Northern Beaches Hospital Connectivity and Network Enhancement Project

Stage 1 and Stage 2  
Six Monthly Compliance Report:  
March 2017 - August 2017

Document No: NBHRDC-EN-EPL-PLN_3

<table>
<thead>
<tr>
<th>Revision</th>
<th>Revision Date</th>
<th>Prepared by (Name and Title)</th>
<th>Reviewed by (Name and Title)</th>
<th>Authorisation (Name and Title)</th>
<th>Authorisation Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>September 17</td>
<td>Jeremy Slattery Environmental Consultant</td>
<td>Mark Sabolch Environment Manager</td>
<td>Project Director</td>
<td></td>
</tr>
</tbody>
</table>
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## ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEMP</td>
<td>Construction environmental management plan</td>
</tr>
<tr>
<td>CoA</td>
<td>Condition of approval</td>
</tr>
<tr>
<td>CTP</td>
<td>Compliance Tracking Program</td>
</tr>
<tr>
<td>DP&amp;E</td>
<td>Department of Planning and Environment</td>
</tr>
<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
</tr>
<tr>
<td>EPA</td>
<td>NSW Environment Protection Authority</td>
</tr>
<tr>
<td>EMS</td>
<td>Environmental management system</td>
</tr>
<tr>
<td>Environmental Audit</td>
<td>Verification of how implementation is proceeding with respect to the Project Deed, AS/NZS ISO 14001:2004, CEMP and environmental documents such as CoA</td>
</tr>
<tr>
<td>Environmental Incident</td>
<td>An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.</td>
</tr>
<tr>
<td>Environmental Representative (ER)</td>
<td>A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.</td>
</tr>
<tr>
<td>EP&amp;A Act</td>
<td>Environmental Planning and Assessment Act 1979</td>
</tr>
<tr>
<td>EPL</td>
<td>Environment Protection Licence</td>
</tr>
<tr>
<td>ERG</td>
<td>Environmental Review Group – comprising representatives of RMS, Environmental Representative, Project delivery team, regulatory authorities (EPA, OEH) and Warringah Council. The ERG will be maintained for the duration of the Project and will meet monthly. The role the ERG is to provide proactive advice on environmental management issues and review the environmental performance of the Project.</td>
</tr>
<tr>
<td>FYJV</td>
<td>Ferrovial York Joint Venture</td>
</tr>
<tr>
<td>Minister, the</td>
<td>Minister for Planning</td>
</tr>
<tr>
<td>Non-compliance</td>
<td>Failure to comply with the requirements of the Project approvals or any applicable license, permit or legal requirements.</td>
</tr>
<tr>
<td>Non-conformance</td>
<td>Failure to conform to the requirements of Project system documentation including this CEMP or supporting documentation.</td>
</tr>
<tr>
<td>OEH</td>
<td>Office of Environment and Heritage</td>
</tr>
</tbody>
</table>
| Project, the | Northern Beaches Hospital – Connectivity and Network Enhancements:  
  - Stage 1 – Hospital Connectivity Enhancement Works; and |
1. Introduction

This Construction Compliance Report – Stage 1 & 2 (Stage 1&2 CCR) required under condition A11(c)(ii) of Infrastructure Approval SSI-6434 and SSI-6622 has been prepared covering the six-monthly reporting period from March 2017 to August 2017 to address the requirements of the Concept and Project Conditions of Approval (CoA) and the Revised Safeguards and Management Measures (RSMM) of the Concept and Project Submissions Report / Preferred Infrastructure Report.

On 14 February 2017 the Project wrote to DPE requesting that the Construction Compliance Report (CCR) required under condition A11(c)(ii) of Infrastructure Approval SSI-6434 and SSI-6622 be submitted as one document at six monthly intervals after February and August each year.

As per the agreement and Approval by DPE, the approach of a single report has been considered an efficient way to deliver the Construction Compliance Report for the entire project, to addresses the Stage 1 and stage 2 Compliance for the NBHRC Project being prepared in September 2017.

Table 1-1 Compliance Report History

<table>
<thead>
<tr>
<th>Compliance Report</th>
<th>Applicable Stage</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>December 2015 –June 2016</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>July 2016- February 2017</td>
</tr>
<tr>
<td>3</td>
<td>1 &amp; 2</td>
<td>February 2017 –August 2017</td>
</tr>
</tbody>
</table>

The body of this report addresses the aspects of both Stages 1 and 2. Appendix A – D present the project compliance against each of the CoA and RMMS for the Project for each stage individually.

2. Project

The Northern Beaches Hospital – Connectivity and Network Enhancements Project (the Project), comprises road upgrades to enhance connectivity of the existing road network surrounding the Northern Beaches Hospital at Frenchs Forest within Sydney’s Northern Beaches.

Roads and Maritime is planning and delivering the road upgrades in two stages as shown in Figure 1-1. Stage 1 of the Project was granted planning approval on 29th June 2015 and approved for construction in November 2015. Stage 2 was granted planning approval on 25th February 2016 and approved for construction in August 2016.

In accordance with Stage 1 and 2 Project Conditions of Approval (CoA) A11, a Compliance Tracking Program (CTP) was prepared for the Project, and was provided as Appendix A9 of the Stage 1 and 2 CEMP. As part of the CTP, Construction Compliance Reports must be prepared at six monthly intervals following commencement of construction and subsequent submission timeframes to be directed by the Secretary if necessary, following review of the Reports for the duration of construction.
3. Project description

3.1. Project overview

The Northern Beaches Hospital – Connectivity and Network Enhancements Project (the Project) comprises road upgrades to enhance connectivity of the existing road network surrounding the Northern Beaches Hospital at Frenchs Forest, within the Warringah local government area (LGA) on Sydney’s Northern Beaches.

Roads and Maritime Services (RMS) is planning and delivering the road upgrades in two stages:

- The Stage 1 Project Hospital Connectivity Works which aim to enhance the existing road network to facilitate the opening of the proposed Northern Beaches Hospital by 2018.

- Stage 2 Project Network Enhancement Works which are directed towards broader network capacity enhancement particularly along Warringah Road.

- The Project has been determined as State Significant Infrastructure (SSI) under section 115U (2) of the EP&A Act, and subject to assessment under Part 5.1 of the EP&A Act. The Minister for Planning granted approval for the Concept Plan and Stage 1 Project on 29 June 2015. Approval for Stage 2 was granted on 25 February 2016. The key features of Stage 1 & Stage 2 of the Project are as follows:
  - Widening and intersection upgrades along sections of Forest Way between about 100 metres north of Warringah Road to south of Adams Street;
  - Upgrade of the existing bus stop fronting the Forest Way Shopping Centre on Forest Way, to accommodate two buses within the bay;
  - Widening of Naree Road, Frenchs Forest Road West and a section of Frenchs Forest Road East from the Wakehurst Parkway intersection to Allambie Road;
  - Provision of traffic signals with pedestrian crossings at Naree Road and Forest Way; at Naree Road, Frenchs Forest Road West and Rabbett Street; on Frenchs Forest Road West at a new access to the hospital opposite Gladys Avenue; at Frenchs Forest Road East and Romford Road; and at Frenchs Forest Road East, Patanga Road and Allambie Road;
• provision of dedicated curb side bus lanes along approaches and departures to the Frenchs Forest Road intersection with Wakehurst Parkway;
• widening and upgrades to the intersection of Frenchs Forest Road and Wakehurst Parkway;
• widening of the Wakehurst Parkway from about 330 metres north of the intersection with Frenchs Forest Road to the intersection with Warringah Road;
• widening of Allambie Road to the north of the intersection with Warringah Road;
• widening and upgrade to the Warringah Road and Allambie Road (north) intersection; and
• widening of Warringah Road west of Allambie Road for about 700 metres just to the east of Courtley Road.
• the removal and replacement of the existing pedestrian overbridge across Warringah Road west of the intersection of Forest Way.
• widening of Wakehurst Parkway from the intersection with Warringah Road to south of Aquatic Drive.
• upgrades to Warringah Road and its intersection with Forest Way, Hilmer Street and Wakehurst Parkway at surface level to provide for all traffic movements and provide for subsurface grade separated through traffic.
• provision of four through lanes on Warringah Road (two lanes in each direction for east-west through traffic) within a grade separated open ‘slot’ (or underpass) for about 1.3 kilometres. Ingress and egress points from and to the slot include: - Western extent – Warringah Road near Fitzpatrick Avenue East - Eastern extent – Warringah Road from about 350 metres east of the Wakehurst Parkway grade separated intersection - Provision of a two-lane on-ramp (merging into one lane) from Wakehurst Parkway (southbound) into the slot (westbound).
• widening of Warringah Road from west of Fitzpatrick Avenue East to west of Allambie Road to include surface level lanes for the length of the project as follows:
• westbound travel lanes on the southern side of the Warringah Road corridor
• eastbound travel lanes on the northern side of the Warringah Road corridor (generally using existing road pavement)
• the intersections of Warringah Road with Forest Way, Hilmer Street and Wakehurst Parkway to form a surface level bridge over the slot to provide for traffic movements at surface level and allow east-west through traffic in the slot to pass beneath uninterrupted
• upgrades or adjustments to existing intersections of Warringah Road with Fitzpatrick Avenue East, Rodborough Road and Allambie Road
• widening of Wakehurst Parkway from the intersection of Warringah Road to south of Aquatic Drive
• provision of a new connection at Aquatic Drive including right in from Wakehurst Parkway (northbound), left in from Wakehurst Parkway (southbound) and left out from Aquatic Drive onto Wakehurst Parkway (southbound)
• provision of shared (pedestrian and cyclist) bridges at the following locations: - Across Warringah Road west of the intersection of Forest Way (removal and replacement of the existing pedestrian bridge) - Across Warringah Road on the western side of the intersection with Hilmer Street (new pedestrian bridge).
• removal of the existing pedestrian crossing across Warringah Road at Hilmer Street
• shared paths and footpaths on sections of Warringah Road, Wakehurst Parkway, Forest Way, Aquatic Drive and Allambie Road.

Both Stage 1 and Stage 2 Project work includes drainage works, landscaping, property acquisition and adjustments, utility relocations (extending into surrounding streets), as well as ancillary works during construction. The ancillary works include but limited to construction compounds, sedimentation basins, and stockpile sites. This would tie in at either end with the shared path proposed by Warringah Council. The scope of the Stage 2 Project does not include ongoing maintenance work.

The Project is delivered under a design and construct (D&C) contract awarded to the Ferrovial York Joint Venture (FYJV) on 15 June 2015.
4. Project Management

The Approved Project is being designed and constructed in a joint venture consisting of Ferrovial Agroman (Australia) Pty Ltd and York Civil (FYJV), with overall project management and supervision of the project by Roads and Maritime Services (RMS). Ferrovial York Joint Venture (FYJV) and RMS are jointly responsible for compliance with the CoAs and RSMMs.

5. Environmental Management System Overview

The Construction Environmental Management Plan (CEMP) is the primary system to manage and control the environmental aspects of the Project during pre-construction and construction. It provides the overall framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled.

The strategies defined in the CEMP have been developed with consideration of the conditions of approval, safeguards and mitigation measures presented in the environmental assessment and approval documents. The CEMP establishes the system for implementation, monitoring and continuous improvement to minimise impacts from the Project on the environment.

6. Compliance Tracking Program requirements

This compliance report provides a status of compliance of construction in meeting the requirements specified in the Concept and Stage 1 and 2 CoAs and the RSMMs as a six-monthly reporting cycle following the commencement of Stage 1 construction.

6.1. Scope of the activities undertaken during the March 2017 to– August 2017 reporting period – Stage 1

During the compliance reporting period from March 2017 to August 2017, Stage 1 and 2 construction for the Project has seen the following activities started and progressed towards completion:

- Potholing, trenching and directional drilling of utility services along Frenchs Forest Road (east and west), Forest Way, Allambie Road and Warringah Road
- Utilities relocation including all providers
- Storm water drainage and earthworks
- Retaining wall construction
- The installation of the new Telstra underground relocation works along the west verge of Forest Way in Area C2 will continue.
- Property works in the Forest High School
- Stormwater drainage along Rabbett Street
- Installation of the stormwater drainage along the south verge in Area B
- Commencing the HP Gas Main
- Commenced road widening works in Forest Way East Area C2, Area D1 / D2 Warringah Road and Allambie Road Widening and Area D4 North verge FFRE East of Patanga.
- Opening up to traffic of the new Southbound slip lane in Area A2
- Road widening works on the South side of FFRW Area B and continuing with road widening works Forest Way East Area C2, Area D1 / D2 and D4
- The widening works to the South Side Frenchs Forest Road West.

