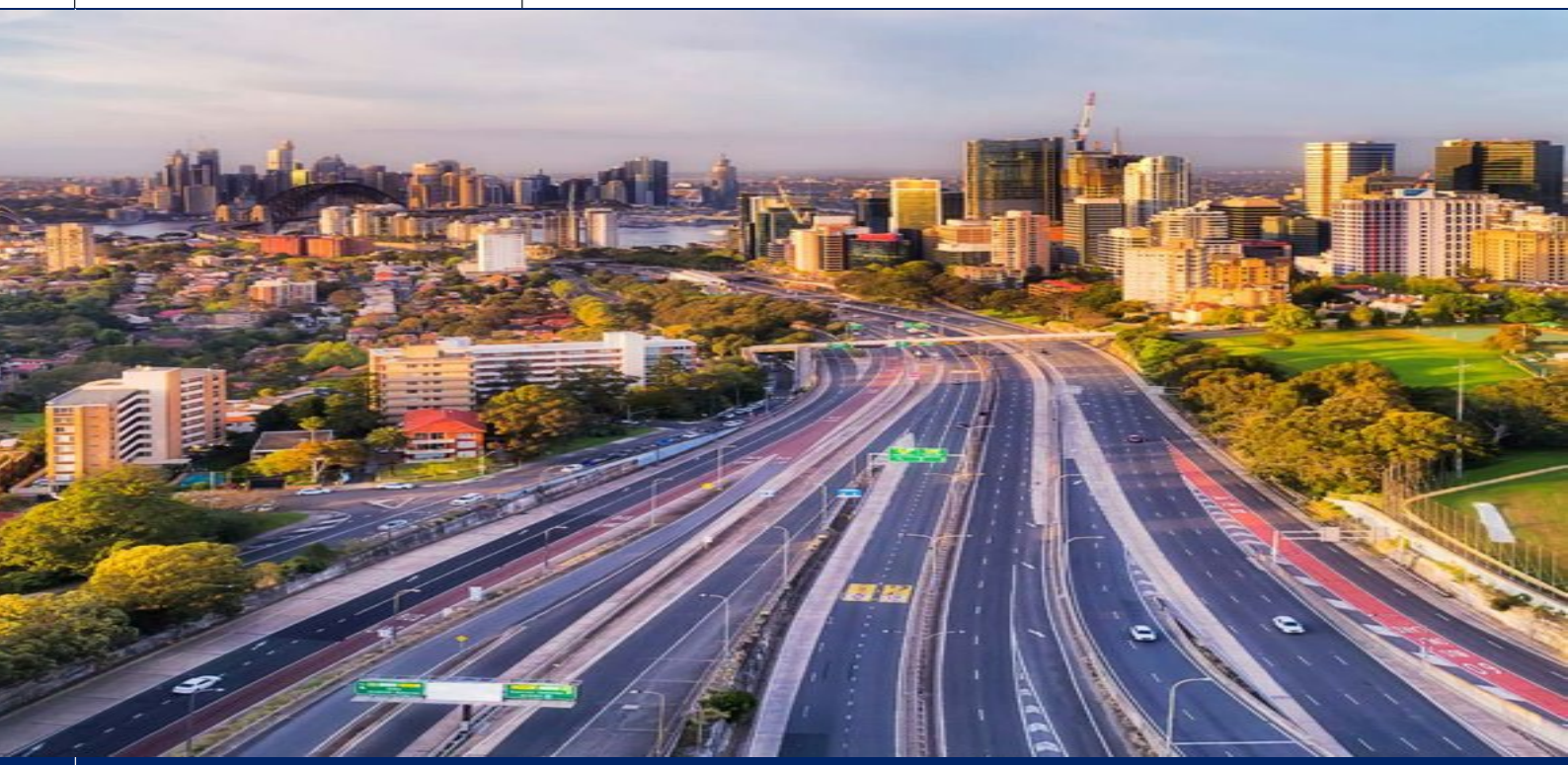
Transport
for NSW

# Staging Report

## Western Harbour Tunnel and Warringah Freeway Upgrade (SSI 8863)



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# Document Control

| Revision | Revision Date | Status | Description | Author / Company |
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| **0** | 1-Mar-2021 | Final | Document endorsed by ER and submission to DPE | TfNSW Environment Team |
| **1** | 6-Oct-2021 | Final | Revision to include additional stages (M2A, WHTCP and MH) and integration of WFU works | TfNSW Environment Team |
| **2** | 7-Dec-2021 | Final | Revision to address DPE review comments | TfNSW Environment Team |
| **3** | 8-Mar-2021 | Final | Minor amendment to Stage 1A scope and management | TfNSW Environment Team |
| **4** | 29-Mar-2022 | Final | Revision to address DPE review comments | TfNSW Environment Team |
| **5** | 12-Aug-2022 | Final | Revision to include WHT Stage 3A and amendments to scope of WHTCP, MH and Low Impact Works | TfNSW Environment Team |
| **6** | 16-Feb-2022 | Final | Revision to address DPE comments, remove maritime heritage works and include Berrys Bay archaeological works. Also, to include Stages 3B and 3C | TfNSW Environment Team |
| **6.1** | 13-Mar-2023 | Final | Revision to address DPE comments | TfNSW Environment Team |
| **6.2** | 21-Mar-2023 | Final | Revision to address DPE comments | TfNSW Environment Team |
| **7** | 13-Sept-2023 | Final | Revision to include Wicks Road Construction Support Site Modification | TfNSW Environment Team |
| **7.1** | Oct-2023 | Draft | Change format to new TfNSW style guide | TfNSW Environment Team |
| **8** | 18-Oct-2023 | Final | Revision to include MOD 2, Stage 3C, and address Independent Audit comments | TfNSW Environment Team |
| **8.1** | 7-Feb-2024 | Final | Revision to include MOD 2 Conditions of Approval, and ER Comments | TfNSW Environment Team |
| **8.2** | 14-Mar-2024 | Final | Revision to address DPE comments | TfNSW Environment Team |
| **9** | 13-Sep-24 | Final | Revision to include Berrys Bay foreshore park | TfNSW Environment Team |
| **10** | 27-Sep-24 | Final | Revision to include non-contestable works | TfNSW Environment Team |

# Glossary / Abbreviations

| Abbreviation | Expanded Text |
|---|---|
| AA | Acoustic Advisor |
| **BB** | Berrys Bay |
| BL | Beaches Link (previously proposed project / cancelled as of 2023) |
| CEMF | Construction Environmental Management Framework |
| CEMP | Construction Environmental Management Plan |
| CGC | Cammeray Golf Course adjustment works, Stage 1B of the Western Harbour Tunnel and Warringah Freeway Upgrade |
| CoA | Conditions of Approval |
| CNVIS | Construction Noise and Vibration Impact Statement |
| COVID-19 | Coronavirus disease |
| CUT | Critical utility installation, relocation and protection, Stage 1A of the Western Harbour Tunnel and Warringah Freeway Upgrade |
| DPHI | NSW Department of Planning, Housing and Infrastructure (formally DPE) |
| EIS | Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement (January 2020) |
| EPA | NSW Environment Protection Authority |
| ER | Environmental Representative |
| ITS | Intelligent Transport System |
| Low Impact Work | Low impact work as defined in the Conditions of Approval includes:<br>a) site establishment work approved under a Site Establishment Management Plan;<br>b) operation of ancillary facilities if the ER has determined the operational activities will have minimal impact on the environment and community;<br>c) minor clearing and relocation of native vegetation, as identified in the documents listed in Condition of Approval A1;<br>d) installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and at-property treatments (including the implementation of the NIP);<br>e) property acquisition adjustment work including installation of property fencing, and relocation and adjustments of utilities to property including water supply and electricity;<br>f) relocation and connection of utilities where the relocation or connection has a minor impact to the environment as determined by the ER;<br>g) archaeological testing under the Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010) or archaeological monitoring undertaken in association with (a) – (f) above to ensure that there is no impact on heritage items;<br>~~*h) the relocation of Cape Don and Baragoola historic vessels as permitted subject to Condition of Approval E53;*~~<br>i) adjustment of Cammeray Golf Course as identified in Condition of Approval E101and relocation of the Cammeray Golf Club dam / harvesting scheme subject to Condition of Approval E209;<br>j) noise barrier / wall between Massey and Amherst Street, Cammeray as identified in Condition of Approval E183 and Appendix C; |

| Abbreviation | Expanded Text |
|---|---|
| | k) maintenance of existing buildings and structures required to facilitate the carrying out of the CSSI; and<br>l) other activities determined by the ER to have minimal environmental impact which may include but not be limited to construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access.<br><br>Notwithstanding the following works are not Low Impact Work:<br>a. where heritage items (excluding those impacted by activities (i) and (j) above), or threatened species or threatened ecological communities (within the meaning of the Biodiversity Conservation Act 2016 or Environment Protection and Biodiversity Conservation Act 1999) are affected or potentially affected by any low impact work, that work is construction, unless otherwise determined by the Planning Secretary in consultation with Heritage NSW, EESG or DPI Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation); and<br>b. any night time (hours as defined by the ICNG) work that exceeds noise management levels as identified in Condition of Approval E68(b)(i)<br><br>The low impact work described in this definition becomes construction with the approval of a Construction Environmental Management Plan. |
| MH | Maritime Heritage – relocation of historic vessels *M.V. Cape Don and Baragoola,*. Stage 1E of the Western Harbour Tunnel and Warringah Freeway Upgrade |
| Minister, the | Minister for Planning and Public Space (or delegate) |
| M2A | Massey to Amherst noise barrier, Stage 1C of the Western Harbour Tunnel and Warringah Freeway Upgrade |
| NSW | New South Wales |
| OOHW | Out of Hours Works |
| Project, the | Western Harbour Tunnel and Warringah Freeway Upgrade Project |
| REMM | Revised Environmental Management Measures as outlined in the project RtS document |
| ROL | Road Occupancy Licence |
| RtS | Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions (September 2020) |
| SCO | Sydney Coordination Office |
| SSI | State Significant Infrastructure |
| TfNSW | Transport for New South Wales |
| TMC | Transport Management Centre |
| WFU | Warringah Freeway Upgrade, Stage 2 of the Western Harbour Tunnel and Warringah Freeway Upgrade |
| WHT | Western Harbour Tunnel project, Stage 3 of the Western Harbour Tunnel and Warringah Freeway Upgrade |
| WHTCP | Western Harbour Tunnel construction power, Stage 1D of the Western Harbour Tunnel and Warringah Freeway Upgrade |
| WHTWFU | Western Harbour Tunnel and Warringah Freeway Upgrade (SSI 8863) |

# 1. Introduction

## 1.1 Purpose of this Staging Report

This Staging Report has been prepared and structured to address the requirements of Conditions of Approval (CoA) A10 to A14 of the Western Harbour Tunnel and Warringah Freeway Upgrade (SSI 8863) (WHTWFU/ the project) planning approval. Table 1 cross-references sections in this report that address each applicable planning approval requirement relating to the Staging Report.

The Department of Planning, Housing and Infrastructure (DPHI) formally the Department of Planning and Environment has been advised of the status of the project prior to the commencement of each stage.

Updates to this Staging Report will be made as required, particularly following the determination of any project modifications or changes to the delivery strategy (refer to Sections 2.2). Where amendments to the proposed staging occur, a revised Staging Report will be prepared in consultation with DPHI and will be submitted in accordance with CoA A14.

**Table 1: Staging Report Planning Approval condition cross references**

| CoA | Condition requirement(s) | Staging Report Sections |
|---|---|---|
| A1 | The Proponent must carry out the CSSI in accordance with the terms of this approval and generally in accordance with the:<br>a) Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement – Volumes 1A-B and 2A-J (dated January 2020) (the EIS); and<br>b) Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions Report (dated September 2020) (the RtS).<br>c) Western Harbour Tunnel and Warringah Freeway Upgrade Wicks Road Construction Support Site – Modification Report (dated October 2022) (Modification 1 Report); and<br>d) Western Harbour Tunnel and Warringah Freeway Upgrade Modification - Wicks Road Construction Support Site Submissions Report (dated May 2023) | This document |
| 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 | This document |

| CoA | Condition requirement(s) | Staging Report Sections |
|---|---|---|
| | otherwise specified in, or required under, this approval. | |
| A10 | The CSSI may be constructed and operated in stages. Where staged construction or operation is proposed, a Staging Report (for either or both construction and operation as the case may be) must be prepared and submitted to the Planning Secretary for information. The Staging Report must be Endorsed by the ER and then submitted to the Planning Secretary no later than one month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation). | This report must be submitted to the Planning Secretary for information one month prior to the commencement of the first stage. |
| A11 | The Staging Report must: | |
| | (a) if staged construction is proposed, set out how the construction of the whole of the CSSI will be staged, including details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish; | Sections 2.2 and 2.4 outline the activities which will occur within each construction stage and an indicative program for the works. |
| | (b) if staged operation is proposed, set out how the operation of the whole of the CSSI will be staged, including details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant); | Sections 2.3 and 2.4 outline the activities which will occur within each operational stage and an indicative program for the works. |
| | (c) specify how compliance with conditions will be achieved across and between each of the stages of the CSSI; and | Section 3 discusses the environmental management system which would be implemented on the project to manage compliance across the stages of the Project. |
| | (d) set out mechanisms for managing any cumulative impacts arising from the proposed staging. | Section 2.6 includes details on how cumulative impacts will be managed. |
| A12 | The CSSI must be staged in accordance with the Staging Report, as approved by the Planning Secretary | The project will be staged in accordance with this report which will be submitted for information to the Planning Secretary prior to the commencement of the stage |
| A13 | Where staging is proposed, the terms of this approval that apply or are | Appendix A and Appendix B allocate the applicability of each CoA and Revised |

| CoA | Condition requirement(s) | Staging Report Sections |
|---|---|---|
| | relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage | Environmental Mitigation Measures (REMMs) to each stage of the project. |
| A14 | Where changes are proposed to the staging of construction or operation, a revised Staging Report must be prepared and submitted to the Planning Secretary for approval no later than one month prior to the proposed change in the staging. | This report will be revised, endorsed by the ER and submitted to the Planning Secretary no later than one month prior to the proposed change in the staging. |

## 1.2 Background

The Western Harbour Tunnel and Warringah Freeway Upgrade (WHTWFU) project comprises a new tolled 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 connect to the future proposed Beaches Link and Gore Hill Freeway Connection project.

