchment area	Various	N/A	N/A	Notify the relevant water supply authority if an environmental incident has the potential for unapproved impacts on a drinking water supply



3.4 Requests for written reports from regulatory authorities

If TfNSW receives a request from an environment regulatory authority for a written report regarding an environmental incident, report-only event or non-compliance, the relevant Environment Manager must be immediately contacted for advice. No further correspondence (including email) about the event should be distributed either internally or externally until advice is received. E&S will then coordinate with Legal Branch to:

- assist in the investigation of the environmental incident, report-only event or noncompliance
- provide legal advice to the project
- co-ordinate the preparation of the written response to the regulatory authority.

3.5 **Corrective actions**

A key aspect of the TfNSW Environment and Sustainability Policy that is addressed through this procedure is being accountable for addressing and minimising the environmental impacts of TfNSW activities. This can be achieved by developing appropriate corrective actions and implementing them within a timely manner following an environmental incident, with the aim of avoiding a repeat of that incident.

There are a variety of scenarios in which an environmental event may occur on a TfNSW project. It is important that corrective actions are:

- specific to the incident that has occurred
- meaningfully address the root cause(s) of the incident
- designed to prevent incident reoccurrence.

Corrective actions could include (but are not limited to) the following:

- physical works to install, augment or rectify controls or a site issue
- testing and/or monitoring
- review and improvement of construction methods or work practices
- review and update of management plans, procedures or other tools
- communication, training and awareness initiatives for workers.

In most cases it will not be sufficient to simply notify workers of correct systems / procedures (e.g. via toolbox talk). A review should be undertaken by the project team following an incident or non-compliance to determine why the systems / procedures failed (or alternatively a formal investigation, when required by section 3.6), and necessary changes made to ensure they do not fail in future. Site staff should then be made aware of the changes and trained as necessary.

Immediate/short-term corrective actions including timeframes for completion must be clearly described in incident/non-compliance reporting. Updates about longer-term corrective actions including timeframes for completion can be provided to the TfNSW Environment Officer and TfNSW Project Management Team post submission of the incident/non-compliance report.

3.6 **Investigations**

Serious environmental incidents and non-compliances must be investigated to identify the causes, with the purpose of preventing a recurrence. A root cause analysis investigation must be completed by the project team for all environmental incidents with a classification of C1, C2 or C3, or any other environmental incidents or non-compliances as determined by TfNSW.

The scope of the investigation will be determined by the TfNSW Environment Officer or Environment Manager. The project team must provide TfNSW with a final investigation report

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within three weeks of the environmental incident or non-compliance being identified. The report must include the minimum information described in Table 3.6 (below).

Table 3.6: Investigations			
Element	Description		
Sequence of events	The sequence of events that led to the incident or non-compliance		
Findings	Given the sequence of events, what are the key findings of the investigation (i.e. what are the main causes of the incident or non-compliance).		
Management methods	A record of the management methods to be changed and/or implemented to avoid the incident or non-compliance reoccurring.		
Key learnings	Describe the key learnings from the investigation into the incident or non-compliance. Detail which learnings may be relevant to other transport projects.		

4 Accountabilities

Table 4 details the key accountabilities for implementing this Procedure.

Table 4: Key accountabilities			
Requirement	Detail		
Environment Director	Oversee compliance with the procedure and make the final determination on the classification of all environmental incidents, report-only events and non-compliances		
Environment reporting team	Recording of all environmental incidents, report-only events, non-compliances and regulatory action, confirm / amend the classification of environmental incidents, report-only events and non-compliances in accordance with section 3.1 and monitor compliance with the Procedure		
Executive Director Environment and Sustainability	Make determinations on whether an environmental incident will be considered a Significant Incident (see section 3.1.2). Assume the role of Information Distributor when a Significant Incident has occurred (see Appendix A).		
Observer of environmental incident, report-only event, non-compliance or regulatory action	Immediately report in accordance with Figure 3.2.1		
Person/s responsible for environmental incident, report-only event, non-compliance or regulatory action	Report and respond in accordance with Figure 3.2.1		
Project Managers	Provide appropriate resources to respond to an environmental incident, report-only event, non-compliance or regulatory action in accordance with this Procedure		

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Table 4: Key accountabilities			
Requirement	Detail		
TfNSW Environment Manager	Report environmental incidents, report-only events, non-compliances or regulatory action in accordance with Figure 3.2.1, assign initial classification in accordance with section 3.1.1, monitor corrective actions, and actively promote compliance with this procedure at a program level. Assume the role of Information Controller when a Significant Incident has occurred (see Appendix A).		
TfNSW Environment Officer	Report environmental incidents, report-only events, non-compliances or regulatory action in accordance with Figure 3.2.1, monitor corrective actions and actively promote compliance with this procedure at a project level		

5 Related policy, systems and documents

The following documents and systems are available on agency intranets and the internet:

- Environmental Event Report Form (for use by road and maritime sites and projects)
- INX system (for use by rail and light rail sites and projects)
- Environment and Sustainability Policy
- Unexpected finds procedures refer to relevant guideline/procedure

6 Definitions and acronyms

All terminology in this Procedure is taken to mean the generally accepted or dictionary definition with the exception of the following terms which have a specifically defined meaning:

- Significant incident an environmental incident that is likely to receive a classification
 of C3, C2 or C1, OR the history of the project, past performance and/or previous
 regulatory interest, indicate the project is likely to receive a penalty notice or be subject
 to prosecution, and therefore requires escalation to the Secretary and other TfNSW
 senior management
- **DPIE** Department of Planning, Industry and Environment
- **Environment Director** consists of Associate Director Environmental Management; Director Environment Motorways; Director Environment Regions; Director Environment Sydney
- **Environment Manager** consists of Environment Manager or Senior Manager Environment from Environment and Sustainability Branch
- Environment Officer consists of Environment Officer and Environment and Planning Manager from Environment and Sustainability Branch
- Environment Reporting team consists of those in Environment and Sustainability
 Branch responsible for administering and maintaining the EnvOps mailbox and INX
 reporting system (for environment entries)
- Environmental event a report-only event, non-compliance, regulatory action or environmental incident
- Environmental incident An environmental incident is an event or set of
 circumstances, as a consequence of which pollution (air, water, noise, or land) or an
 adverse environmental impact has occurred, is occurring, or is likely to occur. Adverse
 environmental impact includes contamination, harm to flora and fauna (either individual

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species or communities), damage to heritage items and adverse community impacts. An unexpected find that is not managed in accordance with relevant procedures / guidelines is also considered an environmental incident

- EPA NSW Environment Protection Authority
- EPL Environment Protection Licence (issued by EPA)
- **E&S** (Safety, Environment and Regulation) Environment and Sustainability Branch
- **Investigation** The process by which the cause(s) of an environmental incident is examined and identified.
- INX reporting system the online system used to record and track environmental incidents, report-only events, non-compliances and regulatory action relating to rail projects and premises.
- Non-compliance a failure to comply with any condition of approval, environmental
 assessment safeguard / mitigation measure, licence condition, permit or any other
 statutory approval relevant to the activity and/or area where the activity occurs;
- **Notifiable event** Any environmental incident, report-only event or non-compliance that triggers a specific statutory requirement to notify a regulatory authority.
- **POEO Act** Protection of the Environment Operations Act 1997
- **Pollution** Pollution (including air pollution, water pollution, noise pollution and land pollution) as defined in the dictionary to the POEO Act.
- **Pollution incident** Has the same meaning as defined in the dictionary to the POEO Act.
- **Regulatory action** any formal regulatory response from an environmental regulator including but not limited to penalty notices, clean-up notices, prevention notices, official cautions, show cause notices and formal warnings.
- **Report-only event** An environmental incident or unexpected find resulting from circumstances outside the scope of controls and of an activity.
- RMS Roads and Maritime Services
- TfNSW Transport for NSW (excludes the operating agencies: Sydney Trains; Sydney Metro; State Transit Authority; NSW TrainLink)
- Transport Cluster all TfNSW divisions and operating agencies (includes the operating agencies: Sydney Trains; Sydney Metro; State Transit Authority; NSW TrainLink)
- **Unexpected find** An unexpected discovery such as a heritage item, threatened species, contamination, asbestos or hazardous substance.
- WHS Work Health and Safety

7 Document control

7.1 Superseded documents

This Procedure replaces the following documents:

- Roads and Maritime Services Environmental Incident Classification and Reporting Procedure (RMS 17.374)
- Transport for NSW Environmental Incident Classification and Reporting (PR-105)

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7.2 Document history

Date &	Document	Approved by	Amendment
Procedure No	owner		notes
19/07/2021 EMF-13/PR- 0001	Environment Manager Performance Improvement	Executive Director Environment and Sustainability	N/A

7.3 Feedback and help

For advice on using this Procedure please contact:

Environment Manager Performance Improvement

Email: envops@rms.nsw.gov.au

Phone: (02) 8849 2586.



Appendix A: Significant Incident escalation process

A1 Confirmation of a Significant Incident

Where an Environment Manager believes that a Significant Incident has occurred (see section 3.1.2 and Figure 3.2.1), they must immediately phone the relevant Environment Director. The Environment Director will consult with the Executive Director Environment and Sustainability, who will determine whether the incident will be considered a Significant Incident. Once a Significant Incident has been determined, the escalation process will commence in accordance with sections A2 and A3, below.

A2 Significant Incident information management

Following determination of a Significant Incident (see section A1, above), it is essential that there is fast, consistent and accurate reporting of information to the TfNSW senior management. As such, clear roles and responsibilities must be established in two key areas, as described in Table A2.

	Table A2: Roles and responsibilities during a Significant Incident			
Role	Who	Responsibilities		
Information Controller	Environment Manager (or relevant Environment Officer in their absence)	 Liaise between the on-site TfNSW project management team and the Information Distributor (below) Be the single point of contact to provide information and updates about the status of the Significant Incident to the Information Distributor 		
Information Distributor	Executive Director Environment and Sustainability (or relevant Environment Director in their absence)	 Identify the relevant members of the Executive and other senior management that will form the distribution group to be informed about the Significant Incident (see Table A3) Consolidate information from the Information Controller, and distribute it to the distribution group Provide key ongoing updates to the distribution group as it becomes available Respond to enquiries from the distribution group, ensuring all members of the distribution group are copied into every response 		

A3 Parties to be notified

As described in Table A2, the Information Distributor must identify relevant TfNSW senior management from delivery and client divisions that will form the distribution group to be informed about the Significant Incident, including ongoing updates. Table A3 provides the key positions that must be included (at a minimum), depending on who is undertaking the activity. Depending on the type and location of the activity, there may be other areas of TfNSW that should be included in the distribution group – see section 3.2.2.