6.2. Scope of the activities undertaken during the March 2017 to– August 2017 reporting period – Stage 2

During the compliance reporting period from March 2017 to August 2017, Stage 2 construction for the Project has seen the following activities started and progressed towards completion:
• Clearing and grubbing, contamination removal, noise walls, start of earthworks on Warringah road westbound, and retaining walls 9 and 5 (capping beam)
• The installation of the noise wall panels at the rear of Karingal Crescent and nearby properties
• Bulk earthworks
• Soil nail and shotcrete operation to retaining wall 2RW-05-WB
• The installation of the temporary bridging for Forest Way Pedestrian bridge east diversion
• Installation of the Forest Way and Hilmer Street pedestrian bridges
• Stormwater drainage
• Micro tunnelling for the stormwater outlet from the Slot
• Retaining wall construction 2RW-05-WB in Area A3 will be complete this period.
• Demolition of the existing Forest Way footbridge.

6.3. Ancillary Facility Approvals

As part of the Project, it is necessary to establish site compounds and other ancillary facilities to facilitate construction. Under the Stage 1 and Stage 2 Conditions of Approval (CoA), any new ancillary facilities have to be assessed and approved by the Department of Planning and Environment (DP&E). Table 6-1 compounds and ancillary facilities have been approved in this reporting period.

Table 6-1 Ancillary Facility Approvals

<table>
<thead>
<tr>
<th>Date</th>
<th>Ancillary Facility Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2017</td>
<td>Corner of Dreadnought Road and Wakehurst Parkway Oxford Falls</td>
</tr>
<tr>
<td>May 2017</td>
<td>500 Warringah Road, Frenchs Forest</td>
</tr>
<tr>
<td>June 2017</td>
<td>312 Warringah Road, Frenchs Forest</td>
</tr>
</tbody>
</table>

6.4. Approvals

Table 6-2 below is a summary of Approvals for this reporting period. The status is as of August 2017.

Table 6-2 Approvals

<table>
<thead>
<tr>
<th>Item</th>
<th>Status (August 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fauna Connectivity Strategy</td>
<td>Fauna Fencing strategy submitted to RMS</td>
</tr>
<tr>
<td>312 Warringah Road Ancillary Facility Consistency Assessment</td>
<td>Submitted to the Department of Planning during the reporting period.</td>
</tr>
<tr>
<td>Property adjustments across Project and Ausgrid tree trimming</td>
<td>Approved – with conditions. Design drawings must be signed by the Property Owner.</td>
</tr>
<tr>
<td>Warringah Road crossings for drainage works</td>
<td>Application to vary the EPL submitted to EPA, but rejected on 21 June 2017.</td>
</tr>
<tr>
<td>Weekend works associated with removal of median on Wakehurst Parkway</td>
<td>Application to vary the EPL submitted to EPA, with approval on 7 August 2017.</td>
</tr>
<tr>
<td>Cutover to 500 DIA Watermain on Forest Way</td>
<td>Application to vary the EPL submitted to EPA, with final approval 22 September 2017</td>
</tr>
<tr>
<td>Community Agreement for works in A1 and A2</td>
<td>Community agreement for weekend works associated with the A2 slip lane was approved by the EPA on 14 June 2017.</td>
</tr>
<tr>
<td>Variations to the EPL to allow weekend day works for various Ausgrid works</td>
<td>Multiple applications to vary the EPL submitted to EPA, during July and August, accepted and approved.</td>
</tr>
</tbody>
</table>
6.5. Sustainability
The Project submitted a reference design proposal to ISCA in March 2017 and received comments. Those comments were addressed and resubmitted to ISCA.
A meeting was held with ISCA to discuss the progress of the report. Following this meeting and incorporating feedback from the meeting, FYJV have re-submitted the reference design proposal on 6/10/17.

6.6. Performance of environmental controls
Key environmental controls have included:
- Fencing, flagging and sign-posting of project boundaries and no-go areas;
- Erosion and sedimentation controls in accordance with Progressive Erosion and Sediment Control Plans (PESCPs). Controls include diversion drains, bunding, sediment fencing and drainage filters, and sediment basins;
- Portable noise mats to suppress noise from mobile plant and equipment;
- Soil binders for dust suppression of temporary spoil stockpiles;
- Mobile water carts and sprinklers for dust suppression of cleared areas;
- Internal environmental permit process developed as part of the CEMP, which targets de-watering, vegetation clearing and out of hours works;
- Weekly environmental monitoring regime to review controls and guide maintenance actions.

In general the above environmental controls have effectively managed construction activities to avoid major environmental pollution impacts or detrimental impacts to surrounding environmental values. Specific case points of active management of environmental controls:
- ERSED controls have been progressively installed and updated across Stage 2 as the project continues earthwork activities.
- Stage 1 ESCP’s continue to be updated as the works progress. Area A1 and A2 were a key area of focus due to the proximity of receivers and scale of works undertaken in this area.
- The Soil Conservationist frequency on-site is weekly, instead of fortnightly to align with the current work program. The purpose of these visits is to reviews current PESCPs and advises the FYJV Construction crew on management methods.
- Watercarts and street sweepers are regularly on site and active in minimising dust generation.
- Weekly, Pre- and Post- rainfall inspections conducted across the Project as per CEMP and sub plans.
- A procedure has been developed with noise wall paint sprayers to minimise any over-spray.
- Out of Hours Works continue to be planned and executed. The environment team works on a weekly roster to monitor noise levels and provide an environmental surveillance for night works.
- Noise mats are being used at high impact sites during nightworks.
- Vibration monitoring occurring regularly as pavement works continuing for Warringah Road westbound continues.
- New waste recycling facilities were implemented in August.
- Solar powered nightworks lights were also established in August.
- Ongoing environmental monitoring of works (such as noise, vibration, air quality and water) conducted.

6.7. Environmental Incidents and actions taken
Environmental incidents on the project are reported to RMS. As per CoA A12 through to A14, RMS must notify DPE of any incident (other than those relating to the POEO Act) of actual or potential significant off site impacts within 24 hours. A record is kept and filed of the incident reports by both RMS and FYJV.

Table 6-4 Environmental Incidents

<table>
<thead>
<tr>
<th>#</th>
<th>Summary</th>
<th>Date</th>
<th>Remedial Action</th>
</tr>
</thead>
</table>

9
<table>
<thead>
<tr>
<th></th>
<th>Event Description</th>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Sediment laden stormwater passed through sediment controls and enters creek at Bantry Bay reserve</td>
<td>16/03/2017</td>
<td>Have Soil Conservationist review the controls, and readjust sediment controls in Bantry Bay area</td>
</tr>
<tr>
<td>25</td>
<td>Site compound basin discharge</td>
<td>13/04/2017</td>
<td>Re-establish the controls around the pump intake to the sediment basin</td>
</tr>
<tr>
<td>26</td>
<td>Hydraulic oil spill (EIN 026)</td>
<td>19/04/2017</td>
<td>Contain the spill, initiate clean up and remove material from site.</td>
</tr>
<tr>
<td>27</td>
<td>Ausgrid OOHW exceedance</td>
<td>18/05/2017</td>
<td>Noise monitoring undertaken to confirm noise levels.</td>
</tr>
<tr>
<td>28</td>
<td>Late finish works Saturday 24 June (Rabbett drainage) community complaint</td>
<td>26/06/2017</td>
<td>Reminder provided to field teams and Supervisors about the Approved Working Hours</td>
</tr>
<tr>
<td>29</td>
<td>Discoloured water at the Rabbett St GPT, but not likely from FYJV works.</td>
<td>18/07/2017</td>
<td>Investigation of the catchment area determined that contamination not likely from FYJV works</td>
</tr>
<tr>
<td>30</td>
<td>Sydney Water broken watermain on Frenchs Forest Road West. EPA asked for R3 report</td>
<td>19/07/2017</td>
<td>Erosion and sediment controls put in place to control the flow from the site</td>
</tr>
<tr>
<td>31</td>
<td>GSW material was discovered with a trace of asbestos</td>
<td>20/07/2017</td>
<td>Stockpile covered. Presna to re-assess the spoil material</td>
</tr>
<tr>
<td>32</td>
<td>Geofabric covering ACM stockpile was covered with other spoil material</td>
<td>31/07/2017</td>
<td>Deliver training on Asbestos management</td>
</tr>
<tr>
<td>33</td>
<td>Slurry spill by Tunnelcorp at Aquatic Dv; extended just passed project boundary but not into waterway</td>
<td>2/08/2017</td>
<td>Reinstate perimeter sediment fence or mulch berm. Clear material beyond project boundary.</td>
</tr>
<tr>
<td>34</td>
<td>Fuel leak from subcontractor van</td>
<td>3/08/2017</td>
<td>closed</td>
</tr>
<tr>
<td>35</td>
<td>Asbestos sheet found at rear of 26 Karingal Cres</td>
<td>9/08/2017</td>
<td>Minor asbestos fragments picked up and bagged</td>
</tr>
<tr>
<td>36</td>
<td>Late reporting of a community complaint (complaint received Fri 4 Aug and notified the EPA on Mon 7 Aug)</td>
<td>4/08/2017</td>
<td>There were two complaints from No 4 FFRE, one received 8:30am the other received 12:15pm.</td>
</tr>
<tr>
<td>37</td>
<td>Less than 5 days community notification to affected residents for OOHW between 7th August and 13th August</td>
<td>8/08/2017</td>
<td>New Comm Officer has arrived; Copy of EPL given to them.</td>
</tr>
</tbody>
</table>
6.8. Independent Environmental Auditing

Parsons Brinkerhoff are employed by RMS to act as the Project Verifier (PV). The PV have been engaged, amongst other tasks, to conduct a regular independent environmental audits of the Project.

Over the course of the period covered by this compliance report, there have been 2 independent PV audits:
- PV audit 31 May 2017 focussing on the Soil and Water Quality Management Plan
- PV Audit 31 August 2017 focussing on the Construction Environment Management Plan.

In addition to the PV, FYJV has an independent Environmental Representative who attends fortnightly to conduct site audits with an open invitation to Government regulators to attend on a monthly basis.

Regular fortnightly inspections by the ER and RMS Environment Branch representative, have identified minor house-keeping matters which included:
- Erosion and sediment control maintenance and adequacy of controls in response to site changes.
- Adequacy of rehabilitation activities following geotechnical activities prior to substantial earthwork activities across the site.
- Dust management.
- Vehicle tracking.

Each of these matters raised during inspections were immediately rectified.

6.9. Environmental complaints

During this reporting period, the Project received 60 environmental complaints. A general breakdown of the month and nature of environmental issues raised in complaints received is detailed in Table xx below.

<table>
<thead>
<tr>
<th>Month 2017</th>
<th>No. of Community Environmental Complaints</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>5</td>
<td>OOHW Noise</td>
</tr>
<tr>
<td>April</td>
<td>9</td>
<td>OOHW Noise Street Sweeper OOH Light Spill</td>
</tr>
<tr>
<td>May</td>
<td>16</td>
<td>OOHW Noise Discharge Tree trimming debris Vibration</td>
</tr>
<tr>
<td>June</td>
<td>7</td>
<td>OOHW Noise</td>
</tr>
<tr>
<td>July</td>
<td>10</td>
<td>OOHW</td>
</tr>
</tbody>
</table>
Community environmental complaints have largely been related to out of hours works, mostly in regards to noise, but some complaints about lack of notifications. Complaints have been also received in relation to dust and paint over spray.

The staging of night-time activities were programmed, assessed and monitored in accordance with the Noise and Vibration Management Plan and the Out of Hours Working Protocol. Noise mitigation measures were implemented where possible. While activities were monitored and shown to comply with predicted noise levels, the inherent noisy nature of these activities had given rise to complaints.

All noise complaints received were responded to within 24 hours and have been closed out. All complaints are recorded and tracked within the Project Consultation Manager system.

### 6.10. Non-compliances during the reporting period

Non-conformance is the failure or refusal to comply with the requirements of the CEMP and supporting documentation. Where a non-compliance has been identified, a corrective / preventative action (or actions) will be implemented. Table 6-6 details the non-compliances and EPA correspondence within this reporting period.

<table>
<thead>
<tr>
<th>Date</th>
<th>Type of non-compliance</th>
<th>EPA actions</th>
<th>FYJV Response and Close-out</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 May 2017</td>
<td>Poor housekeeping practices onsite including high noise impact works (e.g. Rockbreaking in proximity to Fitzpatrick Ave &amp; Panorama Cresc without respite); Issues with community notification; Administrative errors.</td>
<td>Letter received from Stuart Clark (EPA)</td>
<td>Soil Conservationist engaged weekly instead of fortnightly. New Environment Manager engaged.</td>
</tr>
<tr>
<td>5 July 2017</td>
<td>Works being undertaken outside of the permitted standard operating hours at Rabbett St</td>
<td>Formal Warning Letter</td>
<td>Disseminate reminders on Working Hours to field teams and supervisors</td>
</tr>
<tr>
<td>11 August 2017</td>
<td>Less than 5 days notification to affected residents for upcoming out of hours works between Mon 7 and Sun 13 August 2017</td>
<td>Formal Warning Letter</td>
<td>Reminder of the procedures provided to the project’s Community Relations Team</td>
</tr>
<tr>
<td>24 August 2017</td>
<td>Sediment laden water leaving the project construction site. Inadequate controls at Fitzpatrick Avenue East witnessed during the ERG site inspection on 17 August 2017.</td>
<td>Formal Warning Letter</td>
<td>Reminders provided to site personnel including designated gate warden.</td>
</tr>
</tbody>
</table>

### 6.11. Environmental Training and Awareness

In accordance with Section 5.1 of the CEMP, all personnel, including employees, contractors and subcontractors, attend a compulsory environmental site induction prior to commencement of on-site activities. The induction includes:
• relevant details of the CEMP including purpose and objectives;
• key environmental issues;
• key conditions of environmental licences, permits and approvals;
• specific environmental management requirements and responsibilities;
• mitigation measures for the control of environmental issues;
• incident reporting requirements; and
• information relating to the location of environmental constraints.