Due to its importance, the WHTWFU was declared to be critical state significant infrastructure (CSSI) by the Minister for Planning and Public Spaces on 9 November 2020.

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

On 8 August 2023, DPHI, formally the Department of Planning and Environment (DPE) approved the Western Harbour Tunnel & Warringah Freeway upgrade Modification 1 – Wicks Road construction support site.

On 27 January 2024, DPHI approved the Western Harbour Tunnel & Warringah Freeway upgrade Modification 2 – TBM construction methodology and additional ancillary facility site at Emu Plains (WHT13).

## 1.3 Project Description

The WHTWFU project comprises of two main components:

- A new crossing of Sydney Harbour involving twin tolled motorway tunnels connecting the M4-M5 Link at Rozelle and the existing Warringah Freeway at North Sydney (the Western Harbour Tunnel (WHT)) (refer to Figure 1)
- Upgrade and integration works along the existing Warringah Freeway, including infrastructure required for connections to the future proposed Beaches Link and Gore Hill Freeway Connection project (the Warringah Freeway Upgrade (WFU)) (refer to Figure 2).

The WHTWFU project has been split into two separate projects, which will be delivered by TfNSW.

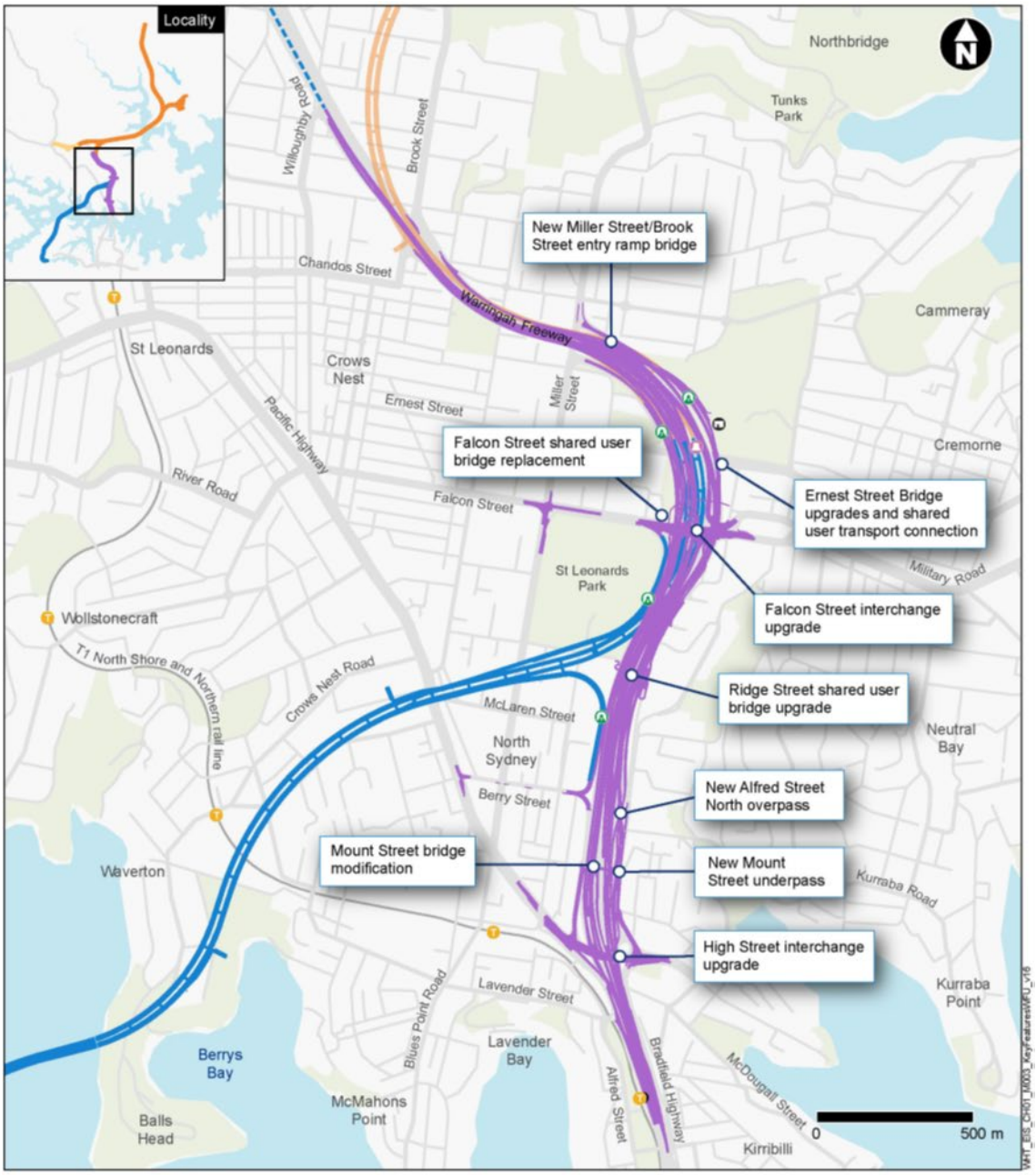
A detailed description of the Project is provided in Chapter 5 of the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement (EIS).

A detailed description of the Wicks Road construction support site is included in Chapter 5 of the Western Harbour Tunnel & Warringah Freeway upgrade modification 1 – Wicks Road construction support site.

A detailed description of the Emu Plains construction support site is included in Chapter 9 of the Western Harbour Tunnel & Warringah Freeway upgrade modification 2 – TBM construction methodology. While modification 2 – TBM construction methodology detailed the Berrys Bay (WHT7) construction support site is no longer required, the delivery of the Berrys Bay foreshore park, part of the Berrys Bay masterplan, would be delivered as part of the Western Harbour Tunnel & Warringah Freeway Project.

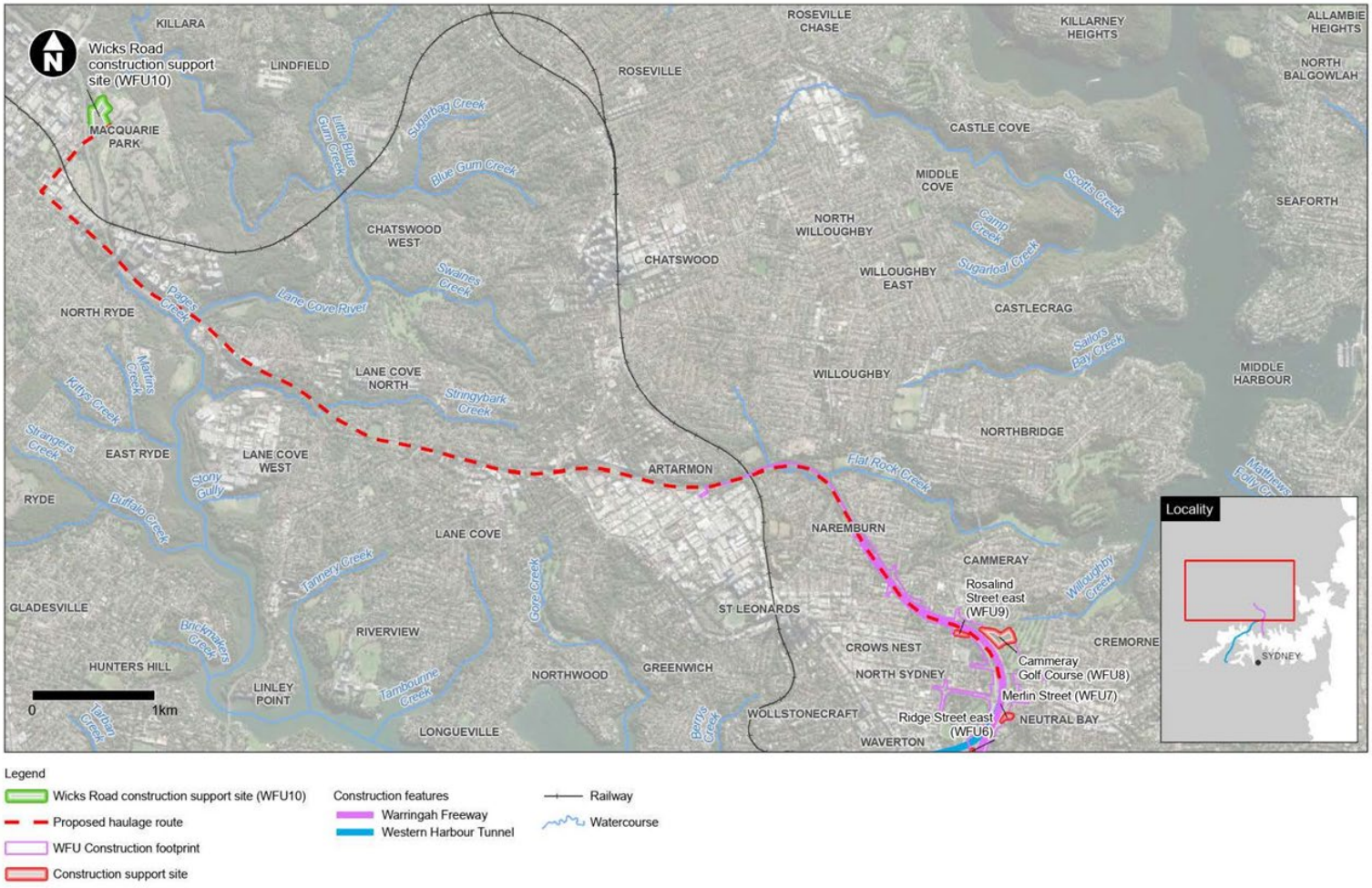

*(Reference: Western Harbour Tunnel and Warringah Freeway Upgrade Modification 2 Report, Figure 5-1*

**Figure 1: Key features of the Western Harbour Tunnel component of the project**



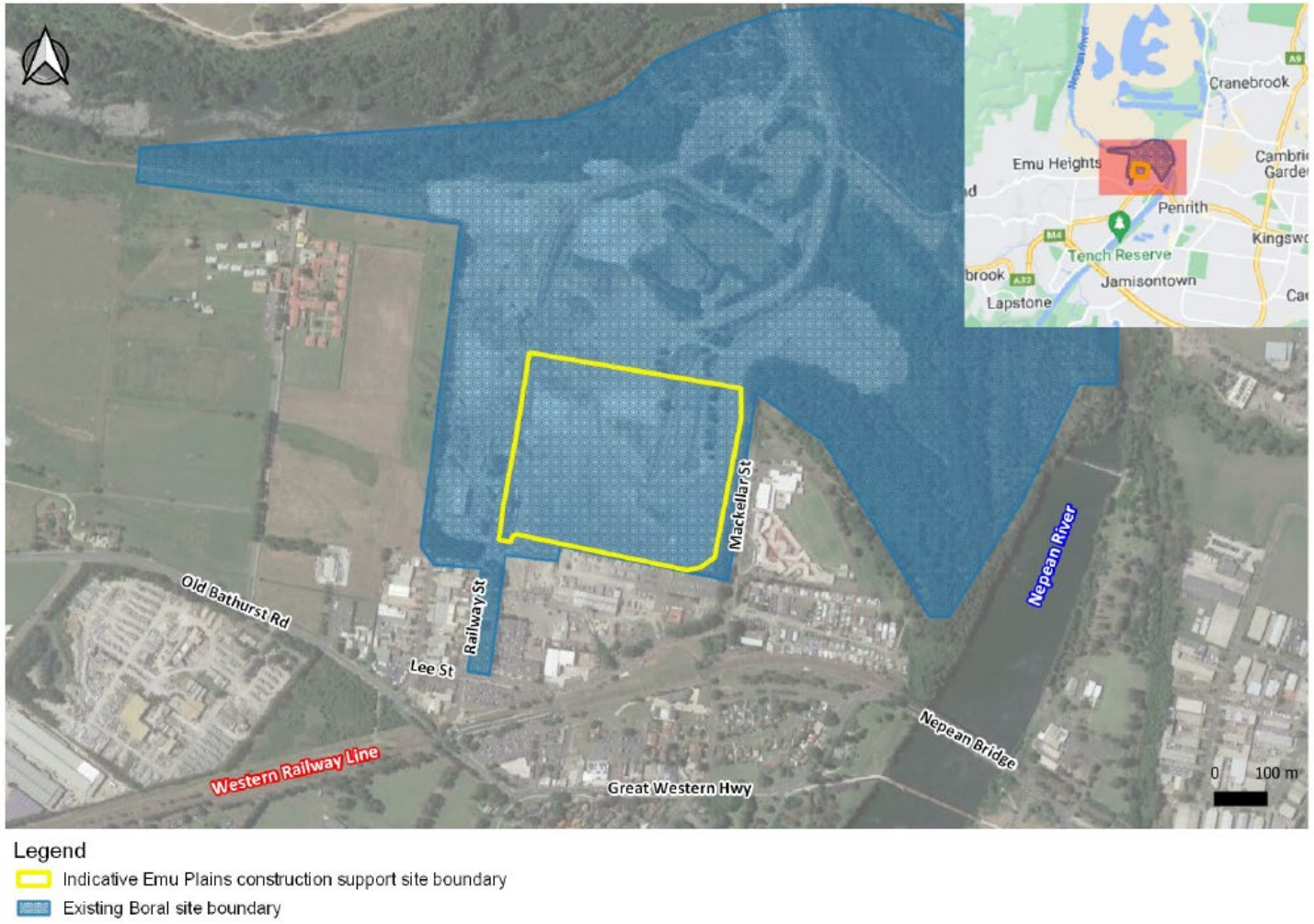

*(Reference: Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement, Figure 1-3)*

**Figure 2: Key features of the Warringah Freeway Upgrade component of the project**




*(Reference: Western Harbour Tunnel and Warringah Freeway Upgrade Modification Report, Figure 5-2)*

**Figure 3: Location of the Wicks Road construction support site (Mod-1) as part of the Warringah Freeway Upgrade component of the project**




*(Reference: Western Harbour Tunnel and Warringah Freeway Upgrade Modification 2 Report, Figure 5-14)*

**Figure 4: Location of the Emu Plains construction support site (Mod-2) as part of the Western Harbour Tunnel component of the project**


**Figure 5: Location of the Berrys Bay as part of the Western Harbour Tunnel component of the project. Precinct 3 is excluded from the scope**

# 2. Project Staging

## 2.1 Overview

TfNSW has elected to stage portions of the project in response to further planning and feedback received from stakeholders and industry consultation.