The distribution group should all be notified concurrently in a single email that a Significant Incident has occurred. The email should be sent by the Information Distributor within five minutes of making the determination of the Significant Incident.

Table A3: TfNSW distribution group to be notified during a Significant Incident			
	Greater Sydney (Client)	Regional & Outer Metropolitan (Client)	
Transport exec notification	Secretary	Secretary	
SER exec notification	 Deputy Secretary, Safety Environment and Regulation 	 Deputy Secretary, Safety Environment and Regulation 	
Client exec notification	 Deputy Secretary, Client Division Executive Director, Community and Place Relevant City Director (Harbour/River/Parkland) 	 Deputy Secretary, Client Division Executive Director, Community and Place Relevant Regional Director 	
Delivery exec notification	 Deputy Secretary, relevant Delivery Area Executive Director (or equivalent) of relevant Delivery Area (e.g. Head of Sydney Project Delivery, Head of Rail Delivery, Chief Operations Officer, Executive Director Planning and Programs) Director of relevant Delivery Area (e.g. WSPO, GSPO, Parramatta Light Rail, Rail Infrastructure Delivery, Sydney Maintenance, Easing Sydney's Congestions etc.) 	 Deputy Secretary, relevant Delivery Area Executive Director (or equivalent) of relevant Delivery Area (e.g. Head of Regional Project Delivery, Executive Director Network and Assets) Director of relevant Delivery Area (e.g. Regional Maintenance, NPO, SaWPO) 	
Project Team notification	 Project Director (or equivalent) of relevant Delivery Area Senior Project Manager Project Manager Environment Manager 	 Project Director (or equivalent) of relevant Delivery Area Senior Project Manager Project Manager Environment Manager 	

pendix G –		•	

MCoA A5 Consultation Report Ancillary Site Establishment Management Plan

Western Harbour Tunnel and Warringah Freeway Upgrade SSI-8863 Stage 2 – Warringah Freeway Upgrade

Transport for New South Wales



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Version control

Revision	Date	Description	Approval
А	8/11/2021	Consultation undertaken on ASEMP	
В	11/11/2021	Response to ER comments	
С	15/11/2021	Response to ER comments	

Glossary/Abbreviations

Abbreviation	Expanded text
CEMP	Construction Environmental Management Plan
MCoA	NSW Minister for Planning Conditions of Approval
CSSI	Critical State Significant Infrastructure
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
Minister, the	NSW Minister for Planning, Industry and Environment
NML	Noise Management Level
Planning Approval	The Planning Approval includes the Conditions of Approval, the EIS and the Submissions and Preferred Infrastructure Report (SSI-8863)
Proponent, the	Transport for NSW
Project, the	Western Harbour Tunnel and Warringah Freeway Upgrade
RBL	Rating Background Level
REMM	Revised Environmental Mitigation and Management Measure
RtS	Response to Submissions Report
WHTBL	Western Harbour Tunnel and Beaches Link
WHTWFU	Western Harbour Tunnel and Warringah Freeway Upgrade
WFU	Warringah Freeway Upgrade

1 Introduction

1.1 Background

The Western Harbour Tunnel and Warringah Freeway Upgrade (WHTWFU) (the project) forms a core component of the broader Western Harbour Tunnel and Beaches Link (WHTBL) program of works. The project comprises two main components:

- A new crossing of Sydney Harbour involving twin tolled motorway tunnels connecting the M4-M5 Link at Rozelle and the Warringah Freeway at North Sydney (the Western Harbour Tunnel)
- Upgrade and integration works along the existing Warringah Freeway, including
 infrastructure required for connections to the Beaches Link and Gore Hill Freeway
 Connection project. Reconfiguration works as part of the Warringah Freeway Upgrade
 would optimise the road corridor and improve the performance of the Sydney Harbour
 Tunnel, the Sydney Harbour Bridge and the Western Harbour Tunnel.

Due to its importance, the WHTWFU project was declared to be Critical State Significant Infrastructure (CSSI) by the Minister for Planning and Public Space on 9 November 2020.

On 21 January 2021, the Department of Planning, Industry and Environment (DPIE) approved the construction and operation of the WHTWFU project (SSI 8863).

A detailed description of the project is provided in Chapter 5 of the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement (EIS).

The WHTWFU is being constructed in three stages:

- Stage 1 Early and Enabling Works:
 - Stage 1A Critical utility installation, relocation and protection
 - Stage 1B Cammeray Golf Course adjustment works
 - Stage 1C Massey to Amherst noise wall
 - Stage 1D Western Harbour Tunnel construction power and utilities
 - Stage 1E Maritime Heritage relocation of historic vessels M.V. Cape Don and Baragoola
- Stage 2 Warringah Freeway Upgrade project (the Project and subject of this document):
- Stage 3 Western Harbour Tunnel project.

Further detail on each stage is provided in the Staging Report, Western Harbour Tunnel and Warringah Freeway Upgrade (SSI 8863) (October 2021, Revision 1).

The Ancillary Site Establishment Management Plan (ASEMP or Plan) applies only to Stage 2 of the project.

The CPB Contractors and Downer Joint Venture (CPB Downer JV) has been appointed by Transport for New South Wales (TfNSW) to deliver the Warringah Freeway Upgrade project.

1.2 Purpose of this Consultation Report

This Consultation Report has been prepared to meet the requirements of the CSSI approval, in particular Minister's Condition of Approval (MCoA) A5. MCoA A5 outlines the requirements for undertaking and documenting consultation undertaken during the preparation of approval documents or monitoring programs required under relevant the MCoA for those documents. This Consultation Report has been prepared to consolidate the consultation undertaken during the preparation of the following document:

• MCoA A17: Ancillary Site Establishment Management Plan

Consultation required during the development of this document is detailed in **Table 1-1**.

Table 1-1 Consultation Requirements

MCoA ID	Document	Consultation requirement
A17	Ancillary Site Establishment Management Plan	Relevant council and government agencies

1.3 MCoA Compliance

This section discusses the compliance of this Consultation Report with the relevant MCoA as applicable to consultation required to be undertaken during the development of the ASEMP.

Table 1-2 lists the applicable MCoA, where and how they have been addressed in this Consultation Report.

Table 1-2 Compliance with applicable CoA

MCoA ID	CoA Detail	Where Addressed	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:	Section 1.2 Appendix 1 to Appendix 7	This Consultation Report identifies each of the stakeholders and agencies consulted in the preparation of the ASEMP (Section 1.2). Full correspondence and documentation exchanged during consultation is found in Appendix 1 to Appendix 7 inclusive.
A5	(a) documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the document	Section 1.2 Appendix 1 to Appendix 7	Full correspondence and documentation exchanged during consultation is found in Appendix 1 to Appendix 7 inclusive.
	for approval;		Each Appendix relates to a different stakeholder and agency, thereby ensuring all evidence for each is consolidated. All correspondence is provided in a chronological order.

MCoA ID	CoA Detail	Where Addressed	How Addressed
A5	(b) a log of the dates of engagement or attempted engagement with the identified party;	Section 2	Section 2 includes, by stakeholder and agency, a log of all points of engagement completed or attempted. It also summarises the issues raised by each stakeholder.
A5	(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;	Section 2	Section 2 includes, by stakeholder and agency, a log of all points of engagement completed or attempted.
A5	(d) outline of the issues raised by the identified party and how they have been addressed; and	Section 2 Appendix 1 to Appendix 5 inclusive	Section 2 identifies all the issues raised during consultation. It provides in tabular format:
			Issue raised
			Date raised
			 How each issue was addressed or justification as to why it was not addressed.
			Section 2 provides cross-referencing to the relevant Appendix where evidence of the consultation is provided.
A5	(e) a description of the outstanding issues raised by the identified party and the reasons why they have not been addressed.	Section 2 Appendix 1 to Appendix 5 inclusive	Section 2 identifies all the issues raised during consultation. It provides in tabular format:
			Issue raised
			 Date raised How each issue was addressed or justification as to why it was not addressed.

MCoA	CoA	Where	How Addressed
ID	Detail	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 Consultation Report	The consultation requirements of this condition are addressed in this Consultation Report. Each of the stakeholders and agencies consulted in the preparation of the ASEMP are detailed in Section 2. Full correspondence and documentation exchanged during consultation is found in Appendix 1 to Appendix 7 inclusive.

1.4 Consultation Process

Consultation with stakeholders and agencies was undertaken using the following means:

- Formal correspondence (DPIE Portal notifications)
- Formal correspondence (standard email)
- Phone Calls.

2 Stakeholder and agency consultation

This Section of the Consultation Report provides detail of consultation undertaken with each stakeholder and agency in the preparation of the CEMP. In particular it contains:

A consultation log that identifies:

- Consultation dates (actual and attempted)
- Form of consultation
- Whether responses and / or comments were received
- Summary of the issues raised, including how they have been addressed.

Documentary evidence of all the correspondence received and sent through the consultation phase is contained in the Appendices at the end of this Report. The Appendices and this Section are broken down by stakeholder and agency, not by issue.

2.1 ASEMP - North Sydney Council

Consultation with North Sydney Council (NSC) commenced on 1 October 2021 and concluded on 27 October 2021.

Table 2-1 includes the details of engagement between CPB Downer JV and North Sydney Council regarding the ASEMP. **Table 2-2** includes the issues raised and how each was addressed and closed out. Full evidence of correspondence is in **Appendix 1** of this report.