A record of all environment inductions are maintained within the Project Comply-Flow system and kept on-site.

Environmental representatives continue to present the environmental component of the induction on a regular basis, as new personnel commence on the project.

Further to the induction, field crews and staff are reminded regularly of the environmental controls which are relevant and specific to the project. Table 6-7 details a list of toolbox talk topics which continued in line with the work fronts and response to current issues.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Date</th>
<th>Toolbox Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>March Monthly Toolbox Talk</td>
<td>1/03/2017</td>
<td>Water discharge requirements; Pre-Rainfall Preparation; Community considerations with nightworks.</td>
</tr>
<tr>
<td>Toolbox Pre-start meeting</td>
<td>14/03/2017</td>
<td>Prevent tracking onto public roads; Sandbags must not be damaged; steel recycling bins are available</td>
</tr>
<tr>
<td>Weekly Toolbox</td>
<td>21/03/17</td>
<td>Incident notification reminders</td>
</tr>
<tr>
<td>April Monthly Toolbox Talk</td>
<td>5/04/17</td>
<td>Dust management; Issue Environment Award for good pump placement</td>
</tr>
<tr>
<td>Toolbox Pre-start meeting</td>
<td>11/04/17</td>
<td>Ensure all ERSED controls are adequate and in place prior to leaving the site before the Easter Break.</td>
</tr>
<tr>
<td>Toolbox Pre-start meeting</td>
<td>19/04/17</td>
<td>Reminders about licensed discharge points, and constant monitoring.</td>
</tr>
<tr>
<td>Toolbox Pre-start meeting</td>
<td>27/04/17</td>
<td>ERSED controls</td>
</tr>
<tr>
<td>May Monthly Toolbox Talk</td>
<td>4/5/17</td>
<td>Noise management; Noise mats; De-watering; Waste management</td>
</tr>
<tr>
<td>10 Day Ausgrid Outage</td>
<td>4/05/17</td>
<td>Noise management and Light spill</td>
</tr>
<tr>
<td>Toolbox Pre-start meeting</td>
<td>9/05/17</td>
<td>Rubbish management; squawkers on plant</td>
</tr>
<tr>
<td>Toolbox Pre-start meeting</td>
<td>16/05/17</td>
<td>Manage tracking of mud onto public roads</td>
</tr>
<tr>
<td>June Monthly Toolbox Talk</td>
<td>7/06/17</td>
<td>Construction Boundary Rules</td>
</tr>
<tr>
<td>Bridge demolition</td>
<td>10/06/17</td>
<td>Noise management; Spills; Slurry management</td>
</tr>
<tr>
<td>Dewatering to the Ford Civil Team</td>
<td>18/06/17</td>
<td>Dewatering and Dewatering Permits</td>
</tr>
<tr>
<td>Slip lane works</td>
<td>23/06/17</td>
<td>Work hours; Community and noise; Oil spills</td>
</tr>
<tr>
<td>Rabbett St, FFRW Pre-start</td>
<td>27/06/17</td>
<td>Mud tracking; ROL; Work Hours; Noise management</td>
</tr>
<tr>
<td>Bantry Bay Rd area Pre-Start</td>
<td>28/06/17</td>
<td>Vibration; Dewatering and permits; Noise management</td>
</tr>
<tr>
<td>Sub-contractor on-boarding</td>
<td>28/06/17</td>
<td>Work hours; Noise management Dewatering; Vegetation clearing; ERSED; Waste</td>
</tr>
<tr>
<td>MacFayden’s Drainage Crew at Rabbett Street</td>
<td>30/06/17</td>
<td>Working hours; Noise management and mitigation</td>
</tr>
<tr>
<td>Telstra Pulling Sub-Ducts</td>
<td>6/08/17</td>
<td>Noise and community and use of noise mats</td>
</tr>
<tr>
<td>Wakehurst Median Weekend</td>
<td>11/08/17</td>
<td>Noise management</td>
</tr>
<tr>
<td>Noise Wall Works</td>
<td>17/08/17</td>
<td>Management of Paint Over-spray and Community Impacts</td>
</tr>
</tbody>
</table>
Table 6-8: Specific Environmental Training

<table>
<thead>
<tr>
<th>Specific Environmental Training</th>
<th>Date</th>
<th>Training Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out of Hours Works Training</td>
<td>4/05/2017</td>
<td>Permit process; Noise Catchment Areas; Mitigation measures; Traffic and ROLs</td>
</tr>
<tr>
<td>Technical training with John Hutchison</td>
<td>14/06/17</td>
<td>Training in use of noise modelling, compliance with EPL, and noise management with John Hutchison</td>
</tr>
</tbody>
</table>
| Internal Training Session to Engineers on Out of Hours Works Noise Management | 20/6/2017  | Requirements of the Legislation – the POEO Act Environment Protection Licence (latest issue 9 June 2017)  
• High Impact Noise Works? Definition provided in License  
• Condition L4.4 Number per week  
• Requirements of our ‘Out Of Hours Noise Protocol’  
• The ‘KnowNoise’ model results  
• How we schedule works  
  o Any new OOHW works - require an OOHW Permit Application Form  
  o Planning the week ahead, submit to Enviro Tuesday morning plotted on a map  
  o Guide 4 quadrants – no more than 3 Noisy OOHW  
• Noise monitoring  
• Community complaints management  
• Basic field requirements |
| Pump Operations VOC              | 28/4/2017  | EPL discharge requirements  
• Pump operation  
• Pump vigilance  
• Pump positioning |

6.12. Compliance with the Stage 1 and Stage 2 Project Approvals and RSMMs

The six monthly report on compliance with the Stage 1&2 Project Approvals and RSMMs are provided in:  
• Appendix A - summary of Concept and Stage 1 Project compliance against the Conditions of Approval  
• Appendix B - summary of the Concept and Stage 1 compliance against each of the RSMMs from the Concept and Stage 1 SPIR.  
• Appendix C - summary of Concept and Stage 2 Project compliance against the Conditions of Approval  
• Appendix D - summary of the Concept and Stage 2 compliance against each of the RSMMs from the Concept and Stage 2 SPIR.
Schedule 2: Conditions of Approval for Concept Approval

### Part A - Administrative Conditions

<table>
<thead>
<tr>
<th>Ref</th>
<th>Sub Ref.</th>
<th>CONCEPT PROPOSAL AND STAGE 1 CONDITIONS OF APPROVAL</th>
<th>Phase</th>
<th>Compliance Report 3 August 2017 Status (e.g. Date submitted to DP&amp;E, Approval obtained etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td></td>
<td>Approval is granted to the Concept Proposal as described in Schedule 1 and in the Environmental Impact Statement, as amended by the Preferred Infrastructure Report and the conditions in this approval.</td>
<td>Pre-construction</td>
<td>Noted</td>
</tr>
<tr>
<td>A2</td>
<td></td>
<td>The Proponent shall carry out the Concept Proposal generally in accordance with the</td>
<td>Construction</td>
<td>CEMP was approved for Stage 2 (6 Stage 1 Update) in August 2016. CEMP addresses all requirements of the SSI-6434, EIS, PPR and CoA.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>State significant infrastructure application SSI-6434;</td>
<td>Post-construction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental Impact Statement;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preferred Infrastructure Report; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conditions of this approval.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td></td>
<td>In the event of an inconsistency between</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The conditions of this approval and any document dated from condition A22(v) to A32(ii) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and</td>
<td>Construction</td>
<td>The condition is noted for both Stage 1 &amp; Stage 2 construction works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>any document dated from condition A22(v) to A32(ii) inclusive, and any other document dated from condition A22(v) to A32(ii) inclusive, the most recent document shall prevail to the extent of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4</td>
<td></td>
<td>The Concept Proposal approval does not permit pre construction activities or the construction of any development.</td>
<td>Pre-construction/Construction</td>
<td>Noted</td>
</tr>
<tr>
<td>A5</td>
<td></td>
<td>This approval shall lapse 10 years after the date on which it is granted, unless the works subject of an SSI approval subject to this Concept Proposal is physically commenced on or before that date.</td>
<td>Construction</td>
<td>Stage 1 and Stage 2 project works have commenced following DP&amp;E Approval.</td>
</tr>
<tr>
<td>A6</td>
<td></td>
<td>In addition to meeting the specific performance criteria established under an SSI approval subject to this approval, the Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of an SSI subject to this approval.</td>
<td>Pre-construction</td>
<td>Stage 1 &amp; Stage 2 project is subject to CEMP and Project Plans covering all SSI approval requirements.</td>
</tr>
<tr>
<td>A7</td>
<td></td>
<td>In the event of a dispute between the Proponent and a public authority, in relation to an applicable requirement in this approval, or an SSI approval subject to this approval, or relevant matter relating to the SSI, either party may refer the matter to the Secretary for resolution. The Secretary’s determination of any such dispute shall be final and binding on the parties.</td>
<td>Construction</td>
<td>Throughout</td>
</tr>
</tbody>
</table>

### Part B - Requirements for Stage 2 Network Enhancement Works

| B1  |          | The Secretary’s Environmental Assessment Requirements as described in the letter (and attachment) from the Secretary of the Department of Planning and Environment and its delegate issued on the 10th September, 2014, and supplemented on the 18th May, 2015 shall be addressed. | | Addressed: No further action. |

### Part C - Community Communication Strategy

| C1  |          | Prior to the commencement of construction of any SSI subject to the Concept Proposal, or as otherwise agreed by the Secretary, the Proponent shall prepare, to the satisfaction of the Secretary and implement a Community Communication Strategy. The Strategy shall provide mechanisms to facilitate communication between the Proponent (and its contractors), the Environmental Representative, the Council, education and community stakeholders (particularly adjoining landowners), on the environmental management of the Concept Proposal and subsequent SSI stages. The Strategy shall include, but not be limited to: | | Community Communications Strategy (CCS) was updated to include stage 2 and was approved on 5th August 2016. Community Involvement Plan (CIP) approved B12/15 (and being revised in 2017) |
|     |          | Identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners, key community and business groups, education (including the Forest High School Working Group), community and social service organisations; | CCS Chapters 4 & 6 | Appendix 3 |
|     |          | Procedures and mechanisms for the regular distribution of accessible information to community stakeholders on construction progress and matters associated with environmental management including provision of information in appropriate community languages; | CCS Chapters 6 & 9 | |
|     |          | The formation of community-based forums that focus on key environmental management issues. The Strategy shall provide detail on the structure, scope, objectives and frequency of the community-based forums; | CCS Chapter 6 - Section 6.2 | |
|     |          | Procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management and delivery of the Concept Proposal and each subsequent SSI stage; and | CCS Chapter 6 | |
|     |          | Procedures and mechanisms through which the Proponent can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the Concept Proposal and each subsequent SSI stage. This will include a mediation system to assist in considering complaints that are unable to be resolved through initial contact, and which may include the use of a specially qualified and experienced independent mediator; | CCS Chapter 7 | |
|     |          | The Proponent shall maintain and implement the Strategy throughout the construction of the Concept Proposal and each subsequent SSI stage. | | |
| C2  |          | Prior to the commencement of construction of each subsequent SSI stage, or as otherwise agreed by the Secretary, the Proponent shall ensure that the following are available for community enquiries and complaints for the duration of construction: | | Incorporate into the Community Communications Strategy for Stages 1 and 2 |
|     |          | a 24 hour telephone number(s) on which complaints and enquiries about the SSI may be registered. | CCS Chapters 7 & 9 | These are all available on the Project website: http://www.rms.nsw.gov.au/projects/sydney-north/northern-beaches-hospital |
|     |          | a postal address to which written complaints and enquiries may be sent; and | | |
|     |          | an email address to which electronic complaints and enquiries may be transmitted. | | |
|     |          | The telephone number, the postal address and the email address shall be published in newspapers circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval. | | |
| C3  |          | Prior to the commencement of construction of each subsequent SSI stage, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a Construction Complaints Management System consistent with SSI-6380: Complaints Handling and maintain the System for the duration of construction and up to 12 months following completion of construction of each subsequent SSI stage. | | Construction Complaints Management System in place for Stage 1 & 2 Project and addressed in CCS Chapter 7 and the CIP. The Complaints process summarised: |
|     |          | The Complaints process summarised: | | Complaints received by Project via 1800 number and email address. Complaints are logged on Consultation manager -(Complaints management software) A short report sent to environment manager. Complaint investigated by Community and environment team and any further correspondence or closure of complaint is managed by the Community team. For Complaints received overnight and before midnight, an incident summary report is sent to EPA by 2pm. For overnight* Complaints received after midnight are reported to the EPA by 2pm the next day. |
|     |          | Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by this approval. The information contained within the System shall be made available to the Secretary on request. | Construction Complaints Management System in place for Stage 1 & 2 Project and addressed in CCS Chapter 7. All complaints and subsequent actions are recorded in the Project complaints software system - Consultation Manager. |
**Ref** | **Sub Ref.** | **CONCEPT PROPOSAL AND STAGE 1 CONDITIONS OF APPROVAL** | **Compliance Report 3 August 2017 Status** (e.g. Date submitted to DP&E, Approval obtained etc.)<br>---|---|---|---
C4 | | Prior to the commencement of construction of each subsequent SSI stage, or as otherwise agreed by the Secretary, the Proponent shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSI for the duration of construction and for 12 months following completion of construction of the SSI. The Proponent shall subject to confidentiality, publish and maintain up to date information on the website or dedicated pages including, but not necessarily limited to:<br>(a) Information on the current implementation status of the SSI<br>(b) a copy of each relevant environmental approval, licence, or other document required under this approval;<br>(c) a copy of any other document that may be granted from time to time;<br>(d) a copy of each current strategy, plan, program or other document required under this approval;<br>(e) the outcomes of any audits undertaken in accordance with condition A2 of Schedule 3 of the approval; and<br>(f) details of contact points to which community complaints and inquiries may be directed, including a telephone number, a postal address and an email address.<br>Prior to Construction Construction Project website established and implemented for Stage 1 & 2 Project www.rms.new.nsw.gov.au/projects/sydney/north/northern-beaches-hospital/