The staging strategy for the project focuses on balancing the need for construction to occur in a safe and efficient manner, while managing constructability constraints, reducing the cumulative impacts and minimising impacts on local communities, the environment, and users of the surrounding road and other transport networks.

The duration of construction is significantly influenced by the complexity and magnitude of the interfaces between the various scopes of work. The staging strategy seeks to minimise the risk to delivery timing and impacts on nearby communities, including cumulative impacts from construction (refer to Section 2.6).

The stages of the project comprise of:

**Stage 1 – Early and enabling works:**

- Stage 1A – Critical utility installation, relocation and protection (CUT) (works completed as of 11 October 2023)
- Stage 1B – Cammeray Golf Course adjustment works (CGC) (works completed as of 26 May 2023)
- Stage 1C – Massey to Amherst noise wall (M2A) (works completed as of 10 February 2023)
- Stage 1D – WHT construction power and utilities (WHTCP) (Works cancelled as of December 2022)
- Stage 1E – Berry's Bay – Berry's Bay archaeological investigation (BB)

**Stage 2 – Warringah Freeway Upgrade project:**

- Stage 2 – Warringah Freeway Upgrade (WFU) (commencement of construction 23 May 2022)

**Stage 3 – Western Harbour Tunnel project (WHT):**

- Stage 3A – WHT Southern Tunnel Works (commencement of construction 30 January 2023)
- Stage 3B - Northern Tunnelling and Integration works (commencement of construction 22 May 2023),
- Stage 3C – Sydney Harbour Crossing between Birchgrove and Balls Head, Waverton, which includes;
    - Excavation of about 1.8 km of twin mainline tunnels using Tunnel Boring Machine (TBM) methodology.
    - Use of Ridge Street North (WHT9) as a tunnelling support site, including the construction of an acoustic shed.
    - Construction and operation of an additional construction ancillary facility at Emu Plains (WHT13), primarily for the prefabrication and storage of tunnel lining segments, box culverts and other pre-cast concrete elements.
    - Construction of Berrys Bay foreshore parkland

Further information on the works comprising each stage is contained in Section 2.2.

### 2.1.1 The Staging Rationale

The rationale for the staged construction and operation of the project is based on the following considerations:

- Making the scope of the project more manageable by dividing the works into numerous construction contracts
- Ensure the following pre-construction activities are carried out ahead of main construction activities, to ensure they can continue unhindered:
    - Critical utility installation, relocation and protection.
    - Cammeray Golf Course adjustment works.
    - Installation of the Massey to Amherst noise wall.
    - Installation of construction power and utilities for tunnelling support sites, and
    - Archaeological investigations.
- Minimising impacts on key stakeholders by relocating utilities and golf course facilities prior to the main works
- Limit as far as possible concurrent activities at any one time, minimising cumulative impacts within the construction footprint
- Action and satisfy proposed REMMs as detailed in the project EIS/RtS. This approach is intended to mitigate impacts on the community and environment, ahead of expected construction impacts
- Keeping with Government advice on staggering activities to limit the potential spread of COVID 19
- Result in a shorter construction program overall, as well as earlier completion of the asset.

The project will be operated in two stages, with the operation of the WFU and WHT projects commencing in accordance with the staged construction strategy.

## 2.2 Construction Stages

### 2.2.1 Early and enabling works

The early and enabling works comprise the following stages:

- Critical utility installation, relocation and protection (CUT).
- Cammeray Golf Course adjustment works (CGC).
- Massey to Amherst noise wall (M2A).
- Construction power and utilities for WHT (WHTCP), and
- Berry's Bay archaeological investigation works (BB).

#### 2.2.1.1 Critical utility installation, relocation and protection (CUT)

The critical utility installation, relocation and protection stage of the project will include the following works:

- Alfred Street North, Neutral Bay
    - Relocation of existing in-ground Sydney Water sewer mains
    - Relocation and undergrounding of existing Ausgrid overhead and in-ground assets
    - Relocation of existing communication provider assets, including Telstra (in-ground), Optus (including overhead and in-ground assets), TPG (in-ground assets) and NBN (in-ground assets)
- Arthur Street/High Street, North Sydney
    - Relocation of existing in-ground Ausgrid assets
    - Relocation of various in-ground communication provider assets, including Vocus, Optus, Verizon, TPG, UeComm and Telstra
    - Relocation of two existing Sydney Harbour Tunnel fire hydrant booster stations on Arthur Street and Mount Street
    - Relocation of existing in-ground 415V feed to Sydney Harbour Tunnel control room
    - Installation of enabling infrastructure and equipment for Sydney Harbour Tunnel ITS Gantry
- Cammeray Avenue / Ernest Street / Cammeray Golf Course
    - Relocation of existing in-ground Ausgrid assets
    - Removal of existing disused in-ground 132kV and 33kV Ausgrid assets
    - Relocation of existing in-ground Sydney Water sewer and potable water mains
    - Relocation of existing in-ground UeComm communication provider assets
    - Installation of new permanent Intelligent Transport System (ITS) node and temporary connections
    - Installation of temporary construction power supply along Ernest Street from Ben Boyd Road to the Cammeray Golf Course site (WHT10).
- Sydney Harbour Bridge*
    - Installation of enabling infrastructure and equipment on the existing ITS Gantry 9
    - Gantry leg reinforcement
    - Installation of power and communications infrastructure

    *These works are the subject to a Heritage Impact Assessment and consistency assessment to demonstrate an improved outcome for the heritage impacts on the Sydney Harbour Bridge.

#### 2.2.1.2 Cammeray Golf Course adjustment works (CGC)

The Cammeray Golf Course adjustment works include works required under REMMs WQ8 and LP7, and CoA E101, E197 and E209, including:

- Installation of a new permanent replacement stormwater harvesting dam (and associated infrastructure) within Cammeray Golf Course prior to decommissioning of the existing dam
- An active transport link through Cammeray Golf Course between Ernest Street and Warringa Road / Bells Avenue, Cammeray must be provided prior to the removal of the existing path, and
- Adjustments to the golf course to maintain its viability, including:
    - Demolition and removal of redundant paths
    - Installation of a temporary Active Transport Link*

*note: these works are proposed to be undertaken as low-impact works, prior to works under the CEMP, subject to the assessment outlined in section 3.3.1

    - Vegetation trimming and removal
    - Utility protection and adjustment works
    - Earthworks and construction of retaining walls
    - Installation of irrigation and drainage infrastructure for the 9 hole golf course
    - Landscaping and plantings for 9 hole golf course.

#### 2.2.1.3 Massey to Amherst Street noise barrier

The existing Massey to Amherst Street noise barrier is impacted by the widening of the Warringah Freeway and the installation of the new noise barrier is programmed to occur before the start of the construction of the Warringah Freeway Upgrade. The works will include:

- Vegetation trimming and removal
- The demolition and removal of the existing noise wall section
- Excavation and civil works
- Construction of pile foundations and footings
- Construction and installation of new noise barrier
- Reinstatement works including backfilling, installation of rock face, fencing, and landscape paving
- Road reinstatement works including mill and re-sheet, and line marking.

#### 2.2.1.4 Construction power and utilities for WHT

The construction power and utility installation for Western Harbour Tunnel has been cancelled due to further design development associated with the change in methodology for Stage 3C.

#### 2.2.1.5 Berrys Bay archaeological investigation works (BB)

The ancillary facility proposed at Berrys Bay in the EIS (WHT7) is no longer required due to the change in construction methodology outlined in WHT Modification 2,

Due to the Berrys Bay masterplan works, and in accordance with the CoA and REMMs, TfNSW has undertaken archaeological investigation works at the BP Site, Waverton.

The archaeological investigation works included;

- Undertaking archaeological salvage excavations.
- Recording results, and
- Reinstating site in original condition.

### 2.2.2 Warringah Freeway Upgrade project

The Warringah Freeway Upgrade works will include:

- Assessment and installation of at-property treatments and noise walls to mitigate construction noise from the project
- Site preparation works including clearing of vegetation, installation of temporary fencing and hoarding, installation of environmental controls including erosion and sedimentation controls
- Establishment of ancillary facilities at 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 (WFU9), Wicks Road (WFU10) and Northern Hub (NH1)
- Operation of ancillary facilities at High Street south (WFU2), High Street north (WFU3), Arthur Street east (WFU4), Berry Street east (WFU5), Ridge Street east (WFU6), Ridge Street North (WHT9), Merlin Street (WFU7), Cammeray Golf Course (WFU8), Rosalind Street (WFU9), Wicks Road (WFU10) and Northern Hub (NH1)
- Preparation of the Cammeray Golf Course construction support site for the benefit of the WHT works and proposed BL works
- Establishment and operation of the Wicks Road construction support site (WFU10) as the principal materials storage and stockpiling location.
- Utility installation, relocation and protection (in addition to the CUT stage works), including new and relocated drainage and installation of Intelligent Transport System (ITS):
    - Under bore and service relocation from Ernest Street through Cammeray Avenue to Rosalind Street
    - ITS node construction (move from Ernest Street to Rosalind)
    - Northbound verge ITS trenching works (between Ch2800-Ch3050)
- CCTV and cleaning of existing drainage structure
- Construction of retaining walls, including excavation, piling, installation of concrete footings, provision of structural support (i.e., rock anchors or soil nails), shotcreting, drainage structures, installation of panels and backfilling of retaining wall structure
- Construction of the new Ridge Street Pedestrian Bridge, including localised excavation, piling, concrete works, roadworks, installation of bridge spans, stairs and ramp and demolition works
- Bridge modifications and widening works to the Mount Street bridge and Falcon Street bridge and entry and exit ramps including installation of traffic barriers, concrete works, installation of structural steel, installation of drainage, asphalting and line marking
- Realignment of traffic including demolition of existing barriers, rock walls, drainage, lighting and signage, asphalting works
- Construction of the bridge over Alfred Street exit ramp including excavation and concrete works
- High Street bridge widening and ramps including piling and concrete works

- Bulk earthworks for the widening of the Warringah Freeway into the Cammeray Golf Course, including the micro tunnel for the Green Park drainage pipe (1500mm diameter) from the (proposed) Beaches Link compound
- Construction of Warringah Freeway southbound bus lanes including piling and concrete works
- Construction of the Mount Street (North Street) and Ernest Street (Cammeray) underpasses including excavation, piling and concrete works.
- Construction of the inner carriage way:
    - Directional sign removal and relocation to Ernest Street
    - Rock excavation and piling for the WHT cut and cover structure
- Demolition and construction of footpaths at the Falcon and Miller Street intersection
- Installation of stormwater drainage
- Upgrade or capacity improvements of other cross drainage structures which cross underneath the Warringah Freeway
- Upgrade and capacity improvements to the drainage pipelines along the on and off ramps connecting the Warringah Freeway with the existing culvert crossing near Brook Street at Cammeray/Crows Nest
- Upgrading local and arterial roads connecting to the Warringah Freeway Upgrade
- Road pavement works
- Installation of shared user paths and cycleways
- Surface finishing works such as line marking and the installation of directional signage and other roadside furniture
- Final landscape treatments and rehabilitation works
- Testing and commission works
- Site clean-up and demobilisation including the reinstatement of construction support sites, post construction condition surveys, removal of construction-related signage, and the removal of construction-related environmental controls and traffic management infrastructure.

### 2.2.3 Western Harbour Tunnel Project (WHT)

The Western Harbour Tunnel project includes:

- Twin mainline tunnels about 6.5 kilometres long connecting the M4-M5 Link at Rozelle to the Warringah Freeway, near Cammeray
- A crossing of Sydney Harbour between Birchgrove and Balls Head using TBM methodology
- Underground connections to the M4-M5 Link project beneath Rozelle
- Tunnelled ramps and surface connections at Rozelle, North Sydney and Cammeray, including direct connections to and from the Warringah Freeway (including integration

with the Warringah Freeway Upgrade), an off ramp to Falcon Street and an on ramp from Berry Street at North Sydney

- Fit out and commissioning of a ventilation outlet and motorway facilities at the Rozelle Interchange
- Construction of a ventilation outlet and motorway facilities at the Warringah Freeway in Cammeray
- Operational facilities including a motorway control centre at Waltham Street, in the Artarmon industrial area, and tunnel support facilities at the Warringah Freeway in Cammeray
- Other operational infrastructure including groundwater and tunnel drainage management and treatment systems, signage, tolling infrastructure, fire and life safety systems, lighting, emergency evacuation and emergency smoke extraction infrastructure, CCTV and other traffic management systems.
- Design and construction of Berrys Bay foreshore parkland.

#### 2.2.3.1 Stage 3A – WHT Southern Tunnels Package

The WHT Southern Tunnels Package includes:

- Twin mainline tunnels about two kilometres long and each accommodating three lanes of traffic in each direction, connecting with the stub tunnels from the M4-M5 Link at Rozelle.
- Connections to the stub tunnels at the M4-M5 Link project in Rozelle.
- Ventilation cavern and tunnel excavation in Rozelle and Balmain.
- Limited in tunnel operational infrastructure including road pavement and drainage to enable Stage 3B works.

#### 2.2.3.2 Stage 3B – WHT Northern Tunnelling and Integration works

The WHT Northern Tunnels work includes:

- Excavation of twin mainline tunnels about 2.5 kilometres long and each accommodating three lanes of traffic in each direction, connecting portals adjacent to the Cammeray Golf Course to the Harbour Crossing section of the tunnel at Berrys Bay.
- Excavation of Falcon Street off-ramp tunnel.
- Excavation of Berry Street on-ramp tunnel.
- Cut and cover infrastructure surface construction at the Ridge Street North construction support site (WHT9), Berry Street and the Warringah Freeway portals.
- Integration works including Mechanical and Electrical (M&E) fit out for the Southern and Northern tunnelling sections, paving, surface connections, ventilation cavern fit out, integration and fit out of the Motorway Operation Centre (MOC) and Motorway Control Centre (MCC)
- Establishment and operation of White Bay (WHT3) – southern portion. The northern portion of WHT3 as described in the EIS will not be used); Ridge Street North (WHT9), and Cammeray Golf Course (WHT10) construction support sites.
- Operation of the City West Link Portal tunnelling support site (WHT12) after the completion of Stage 3A.