Table 2-1 Engagement log – ASEMP – North Sydney Council

#	Date	Form	Purpose	From	Recipient
1	1/10/2021	Email	Submission of ASEMP to NSC for consultation and request for comments by 22 October 2021.	WFU: Howard Chemney	NSC: Gavin McConnell
2	27/10/2021	Email	Response from NSC detailing comments on the ASEMP.	NSC: Gavin McConnell	WFU: Howard Chemney
3	27/10/2021	Email	Response from NSC detailing additional comments on the ASEMP.	NSC: Gavin McConnell	WFU: Howard Chemney

Table 2-2 Comments Register – ASEMP – North Sydney Council

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
N/A	Leasing / resumptions of sites. Can you please confirm the mechanism and timing for resumptions of those sites that have been under the care and control of Council or are owned by Council (or by third parties). I presume you will use the LAAN process for some or all but please confirm.	27/10/2021	The mechanism for resumption of sites that are under the care and control of Council or owned by Council (or third parties) is outside of the scope of this Plan. The leasing/resumption of relevant sites will occur prior to March 2022 to enable site establishment works to be undertaken.
Table 1-6	Concern is raised by the proposed resumption of the Ridge Street lookout. The loss of this iconic lookout is an unreasonable impost on the community for the sake of such an inconsequential construction use. The stated uses could easily be undertaken elsewhere. The loss of the mature palm tree is also unreasonable in the circumstances.	27/10/2021	As described in the EIS and approved by DPIE, the Ridge Street lookout site will be temporarily resumed to accommodate the WFU6 Ridge Street ancillary facility. While alternative sites were considered as part of the EIS process, there was no suitable alternative to support construction activities for the demolition of the existing Ridge Street pedestrian bridge and construction of an upgraded Ridge Street shared user bridge.
			As detailed in Section 6.2.17, the clearing of vegetation for construction support sites will be limited to the minimum amount necessary to construct the Project. In addition, a control measure has been added to Appendix A (B19) to note that where reasonable and feasible, CPB Downer JV will consider whether the palm tree within the WFU6 – Ridge Street East site can be retained.

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
Appendix B	Details are requested of the nature and extent of works proposed along Ernest and Miller Street.	27/10/2021	The access to the WFU8 Cammeray Golf Course Ancillary Facility will be via Ernest Street. It is noted that a temporary access road has been established by the Stage 1 – Early and Enabling Works from Ernest Street to the WFU8 – Cammeray Golf Course site. CPB Downer JV will formalise the access as part of site establishment works. The access to the WFU9 Rosalind Street Ancillary Facility is from Rosalind Street. Similar to WFU8, temporary access road has been established by the Stage 1 – Early and Enabling Works from Rosalind Street to the WFU9 – Rosalind Street site. CPB Downer JV will formalise the access as part of site establishment works.
Section 6.2.17 Appendix A Appendix C	Tree loss is a significant concern. Details of the location, species and number of trees to be removed are requested as well as the replacement strategies/ timing.	27/10/2021	The Sensitive Area Plans (Appendix C) have been revised to provide additional details on the location and species of trees that may require removal during site establishment of the ancillary facilities. As detailed in Section 6.2.17, the clearing of vegetation for construction support sites will be limited to the minimum amount necessary to construct the Project. As far as practical, the construction support sites will be configured so as to not directly impact on trees that would not already be directly impacted by the Project. Pre-clearance inspections, hold points and tree

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
			clearing would be undertaken in line with TfNSW Specification G40 Clearing and Grubbing. In addition, a safeguard as been added to Appendix A (B20) to note that North Sydney Council will be invited to site prior to tree clearing to discuss measures taken to minimise clearing (where feasible).
	The ASEMP should be amended to reflect and acknowledge the impacts of the North Sydney Integrated Transport Plan/ Program (NSITP). This is a comprehensive transport plan being formulated by TfNSW and key stakeholder agencies covering the area around the North Sydney CBD. When formally adopted (est Jan 2022) it will have significant impacts on traffic circulation along Berry Street, Pacific Highway and Arthur Street.	27/10/2021	It is understood that the North Sydney Integrated Transport Program is currently under development and as such, is outside of the scope of this Plan. Subject to formal adoption, this Plan will be reviewed at that time if required.

2.2 ASEMP – Willoughby City Council

Consultation with Willoughby City Council commenced on 1 October 2021 and concluded on 27 October 2021.

Table 2-3 includes the details of engagement between CPB Downer JV and Willoughby City Council regarding the ASEMP. **Table 2-4** includes the issues raised and how each was addressed and closed out. Full evidence of correspondence is in **Appendix 2** of this report.

Table 2-3 Engagement log – ASEMP – Willoughby City Council

#	Date	Form	Purpose	From	Recipient
1	1/10/2021	Email	Submission of ASEMP to Willoughby City Council for consultation and request for comments by 22 October 2021.	WFU: Howard Chemney	Willoughby City Council: Ian Arnott
2	27/10/2021	Email	Response from Willoughby City Council detailing comments on the ASEMP.	Willoughby City Council: Ian Arnott	WFU: Howard Chemney

Table 2-4 Comments Register – ASEMP – Willoughby City Council

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
Figure 1-2	As per Figure 1-2 (Overview of the construction support sites) on page 16 of the ASEMP, none of the construction support sites for the WFU project are located within the Willoughby LGA. There is proposed to be a site WHT11 Waltham Street in Artarmon however it is presumed that this will only be used as part of the later Stage 3 WHT works.	27/10/2021	Noted. The ancillary site WHT11 is outside of the scope of the ASEMP.
Section 7.6	Given these facts, Council has no comments on the ASEMP at this stage. It seems comprehensive and thorough in its detail and proposed environmental management measures. Council requests that the project team consult with Council in future as required and as detailed in Section 7.6 (Community Engagement) on page 77 of the ASEMP	27/10/2021	Noted. Consultation with Willoughby City Council will be undertaken in accordance with Section 7.6 of the ASEMP.

2.3 ASEMP – Environment, Energy and Science Group

Consultation with the Environment, Energy and Science Group (EES) of DPIE commenced on 1 October 2021 and concluded on 22 October 2021.

Table 2-5 includes the details of engagement between CPB Downer JV and EESG regarding the ASEMP. **Table 2-6** includes the issues raised and how each was addressed and closed out. Full evidence of correspondence is in **Appendix 3** of this report.

Table 2-5 Engagement log – ASEMP – EES

#	Date	Form	Purpose	From	Recipient
1	1/10/2021	Email	Submission of ASEMP to EES for consultation and request for comments by 22 October 2021.	WFU: Howard Chemney	EES: Janne Grose
2	22/10/2021	Email	Response from EES detailing comments on the ASEMP.	EES: Janne Grose	WFU: Howard Chemney
3	22/10/2021	Email	Response from EES detailing comments on the Soil and Water Management Subplan.	EES: Susan Harrison	WFU: Howard Chemney

Table 2-6 Comments Register – ASEMP – EES

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
Section 1.3	Section 1.3 notes the ASEMP includes a description of activities to be undertaken during establishment of the construction ancillary facility. It indicates the following construction support sites currently include vegetation: • WFU2 - High Street south – a mixture of planted native	revised to not following construction support sites currently include revised to not cammeray 0 mixture of plant maintained later than 1 mixture of plant mixture of pl	
	vegetation and grass verges (Table 1.1)		
	 WFU3 - High Street north – a mixture of planted vegetation and grass verges (Table 1.2) 		
	WFU4 - Arthur Street – a mixture of planted vegetation and grass verges (Table 1.3)		
	 WFU5 - Berry Street east – a mixture of planted vegetation and grass verges (Table 1.4) 		
	 WFU6 - Ridge Street east – a combination of vegetated and paved surfaces (Table 1.5) 		
	 WFU7 - Merlin Street – a mixture of planted vegetation and maintained lawn (Table 1.6) 		
	 WFU9 - Rosalind Street east – a mixture of planted vegetation and grass verges (Table 1.8) 		
	The description for WFU8 - Cammeray Golf Course site (Table 1.7) does not indicate that any existing vegetation would be impacted but Section 5.10.2 notes the majority of the trees for the site establishment works are located within the Cammeray Golf Course (WFU8) site. It is recommended Table 1.7 is amended to identify that trees are currently located on the golf course site.	cate that any existing vegetation would be impacted but .2 notes the majority of the trees for the site nt works are located within the Cammeray Golf Course It is recommended Table 1.7 is amended to identify that	

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
Table 4.2	Table 4.2 provides an indicative site establishment program for each site. It indicates there will be localised site levelling at WFU2, WFU3, WFU4, WFU5 and WFU9 and site levelling at WFU7 but it does not specify that the site establishment program includes clearing of vegetation. It is suggested Table 4.2 clarifies that vegetation clearing	22/10/2021	In response to feedback from the ER, Table 4-1 and Table 4-2 have been revised. Table 4-1 provides a description of site establishment activities which includes:
	is required.		Clearing of vegetation and grubbing which will involve the use of chain saws and mulchers
			Site levelling, grading and compaction.
Section 5.10	Section 5.10.1 of the ASEMP states "seven <i>Eucalyptus nicholii</i> trees are located within the Rosalind Street construction support site (WFU9), and that the project is not likely to have a significant impact on these threatened flora species, based on the very low numbers of remnant trees to be removed and the fact that other trees are planted". It is suggested the ASEMP clarifies that <i>Eucalyptus nicholii</i> is not a local native species however planted natives and exotic vegetation provide potential habitat for native fauna.	22/10/2021	Section 5.10.1 has been revised to note that <i>Eucalyptus nicholii</i> is not a local native species. However, it is recognised that planted natives and exotic vegetation provide potential habitat for native fauna.
Section 5.10.1	Section 5.10.1 states that flora and fauna will be managed in accordance with the biodiversity environmental safeguards in Appendix B of this ASEMP. It is suggested this section also refers to the Flora and Fauna Management Plan (FFMP) for this project.	22/10/2021	The ASEMP is a stand-alone document to support site establishment works and will therefore be submitted to DPIE for approval prior to the CEMP and Subplans. As such, the Flora and Fauna Management Sub-plan has not been referenced and all relevant biodiversity environmental safeguards are included in Appendix A of the ASEMP.