### Part D - Environmental Performance

#### D1

The Concept Proposal shall facilitate improvements to public transport facilities and services at a local and regional level and shall have consideration of increased public transport demand.<br><br>Post-construction As per SSI application, EIS, Preferred Infrastructure Report and CoA

**Schedule 3: Conditions of Approval for Stage 1 SSI Approval**

#### Part A - Administrative Conditions

| A1 | All references to conditions in this schedule relate to conditions in this schedule unless explicitly stated otherwise. Noted |
| A2 | (a) The Proponent shall carry out the SSI generally in accordance with the Concept Proposal and Stage 1 & 2 CEMP documentation updated with DP&E comment prior to approval and issue for construction in August 2018. CEMP was approved for Stage 2 (8 Stage 1 Update) in August 2016. CEMP addresses all requirements of the SSI-6434, EIS, PIR and CoA. Approvals and dates are outlined in 1.2 Purpose of CEMP. |
| A3 | (a) The conditions of this approval and any document listed from condition A2(a) to A2(c) inclusive, the most recent document shall prevail to the extent of the inconsistency; and<br>(b) if the conditions of this approval and any document listed from condition A2(a) to A2(c) inclusive, the most recent document shall prevail to the extent of the inconsistency. |
| A4 | (a) the conditions of this approval and any document listed from condition A3(a) to A3(c) inclusive, any other document listed from condition A3(a) to A3(c) inclusive, the most recent document shall prevail to the extent of the inconsistency; and<br>(b) the implementation of any actions or measures contained within these reports, plans or correspondence. |
| A5 | (a) Stage 1 & 2 CEMP documentation updated with DP&E comment prior to approval and issue for construction in August 2018. CEMP was approved for Stage 2 (& Stage 1 Update) in August 2016. CEMP addresses all requirements of the SSI-6434, EIS, PIR and CoA. Approvals and dates are outlined in 1.2 Purpose of CEMP. Stage 1 Project commenced following DP&E approval of Infrastructure Approval dated 26th June 2015 And Stage 2 commenced 25 February 2017 |
| A6 | (a) All new comers to Project attend the Project induction which occurs 3x/week with the environmental section presented by the environment team. The project has commenced and no staging reports are prepared for the project. |
| A7 | (a) The Proponent shall establish and operate the SSI in accordance with the Concept Proposal and Stage 1 & 2 CEMP documentation updated with DP&E comment prior to approval and issue for construction in August 2018. CEMP was approved for Stage 2 (& Stage 1 Update) in August 2016. CEMP addresses all requirements of the SSI-6434, EIS, PIR and CoA. Approvals and dates are outlined in 1.2 Purpose of CEMP. |
| A8 | (a) The Proponent shall ensure that any strategy, plan, program or other document required by the conditions of this approval and relevant to each strategy, plan, program or other document required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) are submitted to the Secretary no later than one month prior to the commencement of the relevant stage(s), unless otherwise agreed by the Secretary. |
| A9 | (a) The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities. |
| A10 | (a) The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and others. |
| A11 | (a) The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program shall be submitted to the Secretary for approval prior to the commencement of construction and operate for a minimum of 18 months following commencement of construction. The Program shall include but not necessarily be limited to:<br>(i) a Pre-Construction Compliance Report prior to the commencement of construction;<br>(ii) Construction Compliance Reports, at six months intervals following commencement of construction and subsequent submission thresholds to be directed by the Secretary if necessary, following review of the Reports for the duration of construction; and<br>(iii) a Pre-Operation Compliance Report prior to the commencement of operations;<br>| | The CTP for Stages 1&2 Project were prepared and submitted to DP&E, and was approved for both stages so Project construction could commence. The CEMP for both stages was approved in August 2016. |
### Part B - Environmental Performance

<table>
<thead>
<tr>
<th>Ref</th>
<th>Sub Ref.</th>
<th>CONCEPT PROPOSAL AND STAGE 1 CONDITIONS OF APPROVAL</th>
<th>Commitment/Obligation</th>
<th>Phase</th>
<th>Compliance Report 3 August 2017 Status (e.g. Date submitted to DP&amp;E, Approval obtained etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td></td>
<td>Exempt as may be provided within an EPL, the Proponent must not cause or permit any waters to be polluted, as defined under Section 120 of the Protection of the Environment Operations Act 1997.</td>
<td>Construction</td>
<td>Noted. Water pollution incidents recorded on incident register and reported to EPA. Details in main report</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td></td>
<td>All surface water and groundwater shall be adequately treated to meet the requirements of condition B1, where feasible and reasonable, prior to entering the stormwater system, drainage lines or riparian corridors. The Proponent shall ensure that any works in identified areas of acid sulphate soil risk are undertaken in accordance with the Acid Sulphate Soil Manual (Acid Sulphate Soil Management Advisory Committee, 1998) for the Management of Acid Sulphate Materials (RMS, 2004).</td>
<td>Construction</td>
<td>Controls for discharge of water is being undertaken in accordance with the EPL, and in accordance with the approved Soil and Water Quality Management Plan (see SMEC document Appendix E) and all new comers to Project attend the Project induction which occurs 3x/week with the environmental section these aspects in more detail.</td>
<td></td>
</tr>
<tr>
<td>B3</td>
<td></td>
<td>The SSI shall be designed to ensure that the SSI, where feasible and reasonable, does not worsen surface water quality objectives and pollution reduction targets;</td>
<td>Construction</td>
<td>Compliance with this requirement is being undertaken as part of detailed drainage design as per Scope of Works and Technical Requirements. The proposed flood protection and mitigation measures are generally consistent with the Reference Design proposed by Lyell and Associates. Reference in the Design Drainage Reports and the Drainage Design Strategy Report.</td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td></td>
<td>The upgrade to the drainage system, generally as described in the documents referred to in condition A2, shall achieve a minimum 10 year AR hydrologic standard, unless otherwise agreed by the Secretary. The detailed design of the surface water management systems shall not prejudice integration with surface water management systems associated with Stage 2 of the concept proposal.</td>
<td>Pre-construction &amp; Post-construction</td>
<td>Compliance with this requirement is being undertaken as part of detailed drainage design as per Scope of Works and Technical Requirements. Confirmed in Table 3 of the Drainage Design Strategy Report.</td>
<td></td>
</tr>
<tr>
<td>B5</td>
<td></td>
<td>All relevant information shall be provided to the Relevant Council(s) and/or NSW State Emergency Service, to assist in the preparation of any new or revised update(s) to the relevant plans and documents in relation to flooding, to reflect changes in flooding levels, risks and characteristics as a result of the SSI.</td>
<td>Construction</td>
<td>Following completion of detailed design, information will be supplied to Council and/or NSW State Emergency Service.</td>
<td></td>
</tr>
<tr>
<td>B6</td>
<td></td>
<td>The Proponent shall develop a Water Management Plan (WMP) to ensure that the project is designed and constructed to meet condition B1. The WMP shall address operational water quality management, monitoring and response arrangements in relation to water quality impacts. The Plan shall include but not be limited to:</td>
<td>Construction</td>
<td>CEMP Appendix B4 Sol and Water Quality Management Plan Rev 3 was updated for Stage 1 and Stage 2 inclusion in August 2016 which includes Appendix M - Surface Water Monitoring Program. Also a Water Management Plan has been prepared for the project (see SMEC document prepared for RMS). SMEC have also been engaged to monitor surface and groundwater for the duration of the Project.</td>
<td></td>
</tr>
<tr>
<td>B7</td>
<td></td>
<td>A Surface Water Quality Monitoring Program (SWQMP) shall be prepared and implemented to monitor impacts on surface water quality and resources during construction and operation. The SWQMP shall be prepared by a suitably qualified and experienced person(s) and include, but not be limited to:</td>
<td>Construction</td>
<td>CEMP Appendix B4 Sol and Water Quality Management Plan Rev 3 was updated for Stage 1 and Stage 2 inclusion in August 2016 which includes Appendix M - Surface Water Monitoring Program.</td>
<td></td>
</tr>
</tbody>
</table>

### CEMP Appendix B4 Soil and Water Quality Management Plan Rev 3 was updated for Stage 1 and Stage 2 inclusion in August 2016 which includes Appendix M - Surface Water Monitoring Program. Also a Water Management Plan has been prepared for the project (see SMEC document prepared for RMS). SMEC have also been engaged to monitor surface and groundwater for the duration of the Project.
Prior to commencement of site preparation and excavation activities, or as otherwise agreed by the Secretary, in areas identified as having a medium to high risk and as presented in Chapter 7 of Phase 1 Contamination Assessment: Northern Beaches Hospital Connectivity and Network Enhancements Project, Frenchs Forest NSW, SMEC, October 2014., a Soil Contamination Report shall be prepared by a suitably qualified person(s) in accordance with the requirements of the Contaminated Land Management Act 1997 and associated guidelines, detailing the outcomes of Phase 2 contamination investigations in these areas. The Report shall detail, where relevant, whether the soil is suitable (for the intended land use) or can be made suitable through remediation and/or outline the potential contamination risks from the project to human health and receiving waterways.

For land to be disturbed by the SSI, where the investigations identify that the site is suitable for the intended operations and that there is no need for a specific remediation strategy, measures to identify, handle and manage potential contaminated soils and materials and groundwater shall be identified in the Report and incorporated into the Construction Environmental Management Plan as required under condition D31 and D32. Should a remediation strategy be required, the Report shall specify the contaminated area, and how the environmental and human health risks will be managed during the disturbance, remediation and/or removal of contaminated soil or groundwater.

If required, the Report shall be accompanied by a Site Audit Statement(s), prepared by an accredited Site Auditor under the Contaminated Land Management Act 1997, verifying that the disturbed area has been or can be remediated to a standard consistent with the intended land use. A final Site Audit Statement(s), if required, shall be prepared by an accredited Site Auditor, certifying that the contaminated disturbed areas have been remediated to a standard consistent with the intended land use and shall be submitted to the Secretary and Relevant Council prior to operation of the site.

In undertaking the SSI, impacts to heritage within the SSI boorong, shall where feasible and reasonable, be avoided and minimized. Where impacts are unavoidable, works shall be undertaken in accordance with the strategic outline in the Construction Heritage Management Plan required by condition CS28.

The Proponent shall not destroy, modify or otherwise physically affect any heritage items outside the SSI footprint. This includes Aboriginal heritage sites Treble Creek 1 and Treble Creek 2, unless otherwise agreed by the Secretary following consultation with the OEH.

Access to all properties shall be maintained during construction and operation, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by the SSI shall be remeasured to at least an equivalent standard, unless agreed with by the property owner.

The Proponent shall investigate in consultation with Council, facilitating left turn access for general traffic from Palatina Road on to Frenchs Forest Road East. Where such movement cannot be facilitated, the restriction of access at the Palatina Road and Frenchs Forest Road East intersection shall be managed so as to ensure that there is a suitable alternative travel route and that road users are clearly alerted of these restrictions prior to approaching the intersection. The traffic performance of the restrictions including in relation to the safety turning of vehicles shall be monitored and assessed in accordance with condition D7 (Operational Traffic Performance Review). If this review identifies traffic flow, performance and safety related issues, the Proponent shall investigate facilities to allow vehicles to turn about in a safe manner.

The project shall include the delivery of cycle facilities along Lakemba Parkway to the north of Frenchs Forest Road and for the extent of the SSI Project, Frenchs Forest NSW, SMEC, October 2014., a Soil Contamination Report shall be prepared for land to be disturbed by the SSI, where the investigations identify that the site is suitable for the intended land use (for the intended land use) or can be made suitable through remediation and/or outline the potential contamination risks from the project to human health and receiving waterways.