- Installation of acoustic structures.
- Utilities connections including but not limited to power, potable water, sewerage.
- Carrying out of surveys, test drilling, test excavations, geotechnical or contamination investigations or other tests or surveys, sampling or investigation

Noting that Stage 3B will be carried out concurrently with Stage 3C.

#### 2.2.3.3 Stage 3C – WHT Sydney Harbour Crossing

The WHT Sydney Harbour Crossing work includes:

- Excavation of about 1.8 km of twin mainline tunnels using Tunnel Boring Machine (TBM) methodology.
- Construction of launch chambers beneath Birchgrove, and receival chambers and burial beneath the Waverton Peninsula.
- Establishment and operation of an underground slurry treatment plant within an existing ventilation cavern (constructed by the Stage 3A contractor).
- Establishment and operation of an underground Water Treatment Plant.
- Establishment and operation of an underground grout batching plant.
- Access and egress via City West Link Portal (WHT12) for:
    - Spoil removal.
    - Materials and equipment delivery, including concrete tunnel segments and box culverts.
- Use of Ridge Street North (WHT9) as a tunnelling support site, including the construction of an acoustic shed.
- Construction and operation of an additional construction ancillary facility at Emu Plains (WHT13), primarily for the prefabrication and storage of tunnel lining segments, box culverts and other pre-cast concrete elements.
- Design and construction of Berrys Bay foreshore parkland
- Noting that Stage 3B will be carried out concurrently with Stage 3C.

There are instances on the Project where installation, relocation, adjustment and protection of utilities services are required to be performed by the asset owner. Often these works are non-contestable and performed under the *Energy and Utilities Administration Act 1987* or other applicable legislations. These works would not fall under the Project's Planning Approval, and are not subject to the Project's management plans (C1 – C21). The Project remains responsible to comply with Planning Approval condition E82 and E154 for the coordination of the works. These non-contestable works include:

- Jemena gas installation work across Mackellar Street, Emu Plains

## 2.3 Operation Stages

Operation of the project would be staged as per construction staging, with the WFU stage to commence operation (2025) prior to the WHT stage (2028).

The staging report is focused on construction and any further proposed staging of operation will be addressed by revising the report as per CoA A14 (refer Section 2.5).

## 2.4 Indicative timing

Construction of the WHTWFU project commenced in 2021, with completion of construction in 2028. Early and enabling works as well as site establishment works, were programmed to be carried out first on the project, substantial construction starting in 2022.

An indicative construction and operational program is shown in Table 2 for each stage. The timing specific to each stage will be subject to review as the procurement processes evolve.

## 2.5 Changes to the Staging

Where changes are proposed to the staging of construction or operation, a revised Staging Report will be prepared, endorsed by the ER and submitted to the Planning Secretary for information no later than one month prior to the proposed changed in the staging.

## 2.6 Revisions to the CEMP and Sub-plans

Condition of Approval C10 states that "Where construction of the CSSI is staged, construction of a stage must not commence until the CEMP and sub-plans for that stage have been endorsed by the ER and approved by the Planning Secretary".

Where updates to the CEMP or Sub-plans are required for phases of the main construction stages, and these changes are minor; do not increase impacts to nearby receivers; or administrative in nature, the ER can approve these changes in accordance with CoA A27(i).

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**Table 2: Indicative construction and operation stage timeframes**

| Stage | Indicative construction and operation program | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2021 | | | | 2022 | | | | 2023 | | | | 2024 | | | | 2025 | | | | 2026 | | | | 2027 | | | | 2028 | | | | 2029 | | | |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| 1A – Critical utility installation, relocation and protection (CUT) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1B – Cammeray Gold Course adjustment works | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1C – Massey to Amherst noise barrier (M2A) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1D – Western Harbour Tunnel construction power (WHTCP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1E – Maritime Heritage (MH) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1F – Berry's Bay investigation works (BB) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 – Warringah Freeway Upgrade (WFU) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3A – Western Harbour Tunnel (WHT) – Southern Tunnelling Works | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3B – Western Harbour Tunnel (WHT) – Northern Tunnelling and Integration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3C – Western Harbour Tunnel (WHT) – Harbour Crossing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Construction

Operation

## 2.7 Cumulative impacts

Cumulative impacts may occur as a result of the project stages being constructed concurrently, or consecutively, with other stages of the project and/ or other approved CSSI or SSI projects in the area, including Stage 1 Early and enabling works, Stage 2 Warringah Freeway Upgrade, Stage 3 Western Harbour Tunnel, WestConnex M4-M5 Link and Rozelle Interchange, Sydney Metro West and the proposed Beaches Link and Gore Hill Freeway Connection project (subject to approval).

TfNSW has elected to stage the Project in an effort to reduce cumulative impacts from the Project overall. This will result in a shorter construction program, reducing the impact and duration in any one work area, as well as an earlier completion of the asset.

Cumulative impacts during construction of the project stages will be managed through compliance with the relevant CoAs, coordination meetings between TfNSW, its contractors, external agencies and stakeholders, and environmental management measures related to key environmental impacts including traffic and access, noise and vibration and construction fatigue.

Key CoAs established to manage cumulative impacts during construction of the project stages include but are not limited to:

- E69 (Out-Of-Hours Work Protocol) to facilitate the coordination of out-of-hours work to ensure appropriate respite is provided to the community
- E82 (Utility Coordination and Respite) to coordinate and ensure respite periods are provided for all work undertaken for the delivery of the CSSI, including those undertaken by third parties (such as utility relocations)
- E83 (Out-of-Hours Works – Community Consultation on Respite) to ensure appropriate respite periods for out-of-hours work are implemented in consultation with the community at each affected location on a regular basis
- E139 (Construction Parking Management) to manage light and heavy vehicle use associated with the CSSI and impacts to the community
- E140 (Construction Parking and Access Strategy) to manage impacts resulting from on- and off-street parking changes during construction of the CSSI
- E154 (Utility Coordination Manager) to manage and coordinate all utility work associated with the delivery of the CSSI and to ensure respite is provided to the community

Further details of how compliance with these requirements will be achieved, monitored and reported during construction are provided in section 3.

Other mechanisms to mitigate cumulative impacts from the CSSI and its multiple stages are provided in sections 2.6.1 to 2.6.5.

### 2.7.1 Traffic management

Coordination meetings between TfNSW, Contractors and Transport Management Centre (TMC)/ Sydney Coordination Office (SCO) will occur on a regular basis throughout the delivery of the CSSI and its multiple stages. Key issues for discussion at the traffic coordination meetings will include ROLs and any other traffic changes or impacts as a result from the CSSI.

### 2.7.2 Noise mitigation

OOHW coordination meetings chaired by TfNSW, with representatives from other Contractors (and other projects stages and CSSI projects), including Utility Authorities, working in the vicinity of the project will occur on a weekly basis. The purpose of these meetings is to coordinate out of hours works, to minimise cumulative noise and vibration impacts and maximise respite for affected sensitive receivers as required by the Planning Approval.

TfNSW has also taken the proactive approach and has started to implement a project specific Noise Insulation Program for at property treatment to minimise noise impacts as a result of the CSSI. For further information on noise mitigation and the Noise Insulation Program, refer to https://v2.communityanalytics.com.au/rms/wht/noise.

### 2.7.3 Interface management

The project has multiple interfaces that will be managed, and specific interface agreements will be required for the purpose of facilitating and promoting coordination with relevant third parties such as utility providers and other CSSI/SSI projects.

TfNSW contractor's will be required to enter into an Interface Deed with Contractors and Utility Providers in which they interact with i.e., WFU Contractor will be required to enter into an Interface Deed with the WHT Contractor and the BL Contractor, to coordinate works and minimise cumulative impacts.

### 2.7.4 Visual amenity and landscape mitigation

The WHTWFU project elements at Cammeray will be constructed in close proximity to elements for the proposed BL project. When preparing the Beaches Link and Gore Hill Freeway Connection environmental impact statement operational landscape and visual amenity impacts were assessed cumulatively with the WFU project. The urban and landscape designs for both projects in this area will be developed to be sympathetic with and consistent with each other, thus minimising cumulative impacts from the projects.

### 2.7.5 Other measures to minimise cumulative impacts

In order to minimise cumulative impacts TfNSW will have oversight of projects' construction programs and the ability to identify potential cumulative impacts as to the duration and nature (visual, noise, traffic, business disruptions). Once the potential impacts are identified, TfNSW and its principal contractors will trigger appropriate management measures including; for example, hours of operation, respite and other noise mitigation measures (screening, community consultation as to alternate work programs etc.).

The suite of management measures best adapted to the impacted zone will be determined through community consultation. The steps to managing cumulative impacts are:

- Community Stakeholder and Engagement Managers' and Environment and Sustainability Managers' to identify suite of REMMs to address cumulative impact via liaison with Sydney Coordinating Office, Councils and other stakeholders or sensitive receivers
- Develop suitable suite of management measures applicable to the area
- Separation of time and place, staging/phasing works to minimise cumulative impacts
- Progressively build cumulative management measures into the respective CEMP/ Sub plans, for example CNVIS, and Traffic Management Plans for specific areas
- Monitor complaints to identify unexpected/emerging cumulative impacts

- Up-date approach and revised CEMP and specific sub-plan updates, as needed.

# 3. Compliance

## 3.1 CoA and REMMs

The applicability of the CoA and REMMs to each stage of the project has been assessed, allocated and confirmed. These allocations to each stage of the project are tabled in Appendix A and Appendix B respectively:

- Where a CoA or REMM has been determined to be relevant to a stage, it is defined as Applicable to that stage. This indicates that the CoA or REMM will be fully complied with during the stage
- Where a CoA or REMM does not relate to the stage, it is defined as Not Applicable. This indicates that the CoA or REMM may not be complied with during the stage
- Where only part of a CoA or REMM relates to the stage, it is defined as Partial. This indicates that the CoA or REMM will be at least partially complied with during the stage to the degree explained in Appendix A or Appendix B.

In the event where there is a refinement in design or construction methodology, the change will be considered in the context of consistency with the Minster's approval for the Project. The applicability to the CoA and REMMs to that stage shall also be reviewed as part of the consistency assessment.

Should a project modification be undertaken that requires a change to the MCoAs or REMMs, the staging report will be revised, following approval of the modification, to reflect any changes to the condition allocations.

## 3.2 Construction Environmental Management Framework

Consistency in environmental management across each stage of the project will be achieved through the implementation of the WHTWFU Construction Environmental Management Framework (CEMF). The CEMF formed part of the Western Harbour Tunnel and Warringah Freeway Upgrade Response to Submissions Report (RtS) and provides a linking document to the Construction Environmental Management Plans (produced by the Proponent and contractors). A link to the CEMF contained in the RtS is provided in Appendix C.

The CEMF provides a whole-of-construction life-cycle approach to construction environmental management and sets the environmental and community engagement requirements for construction. More specifically, it details:

- The Construction Environmental Management Plans (CEMPs), sub-plans and other supporting documentation for each environmental management category (i.e., noise and vibration, visual amenity, etc.)
- Key issues that each sub plan would address, along with the relevant guidelines or requirements each plan would be prepared in accordance with.

The requirements of the CEMF have been allocated to each stage of the project by indicating the applicability of each section of the CEMF to each stage. These allocations are provided in Appendix C.

Compliance with the CEMF will help achieve the environmental performance outcomes for the project. These performance outcomes outline the broader objectives to be achieved by TfNSW in the design, construction and operation of the project.

## 3.3 Environmental management approach

The project contractors are required to adhere to and implement the requirements of the CEMF to a degree that is appropriate to the applicable stage of construction / operation. The applicability of the CEMF to each active stage allows for effective and efficient management of environmental issues that is commensurate to the impacts of each project stage on each environmental management category. Table 3 indicates the applicability of the requirements relating to each CEMF environmental management category to each stage of the project. This includes for each environmental management category:

- Whether a stand-alone sub-plan will be prepared ('Sub-plan')
- Whether the category risks will be addressed in the main CEMP document in the form of a procedure ('P'), or
- Whether the risk is not relevant to the scope of work and is not addressed within the CEMP (Not Applicable).

This assessment was based on each project stage's scope of work, relevant CoA and REMMs requirements. The corresponding CoA for each management plan or monitoring program are identified within the table. Additional plans and programs identified in the CoA, not specifically referenced in the CEMF have also been included. Table 3 also outlines the tool (i.e., CEMP or low impact works), which would be used to manage environmental requirements during the stage of the project.

### 3.3.1 Low impact works

Each stage of the project would include some "low impact work" (refer to definitions section and CoA), which would become "construction" following approval of the CEMP for that applicable stage. In some instances, "low impact work" for a later stage may occur following approval of a CEMP for an earlier, separate stage, e.g., "low impact work" undertaken as part of the Warringah Freeway Upgrade (Stage 2) may occur following approval of the CEMP for the Critical utility installation, relocation and protection stage in Stage 1A.

Low Impact Works will only occur after the following activities have been undertaken:

- Consideration of relevant regulatory requirements
- Identification of relevant Conditions of Approval (CoA), Environmental Performance Outcomes (EPOs) and Revised Environmental Mitigation Measures (REMMs)
- Preparation of a Low Impact Works Approval Form to confirm that the works do not represent 'Construction' in accordance with the applicable planning approval. This application must include (as a minimum):
    - Detailed description of the proposed works
    - Environmental risk assessment (including identification of actual and potential environmental impacts)
    - Identification of mitigation measures to be implemented to address any actual or potential environmental risks and/or impacts (including details on community consultation relevant to the works)
    - Environmental Control Map, or similar, and

- Endorsement by the Environmental Representative as necessary in accordance with the nature of the Low Impact Works and/or the definition of 'Construction' in the CSSI planning approval.