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
Section 5.10.2	EES notes that Section 5.10.2 states that "Pre-clearance inspections and TfNSW D&C G40 hold point release will be undertaken prior to any Clearing". It is suggested Section 5.10.2 clarifies that the pre-clearance inspections and relocation of any effected native fauna is to be undertaken for both threatened and non-threatened species and the section also refers to the FFMP for this project which includes a section on pre-clearing/demolition inspections.	22/10/2021	Section 6.2.17 has been revised as requested to note that pre-clearing inspections and relocation of any effected native fauna will be undertaken for both threatened and non-threatened species. This control has also been included in Appendix A (B18).
Section 5.10.2	The draft FFMP notes that one potential hollow-bearing tree was identified (<i>Eucalyptus saligna</i>) in Jefferson Jackson Reserve and does not indicate that any hollow bearing trees will be impacted at the construction support sites. It is suggested Section 5.10.2 includes that should the pre-clearance inspections identify the presence of any hollow-bearing trees at the construction support sites which are required to be removed, reference should be made to the FFMP.	22/10/2021	Within the scope of the ASEMP, there are no site establishment activities proposed to be undertaken in Jeaffreson Jackson Reserve
	The flood comments provided in the EES submission on the draft Soil and Water Management Plan (SWMP) also relate to the ASEMP.	22/10/2021	Noted. The flood comments provided on the Soil and Water Management Subplan are detailed below.
Flood Comm	ents – EES Submission on the SWMP		
Section 6.2.16	The SWMP states that a flood emergency management plan will be prepared. It is unclear if this plan will be prepared separately, its timeframe and whether EES would have any further opportunity to comment.	22/10/2021	As detailed in Section 6.2.16, where the potential exists for the obstruction of overland flows or increased run-off (as a resulting of hardstand areas) a contingency plan will be prepared to manage a potential flood event. The contingency plan will outline procedures to reduce risks including worker safety,

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
			removal of all plant/equipment and stabilising exposed areas.
Section 5.9 Appendix A	It appears that the 10% Annual Exceedance Probability (AEP) flood extents are to be kept clear of obstructions and hazards. The indicative site layouts could include the 10% AEP flood extents to confirm this, and to help ensure that future amendments keep relevant components clear.	22/10/2021	Section 5.9 of the ASEMP has been revised to include additional details on potential flood impacts during site establishment activities, including depth of inundation. For all construction support sites (except Arthur Street east (WFU4),
Section 5.9	Rather than refer to "the 5 year Average Recurrence Interval (ARI)"	22/10/2021	Berry Street east (WFU5) and
Appendix A	and design rainfall IFD data (Intensity-Frequency-Duration design rainfall data), the flood contingency documentation should include an actual rainfall depth in millimetres. Suitable wording may be like: if 50mm rain or more is predicted by BoM. Alternatively, if site specific alerts are to be received from a weather forecast services provider, this should be stated.		Cammeray Golf Course (WFU8)), the establishment and operation of the construction support sites is not expected to impact flood behaviour. With respect to Arthur Street east (WFU4) and Berry Street east (WFU5) minor inundation would occur for 1% Annual Exceedance Probability (AEP) and 10% AEP flood events (Table 5-2). While the depth of inundation within the Cammeray Golf Course (WFU8) exceeds 0.7m at both flood events, the area of impact is limited to the Cammeray Golf Course dam which is outside of the ancillary facility boundary.
			Appendix A has been revised to include specific safeguards to mitigate flood risk. This includes a requirement for key staff to register with a weather forecast service provider to receive timely warnings of flood risk. In addition, the

Ref	Comment Raised	Date	How Addressed/ Justification Why Not Addressed
			10% AEP flood extent will be marked on the Site Environment Plan and EWMS. Where feasible, spoil management and stockpile areas will be located outside the 10% AEP flood extent (Appendix A , F3).
Section 5.9 Appendix A	Without providing specific detail, the SWMP implies significant effort may be required to prepare for each potentially flood-producing rain event in the flood event contingency planning process: all construction equipment and materials are to be removed from areas prone to flooding including stockpiles, stored chemicals, portaloos, ATF and concrete barriers. Further detailed work is recommended to ensure that effort is minimised, and the process has the greatest likelihood of success. This would be aided by adding the 10% AEP flood extent to the site layout plans.	22/10/2021	As detailed in Section 5.9, ancillary facility flood impacts are predicted to be minimal. Practical safeguards have been included in Appendix A to mitigate potential flood impacts.
Appendix A	Some aspects potentially requiring significant effort should be further detailed. For example, the plan for relocation of stockpiles should include nomination of locations to which the material can be relocated. No stockpile locations have been nominated on the layout plans.	22/10/2021	As detailed in Appendix A (safeguard F3), spoil management and stockpile areas will be located outside the 10% AEP flood extent.
Section 5.9	Given the unpredictability of rainfall, it should be anticipated that many 'false alarms' will occur. This should be acknowledged in the documentation to avoid warning fatigue, whereby workers may cease to respond appropriately to warnings.	22/10/2021	As detailed in Section 5.9, ancillary facility flood impacts are predicted to be minimal. On this basis, warning fatigue is not anticipated.

2.4 ASEMP - NSW Health

Consultation with NSW Health commenced on 28 September 2021 and concluded on 18 October 2021.

Table 2-7 includes the details of engagement between CPB Downer JV and NSW Health regarding the ASEMP. It is noted that NSW Health did not provide any comments on the ASEMP. Full evidence of correspondence is in **Appendix 4** of this report.

Table 2-7 Engagement log – ASEMP – NSW Health

#	Date	Form	Purpose	From	Recipient
1	1/10/2021	Email	Submission of ASEMP to NSW Health for consultation and request for comments by 22 October 2021.	WFU: Howard Chemney	NSW Health: Leena Gupta Michael Staff Richard Broome Nick Ives
2	18/10/2021	Email	Confirmation from NSW Health of no comments on the ASEMP.	NSW Health: Nick Ives	WFU: Howard Chemney

2.5 ASEMP - DPI Fisheries

Consultation with DPI Fisheries commenced on 1 October 2021 and concluded 16 October 2021.

Table 2-8 includes the details of engagement between CPB Downer JV and DPI Fisheries regarding the ASEMP. It is noted that DPI Fisheries did not provide any comments on the ASEMP. Full evidence of correspondence is in **Appendix 5** of this report.

Table 2-8 Engagement log – ASEMP – DPI Fisheries

#	Date	Form	Purpose	From	Recipient
1	1/10/2021	Email	Submission of ASEMP to DPI Fisheries for consultation and request for comments by 22 October 2021.	WFU: Howard Chemney	DPI Fisheries: Sarah Conacher
2	18/10/2021	Email	Confirmation from DPI Fisheries of no comments on the ASEMP.	DPI Fisheries: DPIE Portal	WFU: Howard Chemney

2.7 ASEMP - Natural Resource Access Regulator

Consultation with the Natural Resource Access Regulator (NRAR) commenced on 1 October 2021 and concluded on 8 November 2021.

Table 2-9 includes the details of engagement between CPB Downer JV and the NRAR regarding the ASEMP. It is noted that NRAR did not provide any comments on the ASEMP. Full evidence of correspondence is in **Appendix 6** of this report.

Table 2-9 Engagement log – ASEMP – NRAR

#	Date	Form	Purpose	From	Recipient
1	1/10/2021	Email	Submission of ASEMP to the NRAR for consultation and request for comments by 22 October 2021.	WFU: Howard Chemney	NRAR: Jane Curran
2	18/10/2021	Email	Confirmation from NRAR of no comments on the ASEMP.	NRAR: Jane Curran	WFU: Howard Chemney

2.8 ASEMP - Environment Protection Authority

Consultation with the Environment Protection Authority (EPA) commenced on 5 October 2021 and concluded on 3 November 2021.

Table 2-10 includes the details of engagement between CPB Downer JV and the EPA regarding the ASEMP. It is noted that the EPA did not provide any comments on the ASEMP. Full evidence of correspondence is in **Appendix 7** of this report.

Table 2-10 Engagement log – ASEMP – EPA

#	Date	Form	Purpose	From	Recipient
1	1/10/2021	Email	Submission of ASEMP to the EPA for consultation and request for comments by 22 October 2021.	WFU: Howard Chemney	EPA
2	3/11/2021	Email	Confirmation from the EPA of no comments on the ASEMP.	EPA	WFU: Howard Chemney

Appendix 1 North Sydney Council Consultation Records

Corish, Denise

From: Gavin McConnell <Gavin.McConnell@northsydney.nsw.gov.au>

Sent: Wednesday, 27 October 2021 4:47 PM

To: Chemney, Howard

Subject: NSC comments re ASEMP

CAUTION: This email originated from outside of the Organisation.

Howard,

Please note the following comments from Council regarding the ASEMP;

- Leasing / resumptions of sites. Can you please confirm the mechanism and timing for resumptions of those sites that have been under the care and control of Council or are owned by Council (or by third parties). I presume you will use the LAAN process for some or all but please confirm.
- Concern is raised by the proposed resumption of the Ridge Street lookout. The loss of this iconic lookout is an unreasonable impost on the community for the sake of such an inconsequential construction use. The stated uses could easily be undertaken elsewhere. the loss of the mature palm tree is also unreasonable in the circumstances.
- Details are requested of the nature and extent of works proposed along Ernest and Miller Street.
- Tree loss is a significant concern. Details of the location, species and number of trees to be removed are requested as well as the replacement strategies/timing.

Regards,

Gavin McConnell

Public Projects Interface Manager

Corish, Denise

From: Gavin McConnell <Gavin.McConnell@northsydney.nsw.gov.au>

Sent: Wednesday, 27 October 2021 5:15 PM

To: Chemney, Howard

Cc: Jonathan Higlett; Michaela Kemp

Subject: Aditional Item for ASEMP comments from North Sydney

CAUTION: This email originated from outside of the Organisation.

Hi Howard,

I left out an important point in my previous comments;

The ASEMP should be amended to reflect and acknowledge the impacts of the North Sydney Integrated Transport Plan/ Program (NSITP). This is a comprehensive transport plan being formulated by TfNSW and key stakeholder agencies covering the area around the North Sydney CBD. When formally adopted (est Jan 2022) it will have significant impacts on traffic circulation along Berry Street, Pacific Highway and Arthur Street.