In relation to road or modified local road, parking, bus and rail, public transport, pedestrian and cycle infrastructure, the SSI shall be designed and implemented:

(a) in consultation with the Relevant Council(s), DEC, Health Infrastructure and The Fast Forest High School Working Group;
(b) to take into consideration existing and future demand, road safety, traffic network impacts and local access;
(c) to facilitate a high level of pedestrian accessibility and safety, including safe access to and from The Forest High School, and the provision of pedestrian crossings on all four legs of intersections, where not already isolated, and for the extent of the SSI project.
(d) to adopt local and regional cycle plans 2023 and to ensure that cycle facilities will be able to cater for all road user categories of traffic that can be delivered to provide seamless connectivity (including between stages of the Concept Proposal); and
(e) to meet relevant design, engineering and safety guidelines, including Australian Guide to Traffic Engineering Practice.

An independent road safety audit(s) is to be undertaken by an appropriately qualified and experienced person during detailed design to assess the safety performance of the subject road network and associated facilities and to ensure that they meet the requirements of condition B11(a). Audit findings and recommendations shall be actuated prior to construction and shall be made available to the Secretary on request.

The clearing of native vegetation shall be minimized with the objective of reducing impacts to any threatened species or Endangered Ecological Communities to the greatest extent practicable. Impacting vegetation shall be rehabilitated with endemic species to the greatest extent practicable.

The Proponent shall implement at feasible and reasonable corridor and wildlife connectivity measures, including those identified in Chapter 3 Biodiversity Assessment Report, Northern Beaches Hospital Connectivity and Network Enhancements, SMEC, October 2014.

The Proponent shall prepare a Site Audit Statement(s), prepared by an accredited Site Auditor under the Contaminated Land Management Act 1997, verifying that the disturbed area has been or can be remediated to a standard consistent with the intended land use. A final Site Audit Statement(s), if required, shall be prepared by an accredited Site Auditor, certifying that the contaminated disturbed areas have been remediated to a standard consistent with the intended land use and shall be submitted to the Secretary and Relevant Council prior to operation of the site.

Compliance with this requirement is being undertaken as part of detailed design as per Scope of Works and Technical Requirements.

Compliance with this requirement is being undertaken as part of detailed design as per Scope of Works and Technical Requirements.

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<tbody>
<tr>
<td>B20</td>
<td></td>
<td>The proponent shall develop and implement an Ecological Monitoring Program to monitor the effectiveness of project design and biodiversity mitigation measures implemented as part of the project. The program shall be developed by a suitably qualified and experienced ecologist in consultation with the OEH, and shall include but not necessarily be limited to:</td>
<td>Pre-construction Construction</td>
<td>Stage 1 in accordance with approved Construction Flora and Fauna Management Sub Plan issued for construction (Nov 2015) and now incorporated into updated Stage 2 CEMP Rev 3 (Aug 2016) App B2 FFMP. Bios have issued the Ecological Monitoring Program Implementation 2016/17 DRAFT REPORT in the last week of August 2017. The draft report outlines the background to monitoring, the current and future monitoring plan and results for the last 4 quarters of the Project.</td>
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<td>(a) an adaptive monitoring program to assess the effectiveness of design and mitigation measures and allow amendment to the measures if necessary. The monitoring program shall nominate performance parameters and criteria against which effectiveness will be measured, including but not limited to specific species such as Long Nosed Bandicoots, in relation to road kill.</td>
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<td>(b) mechanisms for developing additional monitoring protocols to assess the effectiveness of any additional mitigation measures implemented to address additional impacts in the case of design amendments or unexpected threatened species finds during construction (where these additional impacts are generally consistent with the biodiversity impacts identified for the project in the documents listed under condition A2).</td>
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<td>(c) monitoring shall be undertaken during construction (for construction-related impacts) and from opening of the project to traffic (for operation/ongoing impacts) until such time as the effectiveness of mitigation measures can be demonstrated to have been achieved over a minimum of three successive monitoring periods after opening of the project to traffic, unless otherwise agreed by the Secretary. The monitoring period may be reduced with the agreement of the Secretary in consultation with OEH, depending on the outcomes of the monitoring;</td>
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<td>(d) provision for the assessment of the risk to identify changes to habitat usage and whether this can be directly attributed to the project including, but not limited to, the impacts on the Flinders Ranges Toorak; a result of any ongoing system redeploy and peak flow diversion into or away from ESU 5 and Trelford Creek (orange line 2).</td>
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<td>(e) advice of contingency measures that would be implemented in the event of changes to habitat usage patterns directly attributable to the construction or operation of the project; and</td>
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<td>(f) provision for annual reporting of monitoring results to the Secretary and OEH, or as otherwise agreed by those agencies.</td>
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<tr>
<td>B21</td>
<td></td>
<td>The Program shall be submitted to the Secretary for approval no later than six (6) weeks prior to the commencement of construction that would result in the disturbance of native vegetation, unless otherwise agreed by the Secretary.</td>
<td>Construction</td>
<td>Stage 1 construction works have been undertaken in accordance with Construction Waste and Energy Management Sub Plan issued for construction (Nov 2015) and CEMP Rev 3 (Aug 2016) revised for Stage 1 upgrades and stage 3. No external waste or materials have been brought onto site.</td>
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<td>The waste generated outside the site shall not be received at the site for storage, treatment, processing, reprocessing or disposal on the site, except as expressly permitted by a licence under the POEO Act, if such a licence is required in relation to that waste.</td>
<td>Construction</td>
<td>Stage 1 construction works have been undertaken in accordance with Construction Waste and Energy Management Sub Plan issued for construction (Nov 2015) and CEMP Rev 3 (Aug 2016) revised for Stage 1 upgrades and stage 3.</td>
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<td>The reuse and/or recycling of waste materials generated on site shall be maximised for as practicable, to minimise the need for treatment or disposal of those materials off-site.</td>
<td>Construction</td>
<td>Stage 1 construction works have been undertaken in accordance with Construction Waste and Energy Management Sub Plan issued for construction (Nov 2015) and CEMP Rev 3 (Aug 2016) revised for Stage 1 upgrades and stage 4.</td>
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<td>All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with Waste Classification Guidelines (DECCW, 2009)</td>
<td>Construction</td>
<td>Stage 1 construction works have been undertaken in accordance with Waste Classification Guidelines (DECCW, 2009) and the CEMP Rev 3 (Aug 2016) revised for Stage 1 upgrades and stage 4.</td>
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<td>All waste material removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.</td>
<td>Construction</td>
<td>Stage 1 construction works have been undertaken in accordance with Waste Classification Guidelines (DECCW, 2009) and the CEMP Rev 3 (Aug 2016) revised for Stage 1 upgrades and stage 4.</td>
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<tr>
<td>B25</td>
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<td>Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the SSI shall be undertaken to make suitable arrangements for access to, diversion, relocation, protection, and/or support of the affected infrastructure as required. All works shall meet the safety standards, environmental safeguards and other related requirements of the service provider. All the cost of any such arrangements shall be borne by the Proponent, unless otherwise agreed by the service provider.</td>
<td>Pre-construction Construction</td>
<td>Stage 1 works have been undertaken as per FYJV Project Plans in compliance with Scope of Works and Technical Requirements and are meeting these requirements in agreements with the respective utility providers. Utilities relocation is an ongoing program of works for both Stage 1 and Stage 2.</td>
</tr>
<tr>
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<td></td>
<td>The Program shall be submitted to the Secretary for approval no later than six (6) weeks prior to the commencement of construction that would result in the disturbance of native vegetation, unless otherwise agreed by the Secretary.</td>
<td>Pre-construction Construction</td>
<td>Stage 1 works have been undertaken as per FYJV Project Plans in compliance with Scope of Works and Technical Requirements and are meeting these requirements in agreements with the respective utility providers. Utilities relocation is an ongoing program of works for both Stage 1 and Stage 2.</td>
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<tr>
<td>B26</td>
<td></td>
<td>The Proponent shall ensure that all land impacted as a result of utility adjustments or relocations are restored to its pre-construction condition.</td>
<td>Construction</td>
<td>Aecom have developed and issued the Urban Landscape and Design Plan (ULDP) and has been approved for use. The approval granted by the Secretary includes exceptions to the original urban design principles and objectives.</td>
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<td>The Proponent shall ensure that all land impacted as a result of utility adjustments or relocations are restored to a standard necessary to facilitate safe pedestrian, cyclist and vehicle usage until such time as construction of Stage 2, pending approval, commences. Should construction of Stage 2 not commence within twelve months following finalisation of utility adjustments, the impacted land shall be restored to its pre-construction condition.</td>
<td>Construction</td>
<td>Aecom have developed and issued the Urban Landscape and Design Plan (ULDP) and has been approved for use. The approval granted by the Secretary includes exceptions to the original urban design principles and objectives.</td>
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<tr>
<td>B27</td>
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<td>The Proponent, in consultation with the Relevant Council(s), shall where feasible and reasonable, implement the urban design objectives and principles, giving consideration to the design strategies and mitigation measures identified in Northern Beaches Hospital (Greenway) and Network Environments: Concept Proposal and Stage 1 Urban Design and Landscape Character and Visual Impact Assessment, Speckman Musso &amp; Michael, October 2014. Where an urban design principle or objective is not considered feasible or reasonable, this will be clearly demonstrated to the Secretary in consultation with the submission of the Urban Design and Landscape Plan required by condition B29.</td>
<td>Pre-construction Construction</td>
<td>Aecom have developed and issued the Urban Landscape and Design Plan (ULDP) and has been approved for use. The approval granted by the Secretary includes exceptions to the original urban design principles and objectives.</td>
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<td>The use of visible hiatoles for retaining walls and other structures is not permitted, unless approved by the Secretary through the Urban Design and Landscape Plan required by condition B30.</td>
<td>Pre-construction Construction</td>
<td>This has been captured in the ULDR in Table 1 and Section 1.3. It specifically states that &quot;No exposed hiatoles is proposed as part of the project design.&quot;</td>
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<tr>
<td>B30</td>
<td></td>
<td>Prior to the commencement of permanent built works and or landscaping, or as otherwise agreed by the Secretary, an Urban Design and Landscape Plan shall be prepared and implemented (following approval) for the SSI. The Plan shall be prepared by suitably qualified and experienced person(s), in consultation with the Council, Health infrastructure, educational facilities and the community for the approval of the Secretary. The Plan shall present an integrated urban and landscape design for the SSI, and shall include, but not necessarily be limited to:</td>
<td>Pre-construction Construction</td>
<td>Aecom have developed and issued the Urban Landscape and Design Report (ULDR) which addresses the below criteria.</td>
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<td>(i) identification of design objectives, principles and standards based on local environmental values, urban design context.</td>
<td>Section 2.1</td>
<td>Section 2.1</td>
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<td>(ii) sustainable design and maintenance.</td>
<td>Section 2.2 &amp; 6.4 Urban Design Guidance</td>
<td>Section 2.2 &amp; Appendix 1 included with the safety in Design process for the Project</td>
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<td>(iii) community safety, amenity and privacy, including safety by design and crime prevention through environment design principles where relevant.</td>
<td>Section 1.3 RMS, Urban Design Guidance and Council Standards</td>
<td>Section 1.4</td>
</tr>
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<td>(iv) relevant design standards and guidelines (including consideration of Council standards and guidelines where feasible and reasonable); and</td>
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<td>(v) the requirements of condition B29;</td>
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<td>(vi) the location of existing vegetation, a description of disturbed areas (including compounds) and details of the strategies to progressively revegetate these areas;</td>
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<td>(vii) proposed landscaping (including use of endemic and endangered tree species where practicable). Details of species to be replaced/ revegetated shall be provided, including their appropriateness to the area and habitat for threatened species (including rehabilitation of species and Duffy's Forest ecological community vegetation).</td>
<td>Appendix E (VMP) Describes the strategies for revegetation</td>
<td>Section 6.1, 6.2 + 6.3 + Appendix E</td>
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<td>Roller Appendix E - Vegetation Management Plan</td>
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</tbody>
</table>
Section 3.4 - Artists Impressions and Sections 3, 4, 5, 7 and 8 as covered under item e.

Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition (Landcom, 2004) shall be employed during the construction of the SSI to minimise soil erosion and the discharge of sediment and other pollutants to land and/or water.

Note: The Plan may be submitted in Stages to suit a staged construction program of the SSI.

There was a noncompliance with hours on 18/5/2017 and 24/6/2017 when works went overtime.

There is a note in this table which confirms that consultation will continue and be recorded:

**Note:** CONSULTATION WILL CONTINUE FOLLOWING ISSUE OF THIS REPORT AND BE REGISTERED IN ROADS AND MARITIME CONSULTATION MANAGER SYSTEM.