**Table 3: CEMF and Construction Environmental Management Tool Applicable to each Stage**

| Stage | 1A | 1B | 1C | 1D | 1E | 2 | 3A | 3B | 3C |
|---|---|---|---|---|---|---|---|---|---|
| **CEMF (Relevant CoA)** | **CUT** | **CGC** | **M2A** | **WHTCP** | **BB** | **WFU** | **WHT STP** | **WHT NIW** | **WHT HC** |
| **Construction Environmental Management Tool** | CEMP | CEMP | CEMP | Low Impact Works Approval | Low Impact Works Approval | CEMP | CEMP | CEMP | CEMP |
| **Traffic, Transport and Access (CoA C4(a))** | Sub-plan | Sub-plan | Sub-plan | Low-impact Assessment | Low-impact Assessment | Sub-plan | Sub-plan | Sub-plan | Sub-plan |
| **Noise and vibration (CoA C4(b))** | Sub-plan | Sub-plan | Sub-plan | Low-impact Assessment | Low-impact Assessment | Sub-plan | Sub-plan | Sub-plan | Sub-plan |
| **Flora and Fauna (CoA C4(c))** | P | Sub-plan | P | Low-impact Assessment | Low-impact Assessment | Sub-plan | P | Sub-plan | Sub-plan |
| **Air Quality (CoA C4(d))** | P | P | P | Low-impact Assessment | Low-impact Assessment | Sub-plan | Sub-plan | Sub-plan | Sub-plan |
| **Soil and Surface Water (CoA C4(e))** | P | Sub-plan | P | Low-impact Assessment | Low-impact Assessment | Sub-plan | Sub-plan | Sub-plan | Sub-plan |
| **Groundwater (CoA C4(f))** | N/A | N/A | N/A | N/A | N/A | P | Sub-plan | Sub-plan | Sub-plan |
| **Maritime Heritage (CoA C4(g))** | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Sub-plan |
| **Non-Aboriginal Heritage (CoA C4(h))** | P | P | P | Low-impact Assessment | Low-impact Assessment | Sub-plan | P | Sub-plan | Sub-plan |
| **Aboriginal Cultural Heritage (CoA C4(i))** | P | P | P | Low-impact Assessment | Low-impact Assessment | P | P | N/A | Sub-plan |
| ***Dredging and Disposal (CoA C4(j))*** | *Removed as part of MOD2* | | | | | | | | |
| **Noise and vibration monitoring program (CoA C11(a))** | Included in sub-plan | Included in sub-plan | Included in sub-plan | Low-impact Assessment | Low-impact Assessment | Included in sub-plan | Included in sub-plan | Included in sub-plan | Included in sub-plan |
| **Air Quality Monitoring Program (CoA C11(b))** | P | P | P | Low-impact Assessment | Low-impact Assessment | Included in sub-plan | Included in sub-plan | Included in sub-plan | Included in sub-plan |
| **Surface Water Monitoring Program (CoA C11(c))** | P | P | P | Low-impact Assessment | Low-impact Assessment | Included in sub-plan | Included in sub plan | Included in sub-plan | Included in sub-plan |
| **Groundwater Monitoring Program (CoA C11(d))** | N/A | N/A | N/A | N/A | N/A | P | Included in sub plan | Included in sub-plan | Included in sub-plan |
| ***Marine Monitoring Program (CoA C11(e))*** | *Removed as part of MOD2* | | | | | | | | |
| ***Dredging Monitoring Program (CoA C11(f))*** | *Removed as part of MOD2* | | | | | | | | |

*Note: Should a project modification be undertaken that requires a change to the MCoAs or REMMs, Table 3 will be revised and amended to illustrate CEMF approaches, following approval of the modification, to reflect any changes to the condition allocations.*

## 3.4 Compliance Monitoring

Several layers of compliance checking will be applied during the construction of the CSSI. Contractors will maintain their own internal audit program to ensure they meet the requirements set out in the CoA and contract. TfNSW will conduct an additional auditing program across all stages with a specific focus on compliance with the conditions of approval. TfNSW will monitor compliance with the Planning Approval across all stages through surveillance, environmental inspections, record-keeping and contractor compliance reporting.

TfNSW has engaged an independent ER and Acoustic Advisor (AA) for the early and enabling works relating to WFU (Stage 2). TfNSW has engaged a separate ER and AA for WHT Stage 3A, Stage 3B and Stage 3C, and WHT Stage 1E. The ERs will:

- Undertake regular site inspections with the Contractor's environmental managers and TfNSW representatives
- Review compliance with the approvals on a periodic basis
- Review management plans and provide advice in relation to the level of risk associated with construction works
- Provide independent advice on matters relating to compliance to the Contractors, TfNSW and DPHI if requested.

## 3.5 Independent Environmental Auditing

Independent Audits of the CSSI will be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (DPIE, 2020).

The purpose of an Independent Audit is to obtain an independent and objective assessment of the environmental performance and compliance status of a project. Independent Audits differ from other compliance reporting requirements that may apply as they are undertaken and reported by an independent auditor, rather than an Authorised Reporting Officer. Proposed independent auditors will be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.

## Appendix A Applicability of Conditions of Approval to each stage

Table 4 has been based on the WHTWFU conditions of approval as issued by DPHI on 27 January 2024. This document is attached at the end of this table.

Items listed as “Not Applicable” have been identified as CoAs that will not be triggered under the scope of the relevant project stage. As identified in Section 3.1, should a project modification be undertaken that requires a change to the MCoAs or REMMs, the following table will be updated, following approval of the modification, to reflect any changes to the condition allocations.

**Table 4: Applicability of Conditions of Approval to each Stage**

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| General | A1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A6 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A7 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A8 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Noise Insulation Program | A9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| Staging | A10 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A11 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A12 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A13 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A14 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A15 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Ancillary Facilities | A16 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Site-Establishment Works | A17 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable – minor construction ancillary facilties would be established and operated in accordance with the low impact works approval* | Not Applicable – minor construction ancillary facilities would be established and operated in accordance with the low impact works approval | Applicable | Not Applicable | Applicable | Applicable |
| | A18 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable – the works are defined as Low Impact Works and so the | Applicable | Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | requirements of the CEMP do not apply | | | | |
| | A18A | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | A19 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A20 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Independent Appointment | A21 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A22 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A23 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Environmental Representative | A24 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A25 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A26 | *Applicable – the Proponent will engage two Environmental Representatives – one for WFU works and one for WHT works* | *Applicable – the Proponent will engage two Environmental Representatives – one for WFU works and one for WHT works* | *Applicable – the Proponent will engage two Environmental Representatives – one for WFU works and one for WHT works* | *Applicable – the Proponent will engage two Environmental Representatives – one for WFU works and one for WHT works* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A27 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A28 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Acoustics Advisor | A29 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A30 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A31 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A32 | *Applicable – the Proponent will engage two Acoustic Advisors – one for WFU works and one for WHT works* | *Applicable – the Proponent will engage two Acoustic Advisors – one for WFU works and one for WHT works* | *Applicable – the Proponent will engage two Acoustic Advisors – one for WFU works and one for WHT works* | *Applicable – the Proponent will engage two Acoustic Advisors – one for WFU works and one for WHT works* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A33 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A34 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Notification of Commencement | A35 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A36 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Auditing | A37 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A38 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | A39 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | A40 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | A41 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | A42 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | A43 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| Incident and Non-Compliance Notification and Reporting | A44 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A45 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | A46 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Identification of Workforce and Compounds | A47 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | A48 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Community Information, Consultation and Involvement | B1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Public Liaison Officer | B6 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Complaints Management System | B7 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B8 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B9 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B10 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B11 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B12 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B13 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B14 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Provision of Electronic Information | B15 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Construction Environmental Management Plans | C1 | *Applicable – Refer to Appendix C for applicable CEMF requirements for each stage* | *Applicable – Refer to Appendix C for applicable CEMF requirements for each stage* | *Applicable – Refer to Appendix C for applicable CEMF requirements for each stage* | *Not Applicable – the WHTCP are defined as 'low impact works' and are not construction; environmental risks associated with the works will be addressed in accordance with Table 3.* | Not Applicable – the BB works are defined as 'low impact works' and are not construction; environmental risks associated with the works will be addressed in accordance with Table 3. | Applicable – Refer to Appendix C for applicable CEMF requirements for each stage | Applicable – Refer to Appendix C for applicable CEMF requirements for each stage | Applicable – Refer to Appendix C for applicable CEMF requirements for each stage | Applicable – Refer to Appendix C for applicable CEMF requirements for each stage |
| | C2 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable – refer to Table 3* | Not Applicable – refer to Table 3 | Applicable | Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| Construction Monitoring Programs | C3 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable – refer to Table 3* | Not Applicable – refer to Table 3 | Applicable | Applicable | Applicable | Applicable |
| | C4 | *Partial – refer to Table 3* | *Partial – refer to Table 3* | *Partial – refer to Table 3* | *Not Applicable – refer to Table 3* | Not Applicable – refer to Table 3 | Partial – refer to Table 3 | Partial – refer to Table 3 | Partial – refer to Table 3 | Applicable |
| | C5 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable – refer to Table 3 | Applicable | Applicable | Applicable | Applicable |
| | C6 | *Partial – refer to Table 3* | *Applicable* | *Partial – refer to Table 3* | *Not Applicable – refer to Table 3* | Not Applicable – refer to Table 3 | Applicable | Not Applicable | Applicable | Applicable |
| | C7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable – refer to Table 3 | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | *C8** | | | | | | | | | |
| | C9 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable – refer to Table 3 | Applicable | Applicable | Applicable | Applicable |
| | C10 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable – refer to Table 3 | Applicable | Applicable | Applicable | Applicable |
| | C11 | *Partial – refer to Table 3* | *Partial – refer to Table 3* | *Partial – refer to Table 3* | *Not Applicable – refer to Table 3* | Not Applicable – refer to Table 3 | Partial – refer to Table 3 | Partial – refer to Table 3 | Applicable | Applicable |
| | C12 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | C13 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable – refer to Table 3* | Not Applicable – refer to Table 3 | Applicable | Applicable | Applicable | Applicable |
| | C14 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | *C15** | | | | | | | | | |
| | *C16** | | | | | | | | | |
| | C17 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | C18 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | C19 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | C20 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | C21 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Operational Environmental Management | D1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | D2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | D3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | D4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| Operational Monitoring Program | D5 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | D6 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | D7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | D8 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | D9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | D10 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | D11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | D12 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | D13 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| Air Quality and Odours | E1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | E3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | E4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| Air Quality Goals | E5 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E6 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E8 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E10 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E12 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and | Applicable for design and |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | construction elements of this condition. | construction elements of this condition. |
| | E13 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E14 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E15 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E16 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | E17 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | E18 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E19 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | E20 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E21 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E22 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E23 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| Ambient Air Quality | E24 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E25 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E26 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E27 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E28 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E29 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E30 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E31 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E32 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E33 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |
| | E34 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable for design and construction elements of this condition. | Applicable for design and construction elements of this condition. |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| Biodiversity | E35 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E36 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E37 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | E38 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E38A | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E39 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Applicable |
| | E40 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E40A | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E41 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Microbat Monitoring Program will be developed if it is determined that microbats will be impacted by the work in this stage. | Microbat Monitoring Program will be developed if it is determined that microbats will be impacted by the work in this stage. |
| | E42 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not triggered unless E41 is triggered. | Not triggered unless E41 is triggered. |
| | E43 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not triggered unless E41 is triggered. | Not triggered unless E41 is triggered. |
| | E44 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not triggered unless E41 is triggered. | Not triggered unless E41 is triggered. |
| | *E45** | | | | | | | | | |
| | *E46** | | | | | | | | | |
| | *E47** | | | | | | | | | |
| | E48 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| Flooding | E49 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E49A | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E49B | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E49C | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| Aboriginal Cultural Heritage | E50 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Non-Aboriginal Heritage | E51 | *Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E52 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | *E53** | | | | | | | | | |
| | *E54** | | | | | | | | | |
| | E55 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E56 | *Applicable* | *Not Applicable* | *Not Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E57 | *Applicable* | *Not Applicable* | *Not Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E58 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E59 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable – if triggered by E58 | Applicable – if triggered by E58 |
| | E60 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable – if triggered by E58 | Applicable – if triggered by E58 |
| | E61 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable – if triggered by E58 | Applicable – if triggered by E58 |
| | E62 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable – if triggered by E58 | Applicable – if triggered by E58 |
| | E63 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E64 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Noise and Vibration | E65 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E66 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E67 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E68 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E69 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E70 | *Applicable* | *Applicable* | *Applicable* | *Applicable – works exceeding noise management levels and / vibration criteria would be managed in accordance with low impact works approval* | Applicable – works exceeding noise management levels and / vibration criteria would be managed in accordance with low impact works approval | Applicable | Applicable | Applicable | Applicable |
| | E71 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E72 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E73 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | E74 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E74A | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E75 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E76 | *Applicable* | *Applicable* | *Applicable* | *Applicable – properties would be identified in the low impact works approval* | Applicable – properties would be identified in the low impact works approval | Applicable | Applicable | Applicable | Applicable |
| | E77 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E78 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E79 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E80 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E81 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E82 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E83 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E84 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E85 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E86 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E87 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E88 | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E88A | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E88B | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E88C | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E88D | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E89 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E90 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E91 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E92 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E93 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E94 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E95 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E96 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E97 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E98 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | E99 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| Socio Economic Land Use and Property | E100 | *Applicable* | *Not Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Cammeray Golf Course | E101 | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| Settlement | E102 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E103 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E104 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E105 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E106 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Condition Survey | E107 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E108 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E109 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E110 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E111 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E112 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E113 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Soils | E114 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Contaminated Land | E115 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E116 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E117 | *Partial – all requirements will be complied with fully, with the exception of (i) where the parcel of land is being handed over to another stage of the Project* | *Applicable* | *Applicable* | *Partial – all requirements will be complied with fully, with the exception of (i) where the parcel of land is being handed over to another stage of the Project* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E117A | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E118 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable if triggered | Applicable |
| | E119 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable if triggered | Applicable |
| | E120 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable if triggered | Applicable |
| | E121 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable if triggered | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | E122 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable if triggered | Applicable |
| | E123 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E124 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Sustainability | E125 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E126 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable - partial | Applicable | Applicable |
| | E127 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable - partial | Applicable | Applicable |
| | E128 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E129 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E130 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | *E131** | | | | | | | | | |
| | E132 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E133 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | *E134** | | | | | | | | | |
| | E135 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E135A | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E136 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E137 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E138 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Traffic and Transport | E139 | *Applicable* | *Applicable* | *Applicable* | *Applicable – mitigation measures would be implemented through the low impact works approval* | Applicable – mitigation measures would be implemented through the low impact works approval | Applicable | Applicable | Applicable | Applicable |
| | E140 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E141 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E142 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E143 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E144 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E145 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E146 | *Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E147 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | E148 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | E149 | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E150 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | *E151** | | | | | | | | | |
| | *E152** | | | | | | | | | |
| | E153 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| Utilities Management | E154 | *Applicable* | *Not Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Place, Design and Visual Amenity | E155 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E156 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E157 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | *E158** | | | | | | | | | |
| | E159 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E160 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | E161 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E162 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E163 | *Not Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E164 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E165 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E166 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E167 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E168 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E169 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E170 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E171 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E172 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E173 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E174 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E175 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E176 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | E177 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E178 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E179 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E180 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E181 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E182 | *Not Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Not Applicable |
| | E183 | *Not Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E184 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E185 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E186 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E187 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | *E188** | | | | | | | | | |
| | E189 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E190 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E191 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | E192 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E193 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E194 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | E195 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E196 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E197 | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E198 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E199 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E200 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| Waste | E201 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | E202 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable – no importation of waste is required for the Works | Applicable | Applicable | Applicable | Applicable |
| | E203 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | *E204** | | | | | | | | | |
| | E205 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Water | E206 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |

| CoA Topics | CoA | *CUT†* | *CGC†* | *M2A†* | *WHTCP†* | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | E207 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable – there will be no Works on riparian corridors | Applicable | Applicable | Not Applicable – there will be no Works on riparian corridors | Applicable |
| | E208 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E209† | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| | E210 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable - The Works are defined as Low Impact Works with no planned stormwater discharges* | Not Applicable - The Works are defined as Low Impact Works with no planned stormwater discharges | Applicable | Applicable | Applicable | Applicable |
| | E211 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | *E212** | | | | | | | | | |
| | *E213** | | | | | | | | | |
| | *E214** | | | | | | | | | |
| | *E215** | | | | | | | | | |
| | E216 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E217 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E218 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E219 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E220 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E221 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | E222 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E223 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | E224 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |

** N.B. This CoA was removed as a result of WHT Modification 2*
*† Stages listed as 'completed'*

## Appendix B: Applicability of REMMs to each Stage

Table 5 has been based on the latest version of the Revised Environmental Management Measures taken from Part D of the RtS of the Western Harbour Tunnel and Warringah Freeway Upgrade Environmental Impact Statement and Appendix B of the Western Harbour Tunnel and Warringah Freeway Upgrade Modification – Wicks Road Construction Support Site Submissions Report (May 2023). These documents can be found here:

WHTWFU EIS RtS: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=EXH-2682%2120200914T005951.156%20GMT

WHTWFU Modification 1– Wicks Road Submissions Report: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=EXH-49626988%2120230607T001713.406%20GMT

WHTWFU Modification 2 - TBM construction methodology: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-8863-MOD-2%2120230719T005051.813%20GMT

Items listed as "Not Applicable" have been identified as REMMs that will not be triggered under the scope of the relevant project stage. As identified in Section 3.1, should a project modification be undertaken that requires a change to the REMMs, the following table will be updated, following approval of the modification, to reflect any changes to the allocations.

**Table 5: Applicability of REMMs to each active stage**

| REMM Topic | REMM | *CUT*† | *CGC*† | *M2A*† | *WHTCP*† | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| Traffic and Transport Construction | CTT1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | *CTT2** | | | | | | | | | |
| | *CTT3** | | | | | | | | | |
| | CTT4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CTT5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CTT6 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CTT7 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CTT8 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CTT9 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable – parking impacts will be minimal from the Works | Applicable | Applicable | Applicable | Applicable |
| | CTT10 | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable – no impact to bus stops proposed as part of the Works* | Not Applicable – parking impacts will be minimal from the Works | Applicable | Not Applicable | Applicable | Not Applicable |
| | CTT11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | CTT12 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CTT13 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | *CTT14** | | | | | | | | | |
| | *CTT15** | | | | | | | | | |
| | *CTT16** | | | | | | | | | |
| | *CTT17** | | | | | | | | | |
| | *CTT18** | | | | | | | | | |
| | CTT19 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Traffic and Transport Operations | OT1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | OT2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | OT3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | OT4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| Noise and Vibration | CNV1 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable – construction noise and vibration impacts will be managed through the low impacts works* | Not Applicable – construction noise and vibration impacts will be managed through | Applicable | Applicable | Applicable | Applicable |

| REMM Topic | REMM | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *approval as per Table 3* | the low impacts works approval as per Table 3 | | | | |
| | CNV2 | *Applicable* | *Not Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV3 | *Applicable* | *Not Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV4 | *Applicable* | *Not Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV6 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV7 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV8 | *Applicable* | *Not Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | CNV10 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CNV11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | ONV1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | ONV2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| | ONV3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable – Operational condition | Not Applicable – Operational condition |
| Air Quality | AQ1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | AQ2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Human Health | *HH1** | | | | | | | | | |
| | *HH2** | | | | | | | | | |
| Non-Aboriginal Heritage | NAH1 | *Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| | NAH2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | NAH3 | *Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | NAH4 | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | NAH5 | *Applicable* | *Applicable* | *Not Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | *NAH6** | | | | | | | | | |
| | NAH7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | NAH8 | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| | NAH9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | NAH10 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | NAH11 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | NAH12 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | NAH13 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | NAH14 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | *NAH15** | | | | | | | | | |
| | NAH16 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | *NAH17** | | | | | | | | | |
| | NAH18 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | *NAH19** | | | | | | | | | |
| | *NAH20** | | | | | | | | | |

| REMM Topic | REMM | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | *NAH21** | | | | | | | | | |
| | *NAH22** | | | | | | | | | |
| | *NAH23** | | | | | | | | | |
| | *NAH24** | | | | | | | | | |
| | *NAH25** | | | | | | | | | |
| Aboriginal Cultural Heritage | AH1 | | | | | | | | | |
| | AH2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | AH3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | AH4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | AH5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | AH6 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | *AH7** | | | | | | | | | |
| | *AH8** | | | | | | | | | |
| | *AH9** | | | | | | | | | |
| | AH10 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| Geology, Soils and Groundwater | SG1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | SG2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | SG3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG6 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | SG7 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG8 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Not Applicable | Applicable |
| | SG10 | *Not Applicable – waste mitigtion measures to be implemented during this activity will be managed through a procedure as identified in Table 3.* | *Not Applicable – waste mitigtion measures to be implemented during this activity will be managed through a procedure as identified in Table 3.* | *Not Applicable – waste mitigtion measures to be implemented during this activity will be managed through a procedure as identified in Table 3.* | *Not Applicable – waste mitigtion measures to be implemented during this activity will be managed through a procedure as identified in Table 3.* | Not Applicable – waste mitigation measures to be implemented during this activity will be managed through a procedure as identified in Table 3. | Applicable | Applicable | Applicable | Applicable |
| | SG11 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG12 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | SG13 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Partial | Not Applicable |
| | SG14 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | *SG15** | | | | | | | | | |
| | *SG16** | | | | | | | | | |
| | SG17 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Not Applicable | Applicable |
| | SG18 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG19 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | SG20 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | SG21 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | SG22 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | SG23 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | WQ1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |

| REMM Topic | REMM | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| **Hydrodynamics and Water Quality** | WQ2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | WQ3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | WQ4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | WQ5 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | *WQ6** | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | | | | | |
| | WQ7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | WQ8 | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| | WQ9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | WQ10 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | WQ11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | WQ12 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | WQ13 | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| Flooding | F1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | F2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Not Applicable |
| | F3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | F4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | F5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | F6 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | F7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | F8 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | F9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | F10 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | F11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | F12 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| Biodiversity | B1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | B2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | B3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | B5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | B6 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable – The Works would not be carried out during the microbat roosting period of March to September | Not Applicable | Not Applicable | Applicable | Applicable |
| | *B7** | | | | | | | | | |
| | B8 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | B9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | B10 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | B11 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | B12 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | *B13** | | | | | | | | | |
| | B14 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | B15 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | *B16** | | | | | | | | | |
| | *B17** | | | | | | | | | |

| REMM Topic | REMM | *CUT*[†] | *CGC*[†] | *M2A*[†] | *WHTCP*[†] | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | B18 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Not Applicable | Applicable |
| | *B19** | | | | | | | | | |
| | *B20** | | | | | | | | | |
| | *B21** | | | | | | | | | |
| | *B22** | | | | | | | | | |
| | *B23** | | | | | | | | | |
| | *B24** | | | | | | | | | |
| | *B25** | | | | | | | | | |
| | *B26** | | | | | | | | | |
| | *B27** | | | | | | | | | |
| | *B28** | | | | | | | | | |
| | B29 | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| | *B30** | | | | | | | | | |
| | B31 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | B32 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | B33 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Applicable |
| | B34 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | B35 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| Land Use and Property | LP1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | LP2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | LP3 | *Applicable* | *Not Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | *LP4** | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | | | | | |
| | LP5 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | LP6 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | LP7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | LP8 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | LP9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| Socio Economics | SE1 | *Not Applicable* | *Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | SE2 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | SE3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | SE4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| Business | BU1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Not Applicable | Not Applicable |
| | BU2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | BU3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Landscape Character and Visual Amenity | V1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V5 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | V6 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V7 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V8 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V9 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V10 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | V11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | V12 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |

| REMM Topic | REMM | *CUT†* | *CGC†* | *M2A†* | *WHTCP†* | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| Hazards and Risks | HR1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | HR2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | HR3 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Not Applicable | Applicable |
| | HR4 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Not Applicable | Applicable |
| | HR5 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Not Applicable | Applicable |
| | HR6 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | HR7 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable – operational condition | Not Applicable – operational condition |
| | HR8 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable – operational condition | Not Applicable – operational condition |
| | HR9 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable – operational condition | Not Applicable – operational condition |
| | HR10 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | HR11 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| Resource and Waste Management | WM1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | WM2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | WM3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | WM4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | WM5 | *Applicable* | *Applicable* | *Applicable* | *Not Applicable – wastwater will not be generated by the Works* | Not Applicable – wastewater will not be generated by the Works | Applicable | Applicable | Applicable | Applicable |
| | WM6 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | WM7 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | WM8 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| Sustainability | SU1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | SU2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Climate change risks | CC1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| Greenhouse Gas Assessment | GHG1 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | GHG2 | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| Cumulative impacts | CI1 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CI2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CI3 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | CI4 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |

** N.B. This REMM was removed as a result of WHT Modification 2*

*† Stages listed as 'completed'*

## Appendix C: Applicability of CEMF to each active stage

Table 6 has been based on the latest version of the Construction Environmental Management Framework that was included in Part D of the RtS. This document can be found here:

https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=EXH-2682%2120200914T005951.156%20GMT

**Table 6: Applicability of CEMF to each active stage**

| CEMF Topic | Key issue | *CUT‡* | *CGC‡* | *M2A‡* | *WHTCP‡* | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| **Traffic management plan** | Construction traffic and access management objectives | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Construction traffic and access management implementation including: | | | | | | | | | |
| | • Traffic staging plans | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Traffic control plans and identification of truck marshalling areas | *Applicable – traffic control plans*<br>*Not applicable – truck marshalling areas* | *Applicable – traffic control plans*<br>*Not applicable – truck marshalling areas* | *Applicable – traffic control plans*<br>*Not applicable – truck marshalling areas* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Pedestrian management plans | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | • Parking management plans | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Heavy vehicle hauling routes | *Applicable* | *Not Applicable* | *Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | Construction traffic and access mitigation including:<br>• Monitoring and inspection requirements<br>• Compliance records<br>• Driver certification requirements | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| ***Marine works and marine traffic management plans**** | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| **Noise and vibration management plan** | Hours of construction | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Construction noise and vibration management objectives | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Construction noise and vibration management implementation including the requirements of environmental management measure CNV1 (refer to Table D2-1 of this submissions report) | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Construction noise and vibration impact statements for all construction support sites and major construction works required for the project as required by environmental management measure CNV2 | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Out of hours works protocol as required by environmental management measure CNV3 including:<br>• Details of works required outside standard construction hours, including acceptable justifications for works outside of standard construction hours, | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |

| CEMF Topic | Key issue | CUT‡ | CGC‡ | M2A‡ | WHTCP‡ | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | what types of works are allowed to take place outside of construction hours, and justifications of why the activities are required outside standard construction hours<br>• Details of the assessment and approval process (internal and external) for works proposed outside standard construction hours<br>• Noise and vibration mitigation and management measures that are to be considered and implemented where appropriate to manage potential impacts associated with works outside standard construction hours<br>• The noise and vibration impact assessment processes that will be followed to identify potentially affected receivers, clarify potential impacts and determine appropriate mitigation and management measures | | | | | | | | | |
| | Construction noise and vibration mitigation including:<br>• Monitoring and inspection requirements<br>• Compliance records | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Blast Management Strategy as required by environmental management measure CNV9 which will:<br>• Detail the blasting to be performed including location, method and justification of the need to blast<br>• Identify any potentially affected noise and vibration sensitive sites including heritage buildings and utilities<br>• Establish appropriate criteria for blast overpressure and ground vibration levels at each category of noise sensitive site<br>• Detail storage and handling arrangements for explosive materials and the proposed transport of those materials to the construction support site<br>• Identify hazardous situations that may arise from the storage and | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Applicable | Applicable |

| CEMF Topic | Key issue | *CUT*‡ | *CGC*‡ | *M2A*‡ | *WHTCP*‡ | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | handling of explosives, the blasting process and recovery of the blast site after detonation of the explosives<br>• Determine potential noise and vibration and risk impacts from blasting and appropriate best management practices<br>• Detail community consultation procedures.<br>• Note – the Blasting Management Strategy may not form part of the CNVMP and may be a separate plan | | | | | | | | | |
| | Air Quality Objectives | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| **Air quality management plan** | Air quality management implementation including:<br>• Details of standard construction air quality mitigation and management measures required by environmental management measure AQ1 (refer to Table D2-1 of this submissions report<br>• Odour management measures for odour from sediments and acid sulfate soils (if confirmed) | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Air quality mitigation including:<br>• Compliance records<br>• Monitoring and inspection requirements | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| **Waste and resource use** | Waste and spoil management objectives | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Waste and spoil management implementation including procedures for handling and storing potentially contaminated substances | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Waste and spoil mitigation including:<br>• Monitoring and inspection requirements<br>• Compliance records | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| **Soil and water management plan** | Soil, surface water and contamination management objectives | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Soil, surface water and contamination management implementation including: | | | | | | | | | |
| | • Erosion and sediment control plans | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Management responses to contaminated sediments (if confirmed), including remediation action plans (in accordance with environmental management measure SG2). | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |

| CEMF Topic | Key issue | *CUT‡* | *CGC‡* | *M2A‡* | *WHTCP‡* | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | • Acid sulfate soil management plans | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Applicable | Not Applicable | Not Applicable | Applicable | Applicable |
| | • Emergency spill procedures | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Dewatering plans (including aquatic fauna relocation requirements) | *Applicable – excluding aquatic fauna relocation requirements* | *Applicable* | *Applicable – excluding aquatic fauna relocation requirements* | *Applicable – excluding aquatic fauna relocation requirements* | Not Applicable | Applicable | Applicable – excluding aquatic fauna relocation requirements | Applicable | Applicable |
| | • Water quality monitoring and management | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | Soil, surface water and contamination mitigation including:<br>• Monitoring and inspection<br>• Compliance records | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Construction flood emergency management measures including requirements for construction support sites to manage risks to adjoining properties. | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| **Flood** Emergency management plan | Flooding-related self-directed evacuation or evasion objectives | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | Flood Emergency management implementation including:<br>• Evacuation procedures and actions<br>• Warning monitoring and trigger actions<br>• | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| **Groundwater management plan** | Groundwater management objectives | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | Groundwater management implementation including:<br>• Additional modelling requirements<br>• Acceptable groundwater inflow levels<br>• Ground movement management and minimisation requirements | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| | Groundwater mitigation including:<br>• Monitoring and inspection requirements<br>• Compliance records | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Applicable | Applicable | Applicable |
| ***Dredging management plan**** | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| **Flora and fauna management plan** | Flora and fauna management objectives | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Flora and fauna management implementation including: | | | | | | | | | |
| | • Seagrass monitoring and management | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | • Intertidal and rocky reef management | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |

| CEMF Topic | Key issue | *CUT‡* | *CGC‡* | *M2A‡* | *WHTCP‡* | BB | WFU | WHT Stage 3A | WHT Stage 3B | WHT Stage 3C |
|---|---|---|---|---|---|---|---|---|---|---|
| | • Marine mammals and reptile management | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | • Unexpected flora and fauna finds procedure | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Stop works procedure | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Weed management measures | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Not Applicable | Applicable | Applicable |
| | • Dewatering management | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Not Applicable | Applicable | Applicable | Applicable | Applicable |
| | • Large Bent-winged Bat management | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | • Powerful Owl management and monitoring | *Not Applicable* | *Not Applicable* | *Not Applicable* | *Not Applicable* | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |
| | Flora and fauna mitigation including:<br>• Monitoring and inspection requirements<br>• Compliance records | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| **Heritage management plan** | Heritage management objectives | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Heritage management implementation including Aboriginal and non-Aboriginal heritage unexpected finds procedures | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |
| | Maritime heritage management detailing the objectives and methodologies to conserve maritime heritage and to minimise impacts. | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Applicable |
| | Heritage mitigation including:<br>• Monitoring and inspection requirements<br>• Compliance records | *Applicable* | *Applicable* | *Applicable* | *Applicable* | Applicable | Applicable | Applicable | Applicable | Applicable |

** N.B. This requirement was removed as a result of WHT Modification 2*

*† The relevant works applicable to this condition and CEMF Tool are yet to be awarded; this staging report will be updated to reflect once confirmed, and assigned to one of the active Stages*

*‡ Stages listed as 'completed'*

## Appendix D: Aspect and impact registers

- Stage 2 – Warringah Freeway Upgrade (WFU)
- Stage 3A – Western Harbour Tunnel Southern Tunnel Works (WHT Stage 3A)
- Stage 3B – Western Harbour Tunnel Northern Tunnelling and Integration works (WHT Stage 3B) and Stage 3C – Western Harbour Tunnel Crossing (WHT Stage 3C) are combined as works are managed under one set of CEMP and CEMP sub-plans

This Environmental Aspects and Impacts Register has been prepared by CPBDJV, to supplement the Environmental Risk Analysis conducted as part of the Environmental Assessment (EA).

The identification of significant construction activities and associated impacts that could eventuate during construction of the Project is central to the selection of appropriate environmental safeguards.

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

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

The identification of risks included a review of the proposed works, the CoA, REMM, and review of the environmental risks identified by the EA and subsequent Submissions Report.

The following risk assessment process has been implemented, together with a review of proposed activities and known risks based on past project experience.

**Risk Assessment Process**

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

Table 1 is used to determine the likelihood that the aspect will have an impact on the environment.

Table 2 is used to determine the potential consequence rating of the risk identified

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

**Table 1: Likelihood criteria**

| Score | Description | | Percentage | Expected Frequency |
|---|---|---|---|---|
| **5** | **Almost Certain** | Common / Frequent Occurrence | Can be expected to occur 75% - 99% | More than 1 event per month |
| **4** | **Likely** | Is known to occur or “It has happened regularly” | Can quite commonly occur 50% - 75% | More than 1 event per year |
| **3** | **Possible** | Could occur or ”I’ve heard of it happening” | May occasionally occur 25% - 50% | 1 event per 1 to 10 years |
| **2** | Unlikely | Not likely to occur very often | May infrequently occur 10% - 25% | 1 event per 10 to 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 2: Consequence criteria**

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

**Table 3: Risk severity**

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

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**Table 4: Aspect and impact register**

| Issue | Construction activity/aspect | Potential impact | Risk level prior to mitigation | Indicative Mitigation Measures | Risk level following mitigation | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| Air quality | • General earthworks<br>• Vegetation clearing<br>• Open excavation works<br>• Spoil handling<br>• Stockpiling<br>• Vehicular movements on unsealed roads<br>• Material haulage<br>• Vehicle emissions<br>• Handling of chemicals, waste and hazardous goods. | Complaints from neighbours, including loss of amenity, dust in living areas, swimming pools | Likelihood – 5<br>Consequence – 2<br>**Risk – 10 (Moderate)** | • Induct personnel on air quality issues and safeguards<br>• Use water carts on unsealed surfaces and stockpiles<br>• Utilise safe dust suppressants to reduce dust generation<br>• Use street sweepers to reduce dust in areas of dust build up<br>• Modify or cease operations during high winds<br>• All trucks on public roads to cover loads<br>• Vehicles, equipment, machinery used and all facilities – designed, operated and maintained to control the emission of smoke, dust, odours and fumes<br>• All disturbed areas stabilised, revegetated and/or landscaped as soon as practicable<br>• Minimise tracked mud/dust on public roads<br>• No burning or incineration of any material at any time<br>• Dust monitoring<br>• Avoid “hot-work” during total fire bans and obtain any necessary permits/exemptions from the Rural Fire Service<br>• WorkCover licensing requirements will be complied with for the storage of hazardous substances and dangerous goods<br>• Appropriately stocked spill kits will be readily available at all chemical storage locations and during chemical use<br>• Material Safety Data Sheets (MSDSs) will be obtained, complied with and retained on site for all required chemicals<br>• Pesticide use will be in accordance with the Pesticides Act, 1999 | Likelihood – 3<br>Consequence – 1<br>**Risk – 3 (Low)** | Air Quality Management Sub Plan (AQMP)<br>Environmental Work Method Statements (EWMS)<br>Soil and Water Management Sub Plan (SWMP)<br>Complaints Procedure<br>Project induction |
| | | Potential adverse health effects | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Degradation of water quality and other aspects of the natural environment | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Health risks to neighbours and members of the public from release of gases and/or smoke | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 1<br>Consequence – 2<br>**Risk – 6 (Low)** | |
| Biodiversity | • Clearing of native vegetation.<br>• Tree removal<br>• Stockpile / haul road construction near vegetation.<br>• General earthworks near vegetation.<br>• Vehicular movements.<br>• Open excavation works.<br>• Bushfires | Loss of habitat for threatened species beyond minimum clearing footprint. | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | • Induct personnel on biodiversity issues and mitigation measures.<br>• Verify vegetation clearing boundaries prior to clearing<br>• Ensure vegetation clearing boundaries clearly marked and visible as per FFMP<br>• Consult with affected communities prior to removing large trees<br>• Prior to construction – identify and fence all flora and fauna habitat areas required to be protected as identified in the FFMP.<br>• Minimise clearing of all vegetation and undertake progressive revegetation.<br>• Pre-clearing inspections by Project Ecologist to review weeds and other threatened species<br>• Implement ongoing weed monitoring and management programs.<br>• Disturbed areas will be monitored for effective soil stabilisation and restoration / rehabilitation.<br>• Implement a staged clearing process and undertake fauna rescue during clearing as required.<br>• Project Arborist to provide advice on habitat tree health and provide ongoing advice.<br>• Undertake threatened species management as required under the FFMP and detailed design documentation / Approval.<br>• Undertake monitoring as required.<br>• Spark arresters on plant prevent fires.<br>• Obtain permits from Fire authorities during high risk fire season. | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | Flora and Fauna Management Plan (FFMP)<br>EWMS<br>Vegetation Clearing procedure<br>Fauna handling procedure<br>Project induction |
| | | Weed infestation | Likelihood – 5<br>Consequence – 2<br>**Risk – 10 (Moderate)** | | Likelihood – 3<br>Consequence – 1<br>**Risk – 3 (Low)** | |
| | | Potential longer term impacts associated with increased habitat fragmentation. | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | | Likelihood – 1<br>Consequence – 2<br>**Risk – 6 (Low)** | |
| | | Direct impact to flora or fauna during construction. | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | | Likelihood – 1<br>Consequence – 2<br>**Risk – 6 (Low)** | |

| Issue | Construction activity/aspect | Potential impact | Risk level prior to mitigation | Indicative Mitigation Measures | Risk level following mitigation | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | Indirect impact to flora or fauna during construction | Likelihood – 5<br>Consequence – 2<br>**Risk – 10 (Moderate)** | • Undertake noise and vibration monitoring to ensure compliance with predicted noise levels for sensitive areas<br>• Direct lighting away from sensitive areas, including National Parks or other reserves<br>• Use shrouding of lights where impacts to sensitive areas may occur. | Likelihood – 1<br>Consequence – 2<br>**Risk – 6 (Low)** | Flora and Fauna Management Plan (FFMP)<br>Noise and Vibration Management Plan (NVMP)<br>EWMS<br>Sensitive Area Plans (SAP)<br>Fauna handling procedure<br>Project induction |
| Aboriginal heritage | • Initial clearing and/or grubbing of vegetation.<br>• Initial removal of topsoil.<br>• Construction of site compounds and material or equipment stockpile areas.<br>• Temporary access roads | Impact to undiscovered or undocumented heritage sites | Likelihood – 2<br>Consequence – 3<br>**Risk – 12 (High)** | • Induct personnel on heritage issues and mitigation measures.<br>• For ancillary sites, identify and assess Aboriginal heritage items and predict potential impacts.<br>• Implement unexpected find procedures as required. | Likelihood – 1<br>Consequence – 2<br>**Risk – 6 (Low)** | Heritage Management Sub Plan (HMP)<br>Unexpected Heritage Items Procedure<br>Project induction |
| | | Finding / disturbing burials or human remains | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | | Likelihood – 1<br>Consequence – 2<br>**Risk – 6 (Low)** | |
| Non-Aboriginal heritage | • Initial clearing and/or grubbing of vegetation.<br>• Initial removal of topsoil.<br>• Construction of site compounds and spoil / mulch and / or equipment stockpile areas.<br>• Temporary access roads during construction<br>• Excavations and earthworks.<br>• Pile driving causing vibration.<br>• Use of other vibratory equipment such as rollers. | Impact to identified heritage items. | Likelihood – 3<br>Consequence – 3<br>**Risk – 13 (High)** | • Pre-construction surveys to identify and assess non- Aboriginal heritage items.<br>• Induct personnel on heritage issues and safeguards.<br>• Protect identified heritage items with protective fencing or flagging from being disturbed during construction.<br>• Undertake archival recording as required<br>• Implement unexpected find procedures<br>• Landholder consultation. | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | Heritage Management Sub Plan (HMP)<br>Noise and Vibration Management Sub Plan (NVMP)<br>Unexpected Heritage Items Procedure<br>Project induction |
| | | Vibration damage during the construction period to identified sites. | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Impact to undiscovered or undocumented heritage sites. | Likelihood – 3<br>Consequence – 3<br>**Risk – 13 (High)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Change in visual integrity of heritage sites. | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | | Likelihood – 2<br>Consequence – 1<br>**Risk – 2 (Low)** | |
| Noise and vibration | • Regular out of hour works (OOHW)<br>• Potentially noisy and vibration impact generating works:<br>  ○ Site establishment.<br>  ○ Earthworks<br>  ○ Piling<br>  ○ Paving<br>  ○ Saw cutting | Noise impacts on sensitive receivers during construction. | Likelihood – 5<br>Consequence – 3<br>**Risk – 18 (Very High)** | • Consult with local communities and affected residents.<br>• Liaison AA and permits detailing justification for OOHW<br>• Construction Noise and Vibration Impact Statements (CNVIS) to be prepared to determine impact and consultation requirements<br>• Adherence to working hours in NVMP unless otherwise approved.<br>• Respite periods for particularly noisy/ short duration activities (in accordance with NVMP) or offers of respite as documented in CNVIS.<br>• Construction equipment selected, operated and maintained to minimise noise impacts and where necessary fitted with non-tonal reversing alarms.<br>• Minimise impacts from saw cutting/ use effective shielding.<br>• Regular noise monitoring to monitor predicted verses actual levels.<br>• Implementing management measures where regenerated noise is found to be excessive and agreements are not in place.<br>• Managing construction vehicle routes and speed of vehicles.<br>• Modelling vibration impacts and monitoring where impacts are predicted. | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | NVMP<br>EWMS<br>OOHW protocol<br>Negotiated agreements<br>Complaints procedure<br>Project induction |
| | | Vibration impacts on nearby receptors, including heritage. | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | |

| Issue | Construction activity/aspect | Potential impact | Risk level prior to mitigation | Indicative Mitigation Measures | Risk level following mitigation | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | | | • Establish and maintain complaints management system.<br>• Building condition reports on potentially impacted buildings and structures as required by Project approval.<br>• review monitoring results and implement corrective actions as appropriate, such as for example revising mitigation measures, revising predictions.<br>• Implement any additional feasible and reasonable mitigation measures, identified from the review of monitoring results, for minimising noise and vibration impacts<br>• Discuss noise and vibration monitoring results at each ERG. | | |
| Soil and water quality | • Clearing and grubbing.<br>• Earthworks and stockpile management.<br>• Storage of fuels and chemicals<br>• Maintenance of plant and equipment, including servicing and refuelling<br>• Sediment basin management<br>• Drainage works<br>• Concrete works<br>• Temp access road construction<br>• Bridge construction.<br>• Landscaping<br>• Landscaping maintenance | Erosion and movement of soils. | Likelihood – 5<br>Consequence – 3<br>**Risk – 18 (Very High)** | • Appropriately designed erosion control structures (e.g. rock checks, sedimentation basins, silt fences and sand bags) will be installed, maintained and cleaned regularly.<br>• Locate spoil stockpiles, plant and equipment away from drainage lines, watercourses or stormwater drains in accordance with established criteria.<br>• Install clean water diversions to ensure clean and dirty water are not mixed on site.<br>• Storage, compound access and parking areas sealed, as early during works as practicable.<br>• Chemical storage meets bunding requirements.<br>• Wheel mud reduction/ cleaning measures at exit of all sites where required.<br>• Buffer zones of vegetation will be maintained adjacent to waterways for as long as practical.<br>• Rehabilitation and landscaping works of disturbed areas undertaken as soon as the works are completed and/or progressively where possible.<br>• Implement concrete washout process within bunded areas.<br>• Provide and maintain spill kits.<br>• Establish clean water catch drains/ diversion early in Project before topsoil stripping.<br>• Design drainage to maximise dirty water to sediment basins.<br>• Establish dedicated ERSED crews for the Project.<br>• Install signage at discharge points to assist workers to understand implications of dirty water release in sensitive areas.<br>• Meet TfNSW Dewatering guidelines. | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | SWMP<br>EWMS<br>Basin management procedure<br>Project induction<br>Targeted ERSED training |
| | | Captured dirty water discharge from basins. | Likelihood – 4<br>Consequence – 3<br>**Risk – 17 (Very High)** | | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | |
| | | Dirty water not captured and leaves site without controls. | Likelihood – 4<br>Consequence – 3<br>**Risk – 17 (Very High)** | | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | |
| | | Haul road washout from flood event. | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| Flooding | • Transverse drainage.<br>• Haul roads and Freeway. | Restriction to flow paths causing localised flooding. | Likelihood – 4<br>Consequence – 3<br>**Risk – 17 (Very High)** | • Design drainage structures to cope with design flood events and Environmental Assessment commitments.<br>• Locate compounds / plant / storage above 1 in 20 years flood level events.<br>• Design and build temporary crossings to be stabilised and minimise scour / erosion during flood events.<br>• Install scour protection as early as possible.<br>• Look at predicting flood events from gauges or rainfall predictions.<br>• Design and construct Project in accordance with CoA . | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | SWMP<br>EWMS |
| | | Changes to flood levels – increased impact to receivers. | Likelihood – 3<br>Consequence – 4<br>**Risk – 19 (Very High)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Stormwater inflow to site – clean stormwater getting mixed with dirty site water. | Likelihood – 5<br>Consequence – 3<br>**Risk – 18 (Very High)** | | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | |

| Issue | Construction activity/aspect | Potential impact | Risk level prior to mitigation | Indicative Mitigation Measures | Risk level following mitigation | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | Flood damage to plant / equipment / satellite compounds. | Likelihood – 3<br>Consequence – 3<br>**Risk – 13 (High)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Erosion of haul/ access road during large flood events. | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| Spoil and Fill | • Cuts<br>• Fill areas<br>• Haulage of spoil and fill<br>• Stockpiling<br>• Spoil areas<br>• Site establishment utility<br>• Service relocations<br>• Earthworks<br>• Drainage works | Demand on local resources – local quarries / suppliers. | Likelihood – 4<br>Consequence – 1<br>**Risk – 4 (Low)** | • Design for balanced earthworks.<br>• Offsite spoil movements to be monitored and tracked on the site waste disposal register to ensure spoil movements meet EPA guidelines, including characterisation of the spoil to determine correct disposal locations and volumes.<br>• Spoil to be beneficially reused, on or off site, where applicable and meeting environmental requirements. Includes reuse of excavated material, either as fill, or as earth mounds for noise control, or beautification, shielding or revegetation mounds on site.<br>• All loads accessing public roads to be covered to prevent any loss of material, which may cause driver safety issues.<br>• Only locate stockpiles in accordance with criteria in CEMP/SWMP<br>• Classify and dispose of any contaminated land in accordance with EPA guidelines. | Likelihood – 3<br>Consequence – 1<br>**Risk – 3 (Low)** | SWMP<br>EWMS and Work Packs<br>AQMP<br>CEMP<br>Contaminated Land Management Procedure |
| | | ERSED issues from cuts / batters / stockpiles. | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | |
| | | Sensitive area damage from stockpiling. | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Contaminated land. | Likelihood – 3<br>Consequence – 3<br>**Risk – 13 (High)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| Waste Management | • Generation of waste during construction activities including building materials, excess unsuitable spoil material, vegetation material. | Excessive waste being directed to landfill. | Likelihood – 3<br>Consequence – 1<br>**Risk – 3 (Low)** | • Apply waste hierarchy principles – avoid-reduce-reuse-recycle.<br>• Waste materials contained in waste bins or other suitable containers, and collected for recycling, reuse or disposal by the licensed waste contractor.<br>• Separate, contain, manage and dispose contaminated waste to prevent migration and further contamination whilst maintaining compliance with EPA requirements.<br>• Label and store all liquid waste containers in a bunded area prior to removal off-site.<br>• Undertake inspections of the worksite and waste storage areas to ensure litter / debris is regularly cleaned up and contained on site.<br>• Establish recycling system early on in Project.<br>• Establish good segregation areas for concrete and waste concrete is not to be transported off site for land disposal.<br>• Section 143 Notices Under the POEO Act and provision of a letter to landholder highlighting the need for a “s.143 Notice”, the Contractor’s role and the respective roles of the TfNSW and the landholder in ensuring that the waste is appropriately managed.<br>• Consider types of waste, how each waste type will be used as a beneficial use and address in the approvals that no other type of waste will be used. | Likelihood – 2<br>Consequence – 1<br>**Risk – 2 (Low)** | Waste and Energy Management Plan (WEMP)<br>EWMS<br>Waste register |
| | | Incorrect disposal of contaminated waste. | Likelihood – 3<br>Consequence – 4<br>**Risk – 19 Very High** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Meeting POEO Act requirements for VENM, ENM, Recovered Aggregate, Reclaimed Asphalt pavement and mulch | Likelihood – 3<br>Consequence – 3<br>**Risk – 13 (High)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| Traffic and transport | • Haulage of material.<br>• Import of material / plant / equipment.<br>• Travel to / from site.<br>• Loss of street parking | Accidents - Safety of commuters, pedestrians, cyclists, contractors and subcontractors.<br>Delays<br>Noise Vibrations and Dust nuisance to residents on haul routes<br>Unapproved use of local roads | Likelihood – 4<br>Consequence – 4<br>**Risk – 20 (Very High)** | • Develop and update Traffic Control Plans for all stages of work.<br>• Identify and assess roads likely to be affected by Project construction and develop methods to minimise traffic increases.<br>• Undertake before and after dilapidation surveys on local roads<br>• Traffic controllers and / or signage for both egress and ingress off the work sites.<br>• All vehicles carrying materials to be adequately covered to prevent any loss of material, which may cause driver safety issues.<br>• Toolbox workforce on approved access routes | Likelihood – 3<br>Consequence – 3<br>**Risk – 13 (High)** | Traffic Management Plan (TMP)<br>EWMS<br>AQMP<br>WEMP<br>Project induction<br>Toolbox talks |

| Issue | Construction activity/aspect | Potential impact | Risk level prior to mitigation | Indicative Mitigation Measures | Risk level following mitigation | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | | | • Consult with affected communities prior to removing spaces for street parking | | |
| Visual Impact, Landscaping and Rehabilitation | • Cuttings and cut finishes.<br>• Bridge design Revegetation / landscaping.<br>• Removal of visually prominent native vegetation.<br>• Evening / night works. | General public aesthetic impacts | Likelihood – 3<br>Consequence – 1<br>**Risk – 3 (Low)** | • Landscape and rehabilitation plan including extensive seeding planting in required areas will be developed and implemented.<br>• Landscape treatments will incorporate the surrounding landscape types and vegetation patterns and address view scapes.<br>• Embankments and cuttings will be stabilised by the use of appropriate landscape treatments.<br>• The use of night-lighting will be minimised where possible during the construction phase and directed away from residential areas.<br>• Site compounds and areas surrounding them will be kept tidy and be regularly cleaned and maintained.<br>• Undertake landscaping and revegetation works in accordance with the approved Urban Design and Landscape Management Plan. | Likelihood – 2<br>Consequence – 1<br>**Risk – 2 (Low)** | Urban Design and Landscape Management Plan ( UDLMP)<br>FFMP |
| | | Heritage related visual | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | | Likelihood – 1<br>Consequence – 2<br>**Risk – 6 (Low)** | |
| Contamination | • Discovery of contaminated soils/ asbestos<br>• Management of known contamination | Contamination of land and /or waterways from spills/ asbestos/ land contamination. | Likelihood – 4<br>Consequence – 3<br>**Risk – 17 (Very High)** | • Implement unexpected finds contamination management measures<br>• Undertake Detailed Site Investigations to determine location and extent of contamination | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | Contaminated Land Management Procedure<br>EPA guidelines |
| General Environmental Management | • Environmental management / supervision<br>• Incident response | Poor environmental culture leading to peer environment outcomes.<br>Non-compliance with CEMP, EPL, MCoA and legislative requirements. | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | • Ensure all environmental personnel are trained in the CEMP and all associated documents.<br>• Environment team diligence in including requirements from CEMP and procedures into EWMS and training.<br>• Regular review of environmental management documents.<br>• Regular environment team and ERG meetings.<br>• Environmental Manager to be involved in design and construction meetings.<br>• Training in environmental emergency response.<br>• Ensure NCR process is followed.<br>• Early consultation with regards to proposed upcoming works and approvals to be sought.<br>• Implementation of high operating standards & in accordance with accepted industry standards.<br>• Develop and implement environmental incident response procedures.<br>• Ensure appropriate incident response equipment available at all construction sites.<br>• Ensure adequate access to / from construction sites for environmental incident response (including potential bushfire response). | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | CEMP<br>Procedures (in CEMP and sub-plans)<br>TfNSW Incident Management procedures<br>EWMS<br>Compliance Tracking Program<br>Internal / external audits<br>ERG<br>PIRMP |
| | | Failure to follow requirements of strategies / procedures. | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Failure to report environmental issues and incidents. | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Inconsistent advice to construction personnel. | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Inadequate preparation for environmental incident/ emergency | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Inadequate response to environmental incident/ emergency. | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| Planning Approvals | • Approvals/ Legislative Compliance | Lost opportunities to implement innovations leading to better environmental outcomes | Likelihood – 4<br>Consequence – 2<br>**Risk – 9 (Moderate)** | • Early consultation in preparing approvals and CEMP.<br>• Ensure all environmental personnel are trained in the CEMP and all associated documents.<br>• Environment team diligence in including requirements from CEMP and procedures into EWMS and training.<br>• Regular review of environmental management documents.<br>• Regular review of compliance with environmental management documents, MCoA etc.<br>• Regular environment team and ERG meetings. | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | CEMP<br>Compliance Tracking Program<br>Internal / external audits<br>ERG |
| | | Poor working relationships with regulators | Likelihood – 3<br>Consequence – 2<br>**Risk – 8 (Moderate)** | | Likelihood – 2<br>Consequence – 2<br>**Risk – 7 (Low)** | |
| | | Delays due to receipt of approvals (e.g. CEMP, Planning Modifications, | Likelihood – 4<br>Consequence – 2 | | Likelihood – 1<br>Consequence – 2 | |

| Issue | Construction activity/aspect | Potential impact | Risk level prior to mitigation | Indicative Mitigation Measures | Risk level following mitigation | Management Documents / Training Required |
|---|---|---|---|---|---|---|
| | | Environment Assessments for Ancillary Facilities) | **Risk – 9 (Moderate)** | • Early consultation with regards to proposed upcoming works and approvals to be sought. | **Risk – 6 (Low)** | |

NSW GOVERNMENT

Department of Planning, Housing & Infrastructure

Our ref: SSI-8863-PA-848

Simon Cooper
Project Director – Western Harbour Tunnel
Transport for NSW
20-44 Ennis Road
Milsons Point, NSW 2061

24/10/2024

**Western Harbour Tunnel & Warringah Freeway Upgrade (SSI-8863)**
**Staging Report Rev 10 (Condition A10)**

Dear Mr Cooper

I refer to the Staging Report Revision 10, dated 27 September 2024 submitted to the Department for information in accordance with condition A10 of SSI-8863.

I note that the Staging Report Revision 10 has been:

- updated to include details on non-contestable, project related utility works at Emu Plains;
- endorsed by the Environmental Representative; and
- reviewed by Transport for NSW (TfNSW) and no issues were raised.

You are reminded that TfNSW is responsible for coordinating the various stages of work in a manner that minimises its cumulative impacts that may arise from the proposed staging.

Please note that if there are any inconsistencies between the Staging Report and the conditions of approval, then the requirements of the conditions of approval will prevail.

Please ensure that the Staging Report is placed on the project website at the earliest convenience as per condition B15.

If you wish to discuss the matter further, please contact Edward Kenney at edward.kenney@dpie.nsw.gov.au.

Yours sincerely

Yours sincerely

Shelley Reed
Team Leader
Infrastructure Management