Regards,

Gavin McConnell
Public Projects Interface Manager

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Appendix 2 Willoughby City Council Consultation Records



27 October 2021

Howard Chemney
CPB Downer Joint Venture
Howard.Chemney@cpbcon.com.au
Warringah Freeway Upgrade project

Dear Sir,

RE: WARRINGAH FREEWAY UPGRADE – ANCILLARY SITE ESTABLISHMENT PLAN (ASEMP) AND CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP) SUB-PLANS – COMMENTS FROM WILLOUGHBY CITY COUNCIL

Infrastructure Approval (Application no. SSI 8863) for the Western Harbour Tunnel (WHT) and Warringah Freeway Upgrade (WFU) project was granted by the Minister for Planning and Public Spaces on 21 January 2021. The WHT/WFU project is being constructed in three stages:

Stage 1 – Early and Enabling Works:

- Stage 1A Critical utility installation, relocation and protection
- Stage 1B Cammeray Golf Course adjustment works

Stage 2 – Warringah Freeway Upgrade project

- Stage 2A Warringah Freeway Upgrade early works
- Stage 2B Warringah Freeway Upgrade main works

Stage 3 - Western Harbour Tunnel project

Council understands that the CPB Downer Joint Venture has been selected by the NSW Government to deliver Stage 2 – the WFU project.

As part of the conditions of the Infrastructure Approval, the CPB Downer Joint Venture is required to consult with Council on a range of plans related to the WFU project. Accordingly, draft versions of the following documents were sent to Willoughby City Council (Council) via email on 5 October 2021 requesting comment:

- 1. Ancillary Site Establishment Plan (ASEMP)
- 2. Construction Environmental Management Plan (CEMP) Sub-Plans:
 - 1. Traffic, Transport & Access Management Sub-Plan
 - 2. Noise & Vibration Management Sub-Plan
 - 3. Flora & Fauna Management Sub-Plan
 - 4. Air Quality and Odour Management Sub-Plan
 - 5. Soil and Surface Water Management Sub-Plan
 - 6. Heritage Management Sub-Plan



Given the WFU project footprint and proposed construction works are located almost completely within the North Sydney Council local government area (LGA), the impacts on Willoughby City Council are likely to be minimal. However, Council has reviewed most of the Plans and provides the following comments to ensure that environmental, traffic and transport and other impacts are satisfactorily managed.

1. Ancillary Site Establishment Management Plan (ASEMP):

Reference no. **WHTBLWFU-CPBD-NWW-EV-PLN-000001-B**Dated 1 October 2021

Given the size of the ASEMP and relatively short time in which to provide a response, Council staff have not had the opportunity to review this Plan in detail. However, following a recent meeting with the CPB Downer Joint Venture project team where the ASEMP was discussed, Council is able to provide the following general comments.

The ASEMP relates to the Warringah Freeway Upgrade (WFU) project and has been prepared in accordance with the Minister's Conditions of Approval (MCoA) for the Western Harbour Tunnel and Warringah Freeway Upgrade project.

The ASEMP has been prepared to address the requirements of MCoA, the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement (dated January 2020) (the EIS), the Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions Report (dated September 2020) (the RtS) and applicable guidance and legislation.

This ASEMP applies to the WFU component of the project, the key features of which include the following:

- Upgrade and reconfiguration of the Warringah Freeway from immediately north of the Sydney Harbour Bridge through to Willoughby Road at Naremburn.
- Upgrades to interchanges at Falcon Street in Cammeray and High Street in North Sydney.
- New and upgraded pedestrian and cyclist infrastructure.
- New, modified and relocated road and shared user bridges across the Warringah Freeway
- Connection of the Warringah Freeway to the portals for the Western Harbour Tunnel mainline tunnels and the Beaches Link tunnels, which will consist of a combination of trough and cut and cover structures.
- Upgrades to existing roads around the Warringah Freeway to integrate the Project with the surrounding road network.
- Upgrades and modifications to bus infrastructure, including relocation of the existing bus layover along the Warringah Freeway, and improvements to the geometry and connectivity of the existing southbound bus lane.



• Other operational infrastructure, including surface drainage and utility infrastructure, signage, tolling, lighting, CCTV and other traffic management systems.

The ASEMP outlines the environmental management practices and procedures to be implemented for the establishment of construction ancillary facilities and must be submitted to the Planning Secretary for approval one month before the installation of any ancillary facilities (excluding minor construction ancillary facilities).

As per Figure 1-2 (Overview of the construction support sites) on page 16 of the ASEMP, none of the construction support sites for the WFU project are located within the Willoughby LGA. There is proposed to be a site WHT11 Waltham Street in Artarmon however it is presumed that this will only be used as part of the later Stage 3 WHT works.

Given these facts, Council has no comments on the ASEMP at this stage. It seems comprehensive and thorough in its detail and proposed environmental management measures. Council requests that the project team consult with Council in future as required and as detailed in Section 7.6 (Community Engagement) on page 77 of the ASEMP.

2. Construction Environmental Management (CEMP) Sub-Plans:

2.1 Traffic, Transport & Access Management Sub-Plan (TTAMP)

Reference no. WHTBLWFU-CPBD-NWW-TF-PLN-000003-B Dated 1 October 2021

Given the size of the TTAMP and relatively short time in which to provide a response, Council staff have not had the opportunity to review this Plan in detail. However, following a recent meeting with the CPB Downer Joint Venture (CCPBJV) project team on 13 October 2021, where the TTAMP was discussed, Council is able to provide the following general comments.

At this meeting, the CPBDJV project team outlined the broad scope of the TTAMP and its road network and road network management approach. The minutes for this meeting previously provided to Council by CPBDJV reflect the discussion, selected areas of concern for Council and operational arrangements for liaison with Council. It is noted that the TTAMP appears to provide mechanisms for these concerns to be managed.

It is understood that the main area of works for the WFU project will be located south of Brook St i.e. within North Sydney LGA. Minimal or no construction activity is planned beyond Brook St, outside of any advanced warning signs and incidence response measures.

Nevertheless, construction works are likely to have impacts in terms of flow-on construction traffic effects and delays to existing traffic flows within the vicinity of the project. As such, Council wants to ensure that such impacts are minimised and adequately managed.



Council would like the TTAMP to provide assurance that it addresses and minimises the impacts from the construction of the WFU project in relation to the Willoughby LGA in at least the following key areas of concern:

- Safety for all road users, access to the Willoughby LGA, congestion minimisation, no or minimal movement of construction traffic in Willoughby LGA and no construction worker parking.
- The flexibility for Council to raise issues and for these to be resolved in an acceptable manner, which may include, and not limited to, changes to the TTAMP, site specific management plans, infrastructure, technology, operational and communication measures
- To seek and receive accurate and timely advice in response to community concerns.

In addition, the following advice is provided on specific matters related to the TTAMP:

Road network management and operation in Willoughby City Council

 Please note that road network management and operation in Willoughby City Council is managed through a broad and comprehensive permit system including: Road Opening permits, Crane/Heavy Plant and Road Occupancy permits and Work Zone permits. The provision of permits is mandatory when work is to be undertaken on Council's road network. There is a fee and conditions applicable for all permits. Council requests that the CPBDJV project team contact the Traffic and Transport Team should any such permits be required.

Heavy vehicle movements

- The surge in heavy vehicle movements associated with the construction of the WFU project increases the risks of delays, queues, congestion, noise, and air pollution, particularly during weekday morning and afternoon peak periods and potential for incidents on Willoughby Council's local road network. It is critical that the current operation, use and performance of the routes used for all sites are effectively investigated and all safety hazards identified so that the hazards are mitigated to always maximise safety for all road users.
- Haulage Routes (North) on page 66 of the TTAMP does not indicate the route taken in Miller Street as it approaches the Warringah Freeway. It is Council's preference that all heavy vehicles turn right and use the Warringah Freeway to head southerly and not use Strathallen Avenue. Strathallen Avenue is a narrow State Road with both significant horizontal and vertical alignment changes that would lead to safety and amenity (noise) issues for residents if heavy vehicles use this route.

Bicyclist and pedestrian safety and amenity

 The need to maximise the safety and amenity of bicyclist and pedestrians during construction is recognised in the TTAMP. The approach adopted is outlined in Section 4.6 and Section 5.7.
 The information provided does not address the impact when traffic changes impact on bicycle



routes such as the proposed arrangements at the bicycle link connecting Warringah Freeway with Amherst Street.

- There is significant concern with the management of bicyclists (and pedestrians) along the Warringah Freeway, west of the Brook Street on-ramp; and at the Brook Street on-ramp. The plans provided in the TTAMP i.e. WFU-JAJ-DRG-TW-00-(1106, 1107, 1206, 1216, 1306, 1316, 1406, 1506, 2006 and 2106) indicate the retention of the two-way bicycle link along the Freeway and crossing of the Brook Street on-ramp to/from Amherst St and Warringah Freeway under multiple traffic changes.
- The safety of bicyclists under this arrangement is of significant concern. These vulnerable road users will need to negotiate a road environment with construction infrastructure, changing road and traffic management environments and high speed traffic movements. Council is requesting that the CPBDJV project team review the management approach and designs to maximise safety for bicyclists at this location including considering options such as provision of infrastructure to grade separate motor vehicle and bicyclists; and the temporary closure and rerouting to eliminate this conflict point.

Future consultation on traffic and transport matters

- As per Section 6.2.1 of the TTAMP, it is understood that a Traffic and Transport Liaison Group (TTLG) will be created by the project team and is proposed to meet monthly to discuss construction staging, community concerns associated with traffic changes, impacts on road, path and public transport users and operators. Furthermore, a Traffic Control Group (TCG) is also described in Section 6.2.2 however these will be weekly meetings.
- Council has previously confirmed that a representative from Council's Traffic and Transport
 Team will be able to attend the more infrequent TTLG meetings as required. Council requests
 that the CPBDJV project team contact the Traffic and Transport Team to confirm attendance
 and agendas for these future meetings.