**Part C - Construction Environmental Management**

**C1**
Prior to the commencement of construction of the SSI or as otherwise agreed by the Secretary, the Proponent shall appoint a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel, and that has been approved by the Secretary. The Proponent shall employ an Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Secretary. The Environment Representative(s) shall

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<tr>
<td>[a]</td>
<td></td>
<td>the provision of a Seed Collection and Reintroduction Strategy, to ensure seed from flora within Duffy’s Forest ecological community, where feasible and reasonable, are collected and species identified and used to progressively rehabilitate, regenerate and/or revegetate these areas with the assistance of key community and local bush care groups in the area, where practicable;</td>
<td>Construction</td>
<td>Section 1.3 + 6.2 + Appendix E Refer Appendix E - Vegetation Management Plan</td>
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<tr>
<td>[b]</td>
<td></td>
<td>design features, bulk elements, transport infrastructure, signage, lighting and building materials (including retaining walls) including, but not limited to, colour schemes and finishes of bulk features;</td>
<td>Construction</td>
<td>Section 3- Bridges including Pedestrian Bridges Section 4 - Retaining Walls</td>
</tr>
<tr>
<td>[c]</td>
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<td>an assessment of the visual screening effects of existing vegetation and the proposed landscaping and bulk elements. Where receptors have been identified as likely to experience high visual impact as a result of the SSI, the Proponent shall in consultation with affected receptors, identify opportunities for providing additional landscaping to further screen views of the SSI. Where agreed to with the landowners, these measures shall be implemented during the construction of the SSI.</td>
<td>Construction</td>
<td>Section 5 - Earthworks</td>
</tr>
<tr>
<td>[d]</td>
<td></td>
<td>graphics such as sections, perspective views and sketches for key elements of the SSI, including, but not limited to bulk elements of the SSI;</td>
<td>Construction</td>
<td>Section 7 - Road Furniture (Lighting) + Pedestrian Pavements</td>
</tr>
<tr>
<td>[e]</td>
<td></td>
<td>monitoring and maintenance procedures for the bulk elements, rehabilitated vegetation and landscaping (including weed control) including performance indicators, responsibilities, timing and duration and contingencies where rehabilitation of vegetation and landscaping measures fail; and</td>
<td>Construction</td>
<td>Section 8 - Noise Walls</td>
</tr>
<tr>
<td>[f]</td>
<td></td>
<td>evidence of consultation with stakeholders on the proposed urban design and landscape measures prior to its finalisation.</td>
<td>Construction</td>
<td>Additional screening is being organised for affected residents at 64-66 Hilmer Street as a result of installation of the Hilmer Street footbridge - additional screening has been installed on the on structure itself and properties are being provided with additional plantings and lattice as arranged with Community Relations team.</td>
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<td>[g]</td>
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<td>the Proponent shall, where feasible and reasonable, limit high noise impact activities and work to the</td>
<td>Construction</td>
<td>Additional screening is being organised for affected residents at 64-66 Hilmer Street as a result of installation of the Hilmer Street footbridge - additional screening has been installed on the on structure itself and properties are being provided with additional plantings and lattice as arranged with Community Relations team.</td>
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**C2**

The Environmental Representative(s) shall prepare and submit to the Secretary a monthly report on the Environmental Representative’s actions and decision on matters specified in condition C1 for the preceding month. The reports shall be submitted within seven (7) days for the end of each month for the duration of construction of the SSI, or as otherwise agreed by the Secretary. Notwithstanding, the Environmental Representative(s) shall be given the independence to report to the Secretary at any time and/or at the request of the Secretary. Monthly reports are being prepared in accordance with this requirement.

**C3**

Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition (Landcom, 2004) shall be employed during the construction of the SSI to minimise soil erosion and the discharge of sediment and other pollutants to land and/or water.

**C4**

Where available and practicable, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources shall be used in preference to potable water for construction activities, including dust control.

**C5**

Except as permitted by any EPL, construction activities associated with the SSI shall be undertaken during the following standard construction hours:

- **6.30am to 6.30pm Monday to Friday,** inclusive.
- **8.30am to 5.30pm Saturdays,** and
- **at no time on Sundays or public holidays.**

**C6**

Except as permitted by an EPL, high noise impact works and activities (including, but not limited to rock breaking, rock hammering) shall only be undertaken:

- **(a) between the hours of 8.00 am to 6.00 pm Monday to Friday,** inclusive.
- **(b) between the hours of 8.00 am to 10.00 pm Saturday,** and
- **(c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and activity of not less than one hour between each block.**

For the purposes of this condition continuous includes any period during which there is less than a one hour respite between causing and recommencing any of the works the subject of this condition.

**C7**

The Proponent shall, where feasible and reasonable, limit high noise impact activities and work to the mid-morning and mid-afternoon periods.

**C8**

Notwithstanding conditions C5 and C6 construction works outside of the standard construction hours may be undertaken in the following circumstances:

- **Construction works that generate,**

- **Construction works that generate,**
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<tr>
<td>C9</td>
<td></td>
<td>LAeq(15 minute) noise levels no more than 5 dB(A) above rating background level at any residence in accordance with the Intern Noise Guideline (Department of Environment and Climate Change, 2009); and</td>
<td>Construction</td>
<td>Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub-Plan and Environment Protection Licence 207837 implemented for Stages 1 &amp; 2 (Issued June 2016) (Chapter 8)</td>
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<td>Combination of noise management levels specified in Table 3 of the Intern Noise Guideline (Department of Environment and Climate Change, 2009) at other sensitive receivers; and</td>
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<td>Chapter 8 Appendix B - Out of Hours Work Procedure</td>
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<td>Interim vibration levels measured at all the most affected residences, that are no more than those for human exposure to vibration, specified for residences in Table 2 of Assessing Vibration: a technical guide; or</td>
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<td>Where a negotiated agreement has been reached with affected receivers, where the prescribed noise and vibration levels cannot be achieved; or</td>
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<td>For the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or</td>
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<td>Where it is required in an emergency to avoid injury or the loss of life, property and/or to prevent environmental harm; or</td>
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<td>(a) works approved through an EPL, including for works identified in an out of hours procedure.</td>
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<tr>
<td>C10</td>
<td></td>
<td>LAeq(15 minute) noise levels no more than the noise management levels specified in Table 3 of the Intern Noise Guideline (Department of Environment and Climate Change, 2009); and</td>
<td>Construction</td>
<td>These requirements are incorporated into the approved Construction Noise and Vibration Management Sub-Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1 &amp; 2 construction works.</td>
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<td></td>
<td>Construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan required condition C29(b).</td>
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<td>Chapter 9 Section 6.2</td>
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<td>Note: The Intern Noise Guideline identifies ‘particularly annoying’ activities that require the addition of 5dB(A) to the predicted level before comparing to the construction NML.</td>
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<tr>
<td>C11</td>
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<td>The SSI shall be constructed with the aim of achieving the following construction vibration goals:</td>
<td>Construction</td>
<td>These requirements are incorporated into the approved Construction Noise and Vibration Management Sub-Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1 &amp; 2 construction works.</td>
</tr>
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<td></td>
<td></td>
<td>(a) For structural damage to tangible structures, the vibration limits set out in the German Standard DIN 4109-3: Structural Vibration – Part 3 Effects of vibration on structure.</td>
<td></td>
<td>Chapter 8 Section 6.2</td>
</tr>
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<td></td>
<td></td>
<td>(b) For damage to other buildings and losses of the Erosion Standard SS 7283-1:1990 Evaluation and measurement for vibration in buildings – Guide for measurement of vibration and evaluation of their effects on buildings (as referenced in Australian Standard AS 2187.2-2006 Explosives – Storage and use – Use of Explosives); and</td>
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<td>(c) For human exposure, the acceptable vibration limits are set out in the Assessing Vibration: A Technical Guidelines (Department of Environment and Conservation, 2006).</td>
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<tr>
<td>C12</td>
<td></td>
<td>During construction, affected educational institutes (including The Forest High School) shall be consulted and feasible and reasonable steps taken to ensure that noise generating construction works in the vicinity of affected buildings are not introduced during examination periods (where practicable), unless other reasonable arrangements to the affected institutions are made at no cost to the affected</td>
<td>Construction</td>
<td>These requirements are incorporated into the approved Construction Noise and Vibration Management Sub-Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1 &amp; 2 construction works.</td>
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<td>institute.</td>
<td></td>
<td>Chapter 8</td>
</tr>
<tr>
<td>C13</td>
<td></td>
<td>No blasting shall be undertaken unless reviewed and approved by the secretary in consultation with the EPL.</td>
<td>Construction</td>
<td>These requirements are incorporated into the approved Construction Noise and Vibration Management Sub-Plan and is being considered in construction planning and noise modelling and compliance monitoring during Stage 1 &amp; 2 construction works.</td>
</tr>
<tr>
<td>C14</td>
<td></td>
<td>The SSI shall be constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust to prevent the loss of materials such as concrete, fine cement, and other construction materials. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that the dust emissions do not exceed dust emission limits.</td>
<td>Construction</td>
<td>Requirement implemented in accordance with Construction Air Quality Management Sub Plan, forming part of regular inspection monitoring and fixed dust deposition monitors located within the Project area. Dust complaints have been addressed through a review and improvement of management measures.</td>
</tr>
<tr>
<td>C15</td>
<td></td>
<td>The SSI shall be constructed, where feasible and reasonable, to avoid use of local roads (through residential streets) by heavy vehicles to gain access to ancillary facilities outside of the SSI footprint.</td>
<td>Construction</td>
<td>Local roads avoided by heavy vehicles. Requirement implemented in accordance with approved CEMP Rev 3 (Aug 2016) App B1 Construction Traffic and Access Management Sub Plan Section 7.2.4 Table 7.2 TAMP9, 25</td>
</tr>
<tr>
<td>C16</td>
<td></td>
<td>Access to construction compounds via local roads shall be limited to standard construction hours, where practicable, unless otherwise detailed within the Construction Traffic and Access Management Plan as required in condition C29(c).</td>
<td>Construction</td>
<td>Access to compounds via local roads has been limited. Requirement implemented in accordance with approved CEMP Rev 3 (Aug 2016) App B1 Construction Traffic and Access Management Sub Plan Section 7.2.4 Table 7.2 TAMP24</td>
</tr>
<tr>
<td>C17</td>
<td></td>
<td>Safe pedestrian and cyclist access through or across worksites shall be maintained during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and upgraded.</td>
<td>Construction</td>
<td>Requirement implemented in accordance with approved CEMP Rev 3 (Aug 2016) App B1 Construction Traffic and Access Management Sub Plan Section 7.10 Table 7.2 TAMP5,45 These are divided into discrete work packages.</td>
</tr>
<tr>
<td>C18</td>
<td></td>
<td>Construction vehicles (including staff vehicles) associated with the SSI shall be managed to:</td>
<td>Construction</td>
<td>Construction staff vehicles managed Requirement implemented in accordance with approved CEMP Rev 3 (Aug 2016) App B1 Construction Traffic and Access Management Sub Plan Section 6.3, 6.8 and 7.2.4 Table 7.2 TAMP5</td>
</tr>
<tr>
<td></td>
<td>a)</td>
<td>Minimise parking or queuing on public roads;</td>
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<td>b)</td>
<td>Minimise idling and queuing in local residential streets where practicable; and</td>
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<td></td>
<td>c)</td>
<td>Adhere to the nominated access routes identified in the Construction Traffic Management Plan required under condition C29(c).</td>
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<tr>
<td>C19</td>
<td></td>
<td>Upon determining the habitat use for construction vehicles associated with the SSI, and prior to construction, a properly qualified and experienced independent expert shall prepare a Final Biodiversity Offset Plan as required in condition C28(c).</td>
<td>Construction</td>
<td>Dilapidation Report has been prepared along with condition photos. This was submitted to the client in late August 2017. Requirement implemented and completed in accordance with approved Construction Traffic and Access Management Sub Plan</td>
</tr>
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<td></td>
<td></td>
<td>The Proponent shall develop and implement a Biodiversity Offset Package. The Package shall detail how the ecological values lost as a result of the SSI will be offset. The Package shall be consistent with the NSW Principle for the Use of Biodiversity offsets in NSW (DECCW, 2010) and align with the eco site compliance, avoid and compensate, and the Biodiversity Offset Strategy requirements of the NSW Biodiversity Offset Policy for Major Projects, OEH, 2014 and is being considered in consultation with and to meet the requirements of OEH unless otherwise agreed by the Secretary.</td>
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<td></td>
<td>The Package shall include, but not necessarily be limited to:</td>
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<td></td>
<td>a)</td>
<td>The identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the SSI.</td>
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<td></td>
<td>b)</td>
<td>The objectives and biodiversity outcomes to be achieved.</td>
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<td></td>
<td>c)</td>
<td>The scale of the biodiversity offset measures selected and secured in accordance with the Biodiversity Offset Strategy outlined in the EIS for the SSI.</td>
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<td></td>
<td>d)</td>
<td>The management and monitoring requirements (where a borrowing agreement is not being entered into) for compensatory habitat works and offset of other offset measures taken to ensure the outcomes of the Package are achieved, including:</td>
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<td>e)</td>
<td>The monitoring of the construction of species and ecological communities at offset (including translocation) locations;</td>
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<td>f)</td>
<td>The methodologies for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency of those sites;</td>
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<td>g)</td>
<td>The process for the annual reporting of the monitoring results for a set period of time as determined in consultation with the OEH.</td>
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</table>