2.2 Noise & Vibration Management Sub-Plan:

Reference no. WHTBLWFU-CPBD-NWW-NV-PLN-000005-B Dated 1 October 2021

Council has reviewed the Noise and Vibration Management Sub-Plan and the Noise and Vibration Monitoring Program and finds them satisfactory. The following additional comments are provided.

It is highly likely that Council will receive complaints from the community in regards to construction noise. The MCoA are quite extensive and cover community consultation, out of hours work and monitoring. Complaints should be directed to the Community Complaints Mediator and the Environmental Protection Authority (EPA).



2.3 Flora & Fauna Management Sub-Plan:

Reference no. WHTBLWFU-CPBD-NWW-EO-PLN-000004 Dated 1 October 2021

Council has not reviewed this Sub-Plan in detail. Given the works will take place within the North Sydney LGA, there would seem to be negligible impacts on flora and fauna within the Willoughby LGA. However, it is noted that Willoughby Creek and Flat Rock Creek have been mentioned in the Sub-Plan. Although these creeks are located some distance from the existing Freeway and proposed project footprint, the project team should contact Council to discuss any requirements and appropriate environmental management measures, should direct or indirect impacts be identified in future that have not already been identified and addressed in this Sub-Plan.

2.4 Air Quality and Odour Management Sub-Plan:

Reference no. WHTBLWFU-CPBD-NWW-AH-PLN-000008-B Dated 1 October 2021

Council has reviewed this Sub-Plan and finds it satisfactory. Air quality impacts are a particular area of concern for both Council and the community, both from the works themselves and construction traffic to, from and within the project footprint. Given the works will take place within the North Sydney LGA, there would seem to be only minor, peripheral impacts in terms of air quality and odour within the Willoughby LGA. Council strongly encourages the project team to ensure that air quality monitoring procedures are thorough and transparent to assuage community concerns both within Willoughby and North Sydney LGAs.

2.5 Soil and Surface Water Management Sub-Plan:

Reference no. WHTBLWFU-CPBD-NWW-WA-PLN-000006 Dated 1 October 2021

Council has reviewed the Soil and Surface Water Management Sub-Plan and makes the following comments.

The MCoA refer to a Section A1 or A2 Site Audit Statement accompanied by an Environmental Management Plan (EMP). No mention is made in regard to consultation with the EPA or councils on the suitability of the EMP if there are ongoing maintenance requirements in terms of encapsulated/remaining contaminated material or monitoring/pretreatment prior to discharge of groundwater back into the aquifer. Whilst the Site Auditor will be responsible for ensuring the suitability of any EMP, bodies responsible for the management of the land or the receiving waters impacted by the EMP should be consulted with to ensure the plan is practicable and reasonable, plus there could be ongoing costs. Whilst the MCoA cannot be modified, a written undertaking could be made by the certified Contaminated Land Consultant to conduct consultation with the land



owners/managers and relevant councils regarding the suitability of any proposed EMP before it is submitted to the Site Auditor for assessment and a Site Audit Statement is issued.

2.6 Heritage Management Sub-Plan:

Reference no. WHTBLWFU-CPBD-NWW-HE-PLN-000007
Dated 1 October 2021

Council has reviewed the Heritage Management Sub-Plan and makes the following comments.

From a review of Willoughby Local Environmental Plan 2012 (LEP) heritage mapping and:

- Figure 5-1 (AHIMS site in the vicinity of the project area)
- Figure 5-2 (Location of non-Aboriginal heritage items and potential heritage items within the project area Map 1 of 2)
- Figure 5-3 (Location of non-Aboriginal heritage items and potential heritage items within the project area Map 2 of)

of the Heritage Sub-Plan, it is noted that the southwest border of the Naremburn Central Township heritage conservation area is located next to the existing Warringah Freeway. Several local heritage items are also located in the vicinity of Willoughby Rd and its intersection with the Freeway.

According to section 5.2 of the Heritage Sub-Plan (pg. 20):

Of those heritage items identified within the study area, 134 items would either have no impact or a negligible impact from the Project due to either the low impact activities proposed or the distances between these items and the project construction works. Impacts on these 134 items would be limited to temporary noise, vibration and/or visual impacts during construction, and managed through the implementation of minimum working distances for vibration intensive construction activities and other standard construction management measures.

It is unclear why the two heritage conservation areas in the North Sydney Council LGA (Cammeray Conservation Area and Holterman Estate A Conservation Area, Crows Nest) have been listed in Table 5-1 (Non-Aboriginal heritage items within the project area) of the Heritage Sub-Plan, but the aforementioned Naremburn Central Township heritage conservation area has not.

It is also unclear from the various documents what exactly is planned in the vicinity of this area, but presumably it would be various roadworks that create noise and vibration. As such, Council believes there may be indirect impacts on the Naremburn Central Township heritage conservation area, similar to those listed for the two North Sydney heritage conservation areas, namely:



- Temporary and permanent visual impacts due to the removal of heritage fabric and the construction of permanent operational infrastructure within and adjacent to the heritage boundary.
- Temporary vibration impacts due to construction activities within and adjacent to the heritage boundary.

As such, Council requests further clarification on what, if any, measures are proposed to safeguard properties located within the Naremburn Central Township heritage conservation area, as well as the several local heritage items located in the vicinity of Willoughby Rd and the Freeway.

In this regard, Council notes the requirements of Conditions E79, E80 and E81 of the Infrastructure Approval and the proposed environmental mitigation and management measures as detailed in section 7.7 (Vibration monitoring and acoustic treatment of heritage items) of the Heritage Sub-Plan.

There are no Aboriginal (AHIMS) heritage items located within vicinity of the project area and thus Council would agree that there would be no impacts on the AHIMS items mapped in the Willoughby LGA for this stage of the broader WHT and WFU project. Such impacts would be related to the future Beaches Link and Gore Hill Freeway Connection project.

Conclusion:

Thank you for your giving Council the opportunity to provide comment on these Plans. Please contact Andrew Gillies, Strategic Transport Planner on **9777 7655** or

Andrew.Gillies@Willoughby.nsw.gov.au if you wish to discuss these matters further.

Yours sincerely,

Ian Arnott

PLANNING MANAGER



Corish, Denise

From: Janne Grose <Janne.Grose@environment.nsw.gov.au>

Sent: Friday, 22 October 2021 4:25 PM

To: Chemney, Howard

Subject: EES response on the Warringah Freeway Upgrade – Ancillary Site Establishment Management

Plan

Attachments: EES response - Warringah Freeway upgrade-ASEMP- 22 Oct 2021.pdf

CAUTION: This email originated from outside of the Organisation.

Hi Howard

Please find attached a copy of EES response on the draft Warringah Freeway Upgrade – Ancillary Site Establishment Management Plan

kind regards from Janne 22/10/2021

Janne Grose

Senior Conservation Planning Officer Greater Sydney

Biodiversity & Conservation | Environment, Energy and Science

Department of Planning, Industry and Environment

T 02 8837 6017 | E janne.grose@environment.nsw.gov.au

Level 6, 12 Darcy Street, 4 Parramatta Square, Parramatta NSW 2150 | Locked Bag 5022

www.dpie.nsw.gov.au



The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Our ref: DOC21/871226 Senders ref: SSI-8863

Mr Howard Chemney CPB Contractors

Dear Mr Chemney

Subject: EES comments on draft Ancillary Site Establishment Management Plan for the Warringah Freeway Upgrade from the northern end of the Sydney Harbour Bridge to Willoughby Road – SSI-8863

Thank you for your email of 1 October 2021 requesting advice on the draft Ancillary Site Establishment Management Plan (ASEMP) for this critical State significant infrastructure project.

The Environment, Energy and Science Group (EES) has reviewed the draft ASEMP and provides the following comments and recommendations.

1.3 Scope of ASEMP

Section 1.3 notes the ASEMP includes a description of activities to be undertaken during establishment of the construction ancillary facility. It indicates the following construction support sites currently include vegetation:

WFU2 - High Street south - a mixture of planted native vegetation and grass verges (Table 1.1)

WFU3 - High Street north - a mixture of planted vegetation and grass verges (Table 1.2)

WFU4 - Arthur Street - a mixture of planted vegetation and grass verges (Table 1.3)

WFU5 - Berry Street east - a mixture of planted vegetation and grass verges (Table 1.4)

WFU6 - Ridge Street east - a combination of vegetated and paved surfaces (Table 1.5)

WFU7 - Merlin Street - a mixture of planted vegetation and maintained lawn (Table 1.6)

WFU9 - Rosalind Street east - a mixture of planted vegetation and grass verges (Table 1.8)

The description for WFU8 - Cammeray Golf Course site (Table 1.7) does not indicate that any existing vegetation would be impacted but Section 5.10.2 notes the majority of the trees for the site establishment works are located within the Cammeray Golf Course (WFU8) site. It is recommended Table 1.7 is amended to identify that trees are currently located on the golf course site.

Table 4.2 Ancillary Facilities

Table 4.2 provides an indicative site establishment program for each site. It indicates there will be localised site levelling at WFU2, WFU3, WFU4, WFU5 and WFU9 and site levelling at WFU7 but it does not specify that the site establishment program includes clearing of vegetation. It is suggested Table 4.2 clarifies that vegetation clearing is required.

5 Potential Environmental Impacts

5.10 Biodiversity

Section 5.10.1 of the ASEMP states "seven *Eucalyptus nicholii* trees are located within the Rosalind Street construction support site (WFU9), and that the project is not likely to have a significant impact on these threatened flora species, based on the very low numbers of remnant trees to be removed and the fact that other trees are planted". It is suggested the ASEMP clarifies

that *Eucalyptus nicholii* is not a local native species however planted natives and exotic vegetation provide potential habitat for native fauna.

Section 5.10.1 states that flora and fauna will be managed in accordance with the biodiversity environmental safeguards in Appendix B of this ASEMP. It is suggested this section also refers to the Flora and Fauna Management Plan (FFMP) for this project.

EES notes that Section 5.10.2 states that "Pre-clearance inspections and TfNSW D&C G40 hold point release will be undertaken prior to any Clearing". It is suggested Section 5.10.2 clarifies that the pre-clearance inspections and relocation of any effected native fauna is to be undertaken for both threatened and non-threatened species and the section also refers to the FFMP for this project which includes a section on pre-clearing/demolition inspections.

The draft FFMP notes that one potential hollow-bearing tree was identified (*Eucalyptus saligna*) in Jefferson Jackson Reserve and does not indicate that any hollow bearing trees will be impacted at the construction support sites. It is suggested Section 5.10.2 includes that should the preclearance inspections identify the presence of any hollow-bearing trees at the construction support sites which are required to be removed, reference should be made to the FFMP.

Flood

The flood comments provided in the EES submission on the draft Soil and Water Management Plan (SWMP) also relate to the ASEMP.

If you have any queries regarding this matter, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer on 02 8837 6017 or at janne.grose@environment.nsw.gov.au

Yours sincerely

22/10/21

Susan Harrison

Senior Team Leader Planning Greater Sydney Branch Biodiversity and Conservation

S. Harrison

CC: Carl Dumpleton - DPIE



Our ref: DOC21/871196 Senders ref: SSI-8863

Mr Howard Chemney CPB Contractors

Dear Mr Chemney

Subject: EES comments on draft Soil and Water Management Plan for the Warringah Freeway Upgrade from the northern end of the Sydney Harbour Bridge to Willoughby Road – SSI-8863

Thank you for your email of 1 October 2021 requesting advice on the draft Soil and Water Management Plan (SWMP) for this critical State significant infrastructure project.

The Environment, Energy and Science Group (EES) has reviewed the draft SWMP and provides its recommendations and comments at Attachment A.

If you have any queries regarding this matter, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer on 02 8837 6017 or at janne.grose@environment.nsw.gov.au

Yours sincerely

22/10/21

Susan Harrison
Senior Team Leader Planning
Greater Sydney Branch
Environment, Energy and Science

CC: Carl Dumpleton - DPIE

S. Harrison

Subject: EES comments on draft Soil and Water Management Plan for the Warringah Freeway Upgrade from the northern end of the Sydney Harbour Bridge to Willoughby Road

The Environment, Energy and Science Group (EES) notes this Soil and Water Management Sub Plan (SWMP) forms part of the Construction Environmental Management Plan (CEMP) for the Warringah Freeway Upgrade (the Project) and has been prepared in accordance with the Minister's Conditions of Approval (MCoA) for the Western Harbour Tunnel and Warringah Freeway Upgrade project – SSI-8863.

EES has reviewed the draft SWMP - October 2021 and provides the following comments and recommended amendments.

Table 6.1 - Soil and Water management and mitigation measures

Management Measure (MMSW03)

Management measure (MMSW03) in Table 6.1 states "weather conditions and forecasts (including rainfall prediction maps) will be monitored daily" and this is to be implemented at the construction stage. (page 54). EES assumes vegetation clearing precedes construction and recommends this measure also be implemented during and following the clearing of vegetation. This is to ensure that when any heavy rainfall events are forecast, the sediment erosion controls can be inspected prior to the rainfall event and that they are installed effectively in areas where vegetation clearing is occurring or has been undertaken.

Management Measure (MMSW31)

Management measure (MMSW31) states that the "stabilisation of waterways including their beds and banks will be commenced immediately after the completion of any works within these areas". EES recommends that if planting is proposed to stabilise the stream banks, the long term planting (as opposed to temporary cover crops) should use local native provenance plant species from the relevant native vegetation community that occurs or once occurred along the watercourse.

As advised in the EES submission on the draft Flora and Fauna Management Plan, the proponent should currently be propagating, and/or sourcing local native species so they are available for planting.

Management Measure (MMSW33)

Management measure (MMSW33) states that "Prior to forecast heavy rainfall events, the Environmental Manager (EM) or delegate will inspect the site and note any areas requiring additional management measures". This is to be implemented at the construction stage (page 61). EES assumes vegetation clearing precedes construction and therefore recommends this measure is also implemented prior to and following the clearing of vegetation.

Management Measure (MMSW39)

Management measure (MMSW39) states "a procedure for management of tannins from vegetation mulch will be developed for the Project" and this is to be implemented prior to construction. In the first instance the procedure needs to outline the importance of reusing and salvaging native vegetation that is approved for removal for habitat enhancement and rehabilitation work rather than mulching it in accordance with Condition E48 of the approval for this SSI.

In addition to being implemented 'prior to construction', it is recommended this measure is implemented prior to clearing of vegetation.

<u>Table 7.1 - Monitoring and inspection requirements</u>

Table 7.1 proposes to inspect erosion and sediment controls after heavy rainfall events (page 73). Section 7.6 of this plan indicates that weather conditions and forecasts (including rainfall prediction maps) will be monitored daily and the relevant information passed on to site personnel to allow for

adequate planning for significant rain event. If heavy rainfall is forecast, it suggested the erosion and sediment controls are also inspected prior to such an event to ensure the controls are installed effectively.

Appendix B – Environmental Procedures

B2 Stockpile Management Procedure

Section 2.1 of the Stockpile Management Protocol for the Warringah Freeway Upgrade states "Stockpiles at the Project will be located according to the following criteria:

3. on land that does not require the removal of threatened species, Endangered Ecological Communities or roosting habitat for listed threatened fauna species or native vegetation clearing beyond what is already required for the Project.

While Section 3.2 of the Protocol indicates erosion and sedimentation controls are to be erected between the stockpile and any drainage lines or down-slope areas, it is not clear if erosion and sedimentation controls are to be erected between stockpiles and native vegetation. The Protocol needs to be amended to clarify that erosion and sedimentation controls must be erected between stockpiles and native vegetation.

EES recommends the Protocol also states that stockpiles should be setback from threatened species, endangered ecological communities, or roosting habitat for listed threatened fauna species and native vegetation by an appropriate distance to avoid impacting these entities.

Section 3.2 of the Stockpile Management Protocol states "mitigation measures for each stockpile site will include as a minimum "avoid locating stockpile weed contaminated topsoil or other contaminated materials adjacent to areas of native vegetation". EES recommends an appropriate setback is provided between any native vegetation and stockpiles of weed contaminated topsoil or other contaminated materials.

Environmental Direction Management of Tannins from Vegetation Mulch – January 2012
EES recommends the Environmental Direction for the Management of tannins is amended to outline that in the first instance rather than mulch native trees that are approved for removal they are salvaged and reused by either the project and/or by local community restoration/rehabilitation groups, Landcare groups, relevant public authorities etc in habitat enhancement and rehabilitation work in accordance with Condition E48 of the approval for this SSI.

Flood

The SWMP states that a flood emergency management plan will be prepared. It is unclear if this plan will be prepared separately, its timeframe and whether EES would have any further opportunity to comment.

It appears that the 10% Annual Exceedance Probability (AEP) flood extents are to be kept clear of obstructions and hazards. The indicative site layouts could include the 10% AEP flood extents to confirm this, and to help ensure that future amendments keep relevant components clear.

Rather than refer to "the 5 year Average Recurrence Interval (ARI)" and design rainfall IFD data (Intensity-Frequency-Duration design rainfall data), the flood contingency documentation should include an actual rainfall depth in millimetres. Suitable wording may be like: if 50mm rain or more is predicted by BoM. Alternatively, if site specific alerts are to be received from a weather forecast services provider, this should be stated.

Without providing specific detail, the SWMP implies significant effort may be required to prepare for each potentially flood-producing rain event in the flood event contingency planning process: all construction equipment and materials are to be removed from areas prone to flooding including stockpiles, stored chemicals, portaloos, ATF and concrete barriers. Further detailed work is

recommended to ensure that effort is minimised, and the process has the greatest likelihood of success. This would be aided by adding the 10% AEP flood extent to the site layout plans.

Some aspects potentially requiring significant effort should be further detailed. For example, the plan for relocation of stockpiles should include nomination of locations to which the material can be relocated. No stockpile locations have been nominated on the layout plans.

Given the unpredictability of rainfall, it should be anticipated that many 'false alarms' will occur. This should be acknowledged in the documentation to avoid warning fatigue, whereby workers may cease to respond appropriately to warnings.

End of Submission

Appendix 4 NSW Health Consultation Records

Corish, Denise

From: Nick Ives (Northern Sydney LHD) <nick.ives@health.nsw.gov.au>

Sent: Monday, 18 October 2021 10:02 AM

To: Chemney, Howard

Cc: Rob Owens; Jacqueline McKenzie

Subject: RE: Warringah Freeway Upgrade - Ancillary Site Establishment Management Plan consultation -

NSW Health

CAUTION: This email originated from outside of the Organisation.

Hi Howard,

I refer to the below documentation regarding Warringah Freeway Upgrade.

- Ancillary Site Establishment Management Plan (1 October 2021 WHTBLWFU-CPBD-NWW-EV-PLN-000001-B);
- Air Quality Management Sub Plan (1 October 2021 WHTBLWFU-CPBD-NWW-AH-PLN-000008-B);
- Noise and Vibration Management Sub-Plan (1 October 2021 WHTBLWFU-CPBD-NWW-NV-PLN-000005-B); and
- Instrument of Approval SSI 8863

This documentation has been noted by Sydney Public Health Unit, Northern Sydney Public Health Unit and the Environmental Health Branch of NSW Health.

NSW Health made initial comments at the EIS stage of the project. No further comment is being provided.

If you have any enquiries please contact me.

Nick Ives

Environmental Health Manager | Northern Sydney Public Health Unit

36-76 Palmerston Road, Hornsby, NSW 2077 Tel (02) 9485 6973 | Fax (02) 9485 6092 | Mob 0416 224 241 | <u>nick.ives@health.nsw.gov.au</u>



From: Chemney, Howard [mailto:Howard.Chemney@pcplr.com.au]

Sent: Thursday, 14 October 2021 1:41 PM

To: Leena Gupta (Sydney LHD) <Leena.Gupta@health.nsw.gov.au>; Michael Staff (Northern Sydney LHD) <Michael.Staff@health.nsw.gov.au>; Richard Broome <Richard.Broome@health.nsw.gov.au>; Nick Ives (Northern Sydney LHD) <nick.ives@health.nsw.gov.au>

Cc: Rob Owens < Rob.Owens@transport.nsw.gov.au>; Jacqueline McKenzie < jacqueline.mckenzie@dswjv.com.au> **Subject:** RE: Warringah Freeway Upgrade - Ancillary Site Establishment Management Plan consultation - NSW Health

Hi Lena, Michael, Richard and Nick,

Just following up on the below.