Note: Nothing in this condition restricts the Proponent commencing adjustments and minor upgrades to the existing road network to cater for construction traffic and installation of temporary project signage prior to the commencement of construction.
### CONCEPT PROPOSAL AND STAGE 1 CONDITIONS OF APPROVAL

<table>
<thead>
<tr>
<th>Ref</th>
<th>Sub Ref.</th>
<th>Commitment/Obligation</th>
<th>Phase</th>
<th>Compliance Report 3 August 2017 Status (e.g. Date submitted to DP&amp;E, Approval obtained etc.)</th>
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</thead>
<tbody>
<tr>
<td>C21</td>
<td></td>
<td>Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled in accordance with:</td>
<td>Construction</td>
<td>Dangerous goods being stored in accordance with the construction Soil and Water Quality Management Sub Plan, Waste and Energy Management Sub Plan and EWMS and Project WHS Management Plan and procedures.</td>
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<td>(a) all relevant Australian Standards;</td>
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<td>(b) for lapa, a minimum bund volume requirement of 110% of the volume of the largest single stored volume, within the bund; and</td>
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<td></td>
<td>(c) the Environment Protection Manual for Authorized Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997);</td>
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<td></td>
<td>In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency;</td>
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<td>C22</td>
<td></td>
<td>The Proponent shall provide boundary screening at all construction compounds that adjoin or are adjacent to residential, educational and/or commercial properties, and that have environmental and amenity impacts that can be managed through the implementation of environmental measures detailed in the Construction Environmental Management Plan for the project.</td>
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<td>C23</td>
<td></td>
<td>The Proponent shall provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required during construction.</td>
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<td>C24</td>
<td></td>
<td>The Secretary's approval is not required for minor Ancillary Facilities (e.g. lunch sheds, office sheds, and portable toilet facilities) that do not comply with the criteria set out in condition D28 and that are:</td>
<td>Construction</td>
<td>Noted within approved Stage 1 &amp; 2 Construction Compound and Ancillary Facilities Management Sub Plan. No rehabilitation has occurred yet.</td>
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<td>(a) located more than 50 metres from a waterway;</td>
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<td>(b) located within or adjacent to the SSI being carried out;</td>
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<td>(c) have ready access to the road network;</td>
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<td>(d) be located to minimise the need for heavy vehicles to travel through residential areas;</td>
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<td>(e) be located to provide a sufficient area for the storage of raw materials to minimise the number of deliveries required during construction;</td>
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<td>(f) be located where the SSI is being carried out;</td>
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<tr>
<td>C25</td>
<td></td>
<td>The location of the ancillary facilities shall be identified in the Construction Environmental Management Plan required under condition C27.</td>
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<tr>
<td>C26</td>
<td></td>
<td>The Proponent shall include a description of activities to be undertaken during construction of the SSI (including staging and scheduling);</td>
<td>Construction</td>
<td>Noted within approved Stage 1 Construction Compound and Ancillary Facilities Management Sub Plan (Aug 2016).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(a) a description of activities to be undertaken during construction of the SSI (including staging and scheduling);</td>
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<td></td>
<td>(b) a description of the roles and responsibilities for relevant employees involved in the construction of the SSI, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors, are aware of their environmental and compliance obligations under these conditions of approval;</td>
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<td>(c) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase;</td>
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<td>(d) measures for reducing and managing air quality impacts;</td>
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<td>(e) measures to monitor and manage hazard and risk; and</td>
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</tbody>
</table>

Compliance Tracking Program Appendix A - Concept and Stage 1 Project Approvals
(vi) the issues identified in Condition C28.

The CEMP shall include procedures for periodic review and update (including the sub-plans required under Condition C28), as necessary (including where minor changes can be approved by the Environmental Representative).

The CEMP shall be submitted for the approval of the Secretary no later than one month prior to the commencement of construction, or as otherwise agreed by the Secretary. The CEMP may be prepared in stages; however, construction works shall not commence until written approval of the relevant stage has been received from the Secretary.

Note: The approval of a CEMP does not relieve the Proponent of any requirement associated with this SSI approval. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this SSI approval, the requirements of this SSI approval shall prevail.

C28 (a)

As part of the CEMP for the SSI, the Proponent shall prepare and implement (following approval):

(a) a Construction and Ancillary Facilities Management Plan to detail the management of site compounds associated with the infrastructure activity. The Plan shall be developed in consultation with NOW and Council and must not be limited to:

(i) a description of the facility, its components and the surrounding environment;

(ii) details of the activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods;

(iii) an assessment of the facility against the criteria provided in condition C24. Where proposed facilities do not meet those criteria, the assessment must justify and (where relevant) quantify potential impacts of the facility;

(iv) details of the mitigation and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts and an assessment of the adequacy of the mitigation or offsetting measures;

(v) identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation) and

(vi) appropriate monitoring, review and amendment mechanisms.

C28 (b)

(a) a Construction Noise and Vibration Management Plan to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the Interim Construction Noise Guidelines (DECC, 2009) and be prepared in consultation with the Forest High School Working Group. The Plan shall include, but not be limited to:

(i) identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSI approved in this approval;

(ii) details of the construction activities and an indicative schedule for construction works, including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas;

(iii) identification of construction noise and vibration levels at sensitive receivers, including consideration of cumulative impacts associated with adjoining development sites;

(iv) identification of feasible and measurable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts);

(v) procedures and mitigation measures to ensure relevant vibration criteria are achieved, including, applicable buffer distances for vibration sensitive works, use of low-vibration generating equipment/demolition demanagers or alternative construction methodology and pre and post construction (duplication surveys of receivers where vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria);

(vi) a program for construction noise and vibration monitoring (including the monitoring of the effectiveness of noise and vibration mitigation measures) during construction, clearly indicating the monitoring frequency, monitoring locations, how the monitoring results would be recorded and reported, and any exceedance is detected, how any non-compliance would be rectified;

(vii) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for managing and responding to noise complaints; and

(viii) mechanisms for the monitoring, review and amendment of the plan.

C28 (c)

(i) a Construction Traffic and Access Management Plan to ensure traffic and access controls are implemented to avoid or minimise impacts on traffic, pedestrians and cyclist access, and the amenity of the surrounding environment. The Plan shall be developed in consultation with the Council, emergency services, road user groups, Health Infrastructure, The Forest High School Working Group, and include, but not necessarily be limited to:

(i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle access) on these routes;

(ii) details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, ingress and egress points.

(iii) discussion of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, access to public land, property access, and include, details of overall load movements, and the nature and duration of those impacts;

(iv) details of management measures to minimise traffic impacts and maintain road capacity during heavy and afternoon peaks, including temporary road traffic control measures, on-vein queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cyclist conditions;

(v) details of measures to maintain or provide alternative safe and accessible routes for pedestrians throughout the duration of construction, including provision of replacement kiss and ride, bus stops, pedestrian and cyclist access and paths where necessary;

(vi) details of measures to maintain connectivity for cyclists, with particular emphasis on providing adequate access between key existing cycle routes;

(vii) details of measures to manage traffic movements, inclusion of cycle routes, parking and loading and unloading at ancillary facilities during out-of-hours work;

(viii) details of methods to be used to communicate proposed future traffic changes to affected road users, pedestrians and cyclists, consistent with the Community Communication Strategy required under condition C1 of Schedule 2;

(ix) an adaptive response plan which sets out a process for response to any traffic, construction or other incident; and

(x) mechanisms for the monitoring, review and amendment of the plan.

Compliance with this requirement is being undertaken as part of detailed design as per Scope of Works and Technical Requirements.

Notes:

(i) The Proponent must inform the Environment and Water Management Services (EWMS) and B19 as soon as practicable after the occurrence of any incident;

(ii) in the event of any exceedance of noise and vibration criteria, the Proponent must ensure that all necessary mitigation measures are implemented immediately and report the exceedance to the Council and the Department of Planning and Environment;

(iii) the Proponent shall demonstrate that all measures of the Plans are effective in reducing noise and vibration impacts during construction and at the facility.

Implementation of approved Stage 1 and 2 Construction Noise and Vibration Management Sub Plan (Appendix B3 of CEMP)
<table>
<thead>
<tr>
<th>Ref</th>
<th>Sub Ref.</th>
<th>CONCEPT PROPOSAL AND STAGE 1 CONDITIONS OF APPROVAL</th>
<th>Phase</th>
<th>Compliance Report 3 August 2017 Status (e.g. Date submitted to DP&amp;E, Approval obtained etc.)</th>
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<tbody>
<tr>
<td>C26(d)</td>
<td></td>
<td>A Construction Soil and Water Management Plan to manage surface and groundwater impacts during construction of the SSI. The plan shall be developed in consultation with NOW and the Council and include, but not necessarily limited to:</td>
<td>Construction</td>
<td>CEMP Stage 1 &amp; 2 (Aug 2016) App B4 Soil and Water Quality Management Sub Plan</td>
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<td>(i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater, including identification of all pollutants that may be introduced into the water cycle;</td>
<td></td>
<td>Water Management Plan has been developed and approved for Stage 1. Stage 1 is for surface water only.</td>
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<td>(ii) soil erosion and sediment control measures that comply with the practices and principles as required under Condition C3;</td>
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<td>(iii) details of the staging of construction activities to minimise and manage potential sediment loads discharging to receiving drainage areas as a result of soil loss from disturbed areas;</td>
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<td>(iv) impacts on watercourse, bank stability and the development of appropriate mitigation measures as required;</td>
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<td>(v) a contingency plan to be implemented in the case of unanticipated discovery of contaminated materials during construction;</td>
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<td>(vi) an Asbestos Management Plan, to be developed in accordance with the National Environmental Protection (Assessment of Site Contamination) Measure 1999, and to include measures for the safe removal and disposal of known and undetected asbestos within the SSI footprint and related construction ancillary facilities, stockpile sites and site access;</td>
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<td>(vii) a description of how the effectiveness of these actions and measures would be monitored and maintained during the proposed works, clearly indicating how often the monitoring and maintenance would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any of the criteria is detected how any non-compliance can be rectified and</td>
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<td>(viii) mechanisms for the monitoring, review and amendment of this plan.</td>
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<tr>
<td>C26(e)</td>
<td></td>
<td>A Construction Heritage Management Plan to ensure construction impacts on Aboriginal and non-Aboriginal heritage will be appropriately avoided, minimised and managed. The Plan shall be developed in consultation with the Council and Aboriginal stakeholders (for Aboriginal heritage), and include, but not necessarily limited to:</td>
<td>Construction</td>
<td>CEMP Stage 1 &amp; 2 (Aug 2016)</td>
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<td></td>
<td>(i) in relation to Aboriginal Heritage:</td>
<td></td>
<td>Chapter 7, Table 7.1 HMP3</td>
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<tr>
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<td></td>
<td>(A) details of management measures for the protection of Aboriginal Heritage;</td>
<td></td>
<td>HMP3 Appendix A</td>
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<tr>
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<td>(B) procedures for dealing with previously unidentified Aboriginal objects (excluding human remains), including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures, including when works can re-commence, by a suitably qualified and experienced archaeologist in consultation with Department of Planning and Environment, OEH and Aboriginal stakeholders, and assessment of the consistency of any Aboriginal heritage impacts against the approved impacts of the SSI;</td>
<td></td>
<td>HMP13 Appendix A</td>
</tr>
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<td>(C) procedures for dealing with human remains, including cessation of works in the vicinity, notification of Department of Planning and Environment, NSW Police Force, OEH and Aboriginal stakeholders, and commitment to cease recommencing any works in the area unless authorised by the OEH and/or the NSW Police Force;</td>
<td></td>
<td>HMP1 Appendix A</td>
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<td>(D) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of the approval including site identification, protection and conservation of Aboriginal cultural heritage; and</td>
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<td>HMP 1 Section 3.6</td>
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<td>(E) procedures for ongoing Aboriginal consultation and monitoring for the duration of the SSI, in the event that previously unidentified Aboriginal objects are discovered and</td>
<td></td>
<td>Table 7-1 HMP15, HMP21</td>
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<td>(v) in relation to non-Aboriginal Heritage:</td>
<td></td>
<td>Table 7-1 HMP17 Section 6.2 Training (induction)</td>
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<tr>
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<td>(A) listing of heritage items directly and indirectly affected by the SSI;</td>
<td></td>
<td>Chapter 2, Chapter 10</td>
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<td>(B) details of management measures to be implemented to prevent and minimise impacts on heritage items (including the measures to protect unaffected sites from vibration and other impacts during construction works in the vicinity;</td>
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<td>(C) details of monitoring and reporting requirements for impacts on heritage items;</td>
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<td></td>
<td>(D) procedures for dealing with previously unidentified heritage objects, including cessation of works in the vicinity, assessment of the significance of the item(s) and determination of appropriate mitigation measures including when works can re-commence by a suitably qualified and experienced archaeologist in consultation with the OEH, NSW Heritage Council and Department of Planning and Environment, and assessment of the consistency of any heritage impacts against the approved impacts of the SSI; and</td>
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<td></td>
<td>(E) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions and obligations under this approval including site identification, protection and conservation of non-Aboriginal cultural heritage); and</td>
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<td>(F) mechanisms for the monitoring, review and amendment of this plan.</td>
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<tr>
<td>C26(f)</td>
<td></td>
<td>A Construction Flora and Fauna Management Plan to detail how construction impacts on ecology will be minimised and managed. The Plan shall be endorsed by an appropriately qualified and experienced ecologist and in consultation with NOW and the Council, and shall include, but not necessarily be limited to:</td>
<td>Construction</td>
<td>CEMP Stage 1 &amp; 2 CEMP Rev 3 (Aug 2016) App B2 Construction Flora and Fauna Management Sub Plan Chapter 4</td>
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<td>(i) plans for impacted and affected areas showing vegetation communities, including riparian areas important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including pre-clearing surveys to confirm the location of threatened flora and fauna species and executed habitat features;</td>
<td>Appendix C – Pre-clearing checklist Sensible Areas Plans (Appendix A7 to the CEMP)</td>
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<td></td>
<td>(ii) the identification of areas to be cleared and details of management measures to avoid residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat such as:</td>
<td>Appendix C – Pre-clearing checklist D Fauna Handling and Rescue Procedure</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(A) clearing minimisation procedures (including fencing);</td>
<td>Appendix E Anticipated Threatened Species/ EEC Management Procedure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(B) pre-clearing and clearing procedures;</td>
<td>Appendix F Unexpected Threatened Flora Species/ EEC Finds Procedure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(C) removal and relocation of fauna (if necessary) clearing.</td>
<td>Table 7-1 Flora and fauna management measures</td>
<td></td>
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<tr>
<td></td>
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<td>(D) habitat tree and hollow bearing tree management, and</td>
<td>Appendix I Vegetation Management Plan</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(E) construction worker education;</td>
<td>Table 7-1 Flora and fauna management measures</td>
<td></td>
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<td>(iv) a Pathways and Weed Management Strategy, incorporating weed management measures focusing on early identification of invasive weeds and pathogens (including but not limited to Bactrocera tryoni, dodder, Phytophthora cinnamomi and myrtle rust) and effective management controls;</td>
<td>Appendix B – Pathogens and Weed Management Strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(v) a description of how the effectiveness of these management measures would be monitored.</td>
<td>Table 7-1 Flora and fauna management measures</td>
<td></td>
</tr>
</tbody>
</table>