Please let me know if you / NSW Health have any queries during this review stage or require a live review / page turn on any of the documents submitted.

This is also a reminder that all comments must be received back by Friday 22nd October.

Thanks

Howard 0410 542 009

From: Chemney, Howard

Sent: Friday, 1 October 2021 11:42 AM

To: leena.gupta@health.nsw.gov.au; michael.staff@health.nsw.gov.au; Richard.broome@health.nsw.gov.au; Nick.lves@health.nsw.gov.au

Cc: Rob Owens < Rob.Owens@transport.nsw.gov.au>; Jacqueline McKenzie < jacqueline.mckenzie@dswjv.com.au> **Subject:** RE: Warringah Freeway Upgrade - Ancillary Site Establishment Management Plan consultation - NSW Health

Hi Leena, Michael, Richard and Nick,

Further to the below correspondence, please find attached the following plans for your consultation:

- Ancillary Site Establishment Management Plan
- Noise & Vibration Management Sub-plan
- Air Quality and Odour Management Sub-plan

The consultation period is for 3 weeks and therefore we request all comments must be received back by Friday 22nd October.

Please give me a call if you need any clarification.

Thanks

Howard

0410 542 009

From: Chemney, Howard

Sent: Tuesday, 28 September 2021 4:24 PM

To: <u>leena.gupta@health.nsw.gov.au</u>; <u>michael.staff@health.nsw.gov.au</u>; <u>Richard.broome@health.nsw.gov.au</u>; Nick.lves@health.nsw.gov.au

Cc: Rob Owens < Rob.Owens@transport.nsw.gov.au >; Jacqueline McKenzie < jacqueline.mckenzie@dswjv.com.au > **Subject:** Warringah Freeway Upgrade - Ancillary Site Establishment Management Plan consultation - NSW Health

Hi Leena, Michael, Richard and Nick,

Further to the below – it is also a requirement of Condition A17 of the Infrastructure Approval SSI 8863 that we consult with NSW Health on the Ancillary Site Establishment Management Plan (ASEMP). This plan outlines the environmental management practices and procedures to be implemented for the establishment of the construction ancillary facilities / construction support sites. A snippet of this condition is reproduced below:

SITE ESTABLISHMENT WORK

Ancillary Site Establishment Management Plan

- 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:
 - (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);
 - (b) figures illustrating the proposed operational site layout and the location of the closest sensitive land user(s);
 - (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;
 - (d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to:
 - (i) meet the performance outcomes stated in the documents listed in Condition A1, and
 - (ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and
 - (e) a program for monitoring the performance outcomes, including a program for construction noise monitoring.

Nothing in this condition prevents the Proponent from preparing individual Ancillary Site Establishment Management Plans for each construction ancillary facility.

We will be sending over the ASEMP for consultation with NSW Health this Friday 1st October.

As with the CEMP sub-plans, the consultation period is for 3 weeks and therefore all comments must be received back by Friday 22nd October. Comments received after this date may not be addressed in time and will be considered during future revisions. We are also happy to assist you in your review of the document by undertaking a live review / page turn to discuss issues directly. Please contact me should you wish to take up this offer.

Please note that TfNSW will also be issuing this plan formally for consultation via the DPIE Portal.

Thanks

Howard Chemney

Environment & Sustainability Manager Warringah Freeway Upgrade

M 0410 542 009

E Howard.Chemney@cpbcon.com.au

From: Chemney, Howard

Sent: Monday, 27 September 2021 6:26 PM

To: <u>leena.gupta@health.nsw.gov.au</u>; <u>michael.staff@health.nsw.gov.au</u>; <u>Richard.broome@health.nsw.gov.au</u>; <u>Nick.lves@health.nsw.gov.au</u>

Cc: Rob Owens < <u>Rob.Owens@transport.nsw.gov.au</u>>; Jacqueline McKenzie < <u>jacqueline.mckenzie@dswjv.com.au</u>> **Subject:** Warringah Freeway Upgrade - Construction Environmental Management Plan consultation - NSW Health

Hi Leena, Michael, Richard and Nick,

This email is to advise you that CPB Downer JV will be sending over a number of sub-plans to the Warringah Freeway Upgrade Construction Environmental Management Plan (CEMP) for consultation with Council this Friday 1st October.

Our requirement to consult with NSW Health on these plans is contained in Condition C4 of the Infrastructure Approval SSI 8863 as snipped below and included in the attachment.

C4 The following CEMP Sub-plans must be prepared in consultation with the relevant government agencies identified for each CEMP Sub-plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP Sub-plan, including copies of all correspondence from those agencies as required by Condition A5.

	Required CEMP Sub-plan	Relevant government agencies to be consulted for each CEMP Sub-plan
(a)	Traffic, transport and access	Relevant council(s)
(b)	Noise and vibration	NSW Health, relevant council(s)
(c)	Flora and Fauna	DPI Fisheries, DPIE Water, EESG, and relevant council(s)
(d)	Air quality and odour	NSW Health, and relevant council(s)

(e)	Soil and surface water	DPIE Water, EESG, EPA, Sydney Water (if Sydney Water's assets are affected) and relevant council(s)
(f)	Groundwater	DPIE Water, EESG, EPA, Sydney Water (where it is proposed to discharge groundwater into Sydney Water's assets) and relevant council(s)
(g)	Maritime Heritage	Heritage NSW and relevant council(s)
(h)	Non-Aboriginal Heritage	Heritage NSW and relevant council(s)
(i)	Aboriginal Cultural Heritage	Heritage NSW
(j)	Dredging and Disposal Management Plan	EPA, DPI Fisheries, Port Authority of NSW (including Harbour Master)

Specifically we are required to consult with NSW Health on the following project relevant sub-plans:

- Noise & Vibration Management Sub-plan
- Air Quality and Odour Management Sub-plan

The consultation period is for 3 weeks and therefore all comments must be received back by Friday 22nd October. Comments received after this date may not be addressed in time and will be considered during future revisions.

To assist you in your review of the documents we are happy to undertake a live review / page turn to discuss issues directly. Please contact me should you wish to take up this offer.

Please note that TfNSW will also be issuing these plans formally for consultation via the DPIE Portal.

Thanks

Howard Chemney

Environment & Sustainability Manager Warringah Freeway Upgrade

M 0410 542 009

E Howard.Chemney@cpbcon.com.au

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Appendix 5 DPI Fisheries Consultation Records

Corish, Denise

From: no-reply@majorprojects.planning.nsw.gov.au

Sent: Saturday, 16 October 2021 4:19 PM

To: Rob Owens

Subject: Western Harbour Tunnel & Warringah Freeway Upgrade Ancillary Site Establishment

Management Plan - Response from DPI Fisheries

Attachments: ...datacontentImagerteImagesNew_DPIE_Logo1561956956365.png

CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

DPI Fisheries has responded to your request for advice in relation to the Western Harbour Tunnel & Warringah Freeway Upgrade Ancillary Site Establishment Management Plan . The response is below and/or attached. Record of this consultation has been automatically saved to the portal.

When you are ready, login to your profile to submit the final document to the Department.

Public Authority Response

DPI Fisheries has no comments on the Ancillary Site Establishment Management Plan (ASEMP) for the Warringah Freeway Upgrade component of the project. DPI Fisheries looks forward to reviewing the Western Tunnel component of the project.

To sign in to your account click here or visit the Major Projects Website. Please do not reply to this email.

Kind regards

The Department of Planning, Industry and Environment



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Contact: Natural Resources Access Regulator Phone: 1800 633 362 Email: nrar.enquiries@nrar.nsw.gov.au

Our ref: INT21/156967, V15/3875-5#82

8 November 2021

Attention: Rob Owens

Uploaded to the Major Projects Portal

Dear Rob,

Re: Western Harbour Tunnel & Warringah Freeway Upgrade (SSI-8863-PA-79) Ancillary Site Establishment Management Plan (PAE-29569638)

Thank you for giving Natural Resources Access Regulator (NRAR) the opportunity to review Western Harbour Tunnel & Warringah Freeway Upgrade (SSI-8863-PA-79) Ancillary Site Establishment Management Plan (PAE-29569638).

NRAR has no comments on the provided plan.

Should you have any further queries in relation to this submission please do not hesitate to contact the Natural Resources Access Regulator's Service Support Team at nrar.servicedesk@dpie.nsw.gov.au.

Yours Sincerely

Jane Curran

Manager Licensing & Approvals Water Regulatory Operations

Natural Resources Access Regulator



Corish, Denise

To: Denise Corish

Subject: RE: Western Harbour Tunnel & Warringah Freeway Upgrade Ancillary Site Establishment

Management Plan - Response from ENVIRONMENT PROTECTION AUTHORITY

From: no-reply@majorprojects.planning.nsw.gov.au < no-reply@majorprojects.planning.nsw.gov.au>

Sent: Wednesday, 3 November 2021 4:31 PM

To: Rob Owens < Rob. Owens@transport.nsw.gov.au>

Subject: Western Harbour Tunnel & Warringah Freeway Upgrade Ancillary Site Establishment Management Plan -

Response from ENVIRONMENT PROTECTION AUTHORITY

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ENVIRONMENT PROTECTION AUTHORITY has responded to your request for advice in relation to the Western Harbour Tunnel & Warringah Freeway Upgrade Ancillary Site Establishment Management Plan . The response is below and/or attached. Record of this consultation has been automatically saved to the portal.

When you are ready, login to your profile to submit the final document to the Department.

Public Authority Response

Thank you for providing the ASEMP for the EPA's consideration.

As the regulatory authority the EPA does not comment on post-approval management plans, unless it is specifically requested to do so in accordance with the relevant condition of approval.

The EPA will not be providing comment.

To sign in to your account click <u>here</u> or visit the <u>Major Projects Website</u>.

Please do not reply to this email.

Kind regards

The Department of Planning, Industry and Environment



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