**Appendix C – Pre-clearing checklist Sensible Areas Plans (Appendix A7 to the CEMP)**

**Appendix C – Pre-clearing checklist D Fauna Handling and Rescue Procedure**

**Appendix E Anticipated Threatened Species/ EEC Management Procedure**

**Appendix F Unexpected Threatened Flora Species/ EEC Finds Procedure**

**Table 7-1 Flora and fauna management measures**

**Appendix G – Neat Box Plan Soil and Water Quality Management Plan (Appendix B4 to the CEMP)**
Table 7-1 Flora and fauna management

Annexes
Appendix A Ecological Monitoring Program
Appendix D Fauna Handling and Rescue Procedures
Appendix F Unexpected Threatened Flora Species/ EEC Finds Procedure

Chapter 11

Compliance Report 3
August 2017 Status (e.g. Date submitted to DP&E, Approval obtained etc.)

Post-construction
Detailed design is proceeding in accordance with this requirement.

Post-construction
Tactile noise will be considered in detailed design.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
To be actioned after Operation commences.

Post-construction
To be actioned after Operation commences.

Notwithstanding the above, the Proponent is responsible for the cumulative operational noise impacts of the SSI and the NBH development. That is, the review shall incorporate a baseline time period that does not include traffic generated by the NBH development (NSW SPI).

To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Part D - Operational Environmental Management and Reporting

The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

Table 7-1 Flora and fauna management

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Post-construction
Operational noise review currently under consideration with DPE.

Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Part D - Operational Environmental Management and Reporting

The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

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Post-construction
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Post-construction
Operational noise review currently under consideration with DPE.

Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

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The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

Table 7-1 Flora and fauna management

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Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
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Post-construction
Operational noise review currently under consideration with DPE.

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The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

Table 7-1 Flora and fauna management

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Appendix D Fauna Handling and Rescue Procedures
Appendix F Unexpected Threatened Flora Species/ EEC Finds Procedure

Chapter 11

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Post-construction
Tactile noise will be considered in detailed design.

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Post-construction
Operational noise review currently under consideration with DPE.

Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Part D - Operational Environmental Management and Reporting

The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

Table 7-1 Flora and fauna management

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Appendix D Fauna Handling and Rescue Procedures
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Post-construction
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Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Part D - Operational Environmental Management and Reporting

The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

Table 7-1 Flora and fauna management

Annexes
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Appendix D Fauna Handling and Rescue Procedures
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Post-construction
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Construction
Post-construction
DP&E has provided approval of this document.

Construction
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Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Part D - Operational Environmental Management and Reporting

The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

Table 7-1 Flora and fauna management

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Appendix D Fauna Handling and Rescue Procedures
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Chapter 11

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August 2017 Status (e.g. Date submitted to DP&E, Approval obtained etc.)

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Post-construction
Tactile noise will be considered in detailed design.

Post-construction
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Post-construction
Operational noise review currently under consideration with DPE.

Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Part D - Operational Environmental Management and Reporting

The SSI shall be designed and operated with the objective of not exceeding the noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).

Table 7-1 Flora and fauna management

Annexes
Appendix A Ecological Monitoring Program
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Chapter 11

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Post-construction
Detailed design is proceeding in accordance with this requirement.

Post-construction
Tactile noise will be considered in detailed design.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.

Construction
Post-construction
DP&E has provided approval of this document.

Construction
To be actioned after Operation commences.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review has been approved by the DPE.

Post-construction
Operational noise review currently under consideration with DPE.
**Impact**  | **CONCEPT APPROVAL, STAGE 1 PROJECT and STAGE 2 PROJECT** | **Compliance Report 3 (AUGUST 2017)**
---|---|---
**Commitment/Obligation** | **Concept Approval** | **Status (e.g. Date submitted to DP&E, Approval obtained etc.)**
---|---|---
**Construction Traffic Impacts** | A construction traffic management plan would be developed and implemented as part of Stages 1 and 2 of the Concept Proposal. The construction traffic management plan would focus on maintaining general traffic flow and specifying appropriate site accesses and construction traffic routes. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 7.1 TAMP2
---|---|---
| Detailed construction staging would inform each stage of the Concept Proposal. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 7.1 TAMP17  Section 7.2.1 Construction staging
---|---|---
| Subject to safety reasons and other environmental impacts (e.g. noise), construction traffic movements would be limited to off-peak periods, with peak period construction staggered to minimise construction traffic during these periods. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 7.1 TAMP2
---|---|---
| Priority would be given to the use of the arterial road network for construction vehicle access routes. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 7.1 TAMP19
---|---|---
| The Construction Traffic Management Plan would include consideration of: – management of impacts on waste collection from properties affected by construction of retaining walls along Nareen Road and Forest Way – maintenance of traffic flows | Not addressed
---|---|---
| Council would be consulted with regard to maintaining safe vehicle passage along Frenchs Forest Road during construction. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Section 4.2 Consultation Requirements under the EA
---|---|---
**Cumulative Construction Traffic Impacts** | Consultation would be undertaken with Health Infrastructure to coordinate scheduling of construction activities and deliveries. | RISMM incorporated into CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 (TAMP56 and TAMP57). Consultation undertaken as part of interface meetings with Healthscope contractor. FYJV construction team has regular meetings/correspondence with CRP - with regards to upcoming works/deliverables which will affect the other Project. The FYJV Community Relations Manager has a fortnightly catchup with Healthscope Community representative.
---|---|---
| Consultation would be undertaken with Health Infrastructure, regarding the need for construction access to the hospital site to focus on the Warringah Road/Bantry Bay Road intersection. | Consultation would be undertaken with Health Infrastructure, regarding the need for construction access to the hospital site to focus on the Warringah Road/Bantry Bay Road intersection.
---|---|---
**Property Impacts** | Access to properties along affected roads would be maintained during construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 3.2 B15  2.3 Targets  Table 3.3 T36
---|---|---
| The FYJV community have regular interactions with directly impacted residents and property owners. During this reporting period, there have not been any access issues with residents - alternative arrangements have been agreed and accepted. | The FYJV community have regular interactions with directly impacted residents and property owners. During this reporting period, there have not been any access issues with residents - alternative arrangements have been agreed and accepted.
---|---|---
| On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night shifts sent automatically to all residents on catchment database | On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night shifts sent automatically to all residents on catchment database
---|---|---
**Road and footpath cross falls** | Council’s requirements would be included as design parameters/ objectives for detailed design. | Addressed in Urban & Landscape Design Report (ULDR) DoP approval 21/11/16  Table 1 B30  Table 2 B20/B24  Karingal Crescent temporary footpath was inspected by Council’s representative for compliance.
---|---|---
| These become punch list items prior to PC signoff. | These become punch list items prior to PC signoff.
---|---|---
**Street lighting** | The cost for any required upgrading of street lighting would be met by Roads and Maritime. | N/A for action as required.
---|---|---
**Rat running during construction** | Regular monitoring of local streets that exhibit increases in traffic and would be carried out and would include consultation with Council with regard to temporary measures that could be implemented to manage safety and related issues. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 3.1 C26  NVMP – Appendix A  Section 7.2.2, Table 7.2 TAMP4
---|---|---
| Most recent rat run issue was Oxford falls road which has been mentioned by council as a potential rat run due to - FYJV looked into adjusting traffic lights west of the Warringah rd at Wearden rd intersection to address." | Most recent rat run issue was Oxford falls road which has been mentioned by council as a potential rat run due to - FYJV looked into adjusting traffic lights west of the Warringah rd at Wearden rd intersection to address.
---|---|---
**Shared Paths** | Shared paths would generally conform to a three metre width as a desirable minimum and a 2.5 metre width as an absolute minimum to avoid impacting on utilities and trees, etc. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 8.1 TAMP51  ULDR
---|---|---
| This has been implemented. E.g is a shared path through Karingal Park along the noise wall that has utilities below | This has been implemented. E.g is a shared path through Karingal Park along the noise wall that has utilities below
---|---|---
**Pedestrian Connectivity and Access** | Design development would consider all relevant matters including disabled access requirements and would be carried out in accordance with the Australian Standards, Austroads Design Standards, Guides, Codes, and Roads and Maritime Road supplements. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 7.1 TAMP17  ULDR
---|---|---
| Roads and Maritime would consider provision of a pedestrian refuge in Russell Avenue and changes to the kerb returns to slow traffic turning left. | Roads and Maritime would consider provision of a pedestrian refuge in Russell Avenue and changes to the kerb returns to slow traffic turning left.
---|---|---
| The design for the northern footpath on Frenchs Forest Road would adopt a 0.8 metre wide verge behind kerb and a 1.5 metre wide formed concrete footpath as agreed with Council. | The design for the northern footpath on Frenchs Forest Road would adopt a 0.8 metre wide verge behind kerb and a 1.5 metre wide formed concrete footpath as agreed with Council.
---|---|---
**Public Transport** | Construction of new and relocated bus shelters would be carried out in accordance with Council’s design requirements and applicable disability access standards. This would include appropriate consultation with Council. | ULDR  Section 7.2 Furnishings and fittings - Bus Stops
---|---|---
| This as per road furniture design drawings. Bus Stop has the latest DDA and RMS spec. | This as per road furniture design drawings. Bus Stop has the latest DDA and RMS spec.
---|---|---
| Reconfiguration of the waiting facilities associated with the northbound bus bay in Forest Way at the Fonsesway Shopping Centre would be further considered during detailed design. | Reconfiguration of the waiting facilities associated with the northbound bus bay in Forest Way at the Fonsesway Shopping Centre would be further considered during detailed design.
---|---|---
**Car Parking** | Continue to work with Council to determine if further parking can be implemented on local roads adjacent to Frenchs Forest Road and Nareen Road. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 7.1 TAMP50
---|---|---
| On-going consultation. These items will be part of the final punch-list. Road audits will be completed and the audit findings will approve or advise on these items. | On-going consultation. These items will be part of the final punch-list. Road audits will be completed and the audit findings will approve or advise on these items.
---|---|---
**Signage** | Development and finalisation of the wayfinding strategy would include consultation with Council. | CEMP Stage 1 & 2 App B1 - Traffic and Access Management Sub Plan  Table 7.1 TAMP4
---|---|---
---|---|---
Development of the strategy would address all relevant issues including number of signs, and types and locations of directional signage for all road users.

Table 7.1 TAMP56
Section 6.4
Table 3.3 TA7
Table 7.1 TAMP56
Section 6.4
Appendix B8 Construction Compound and Ancillary Facilities Management Sub-Plan (Aug 2016)
Table 3-3 AF1
Section 6.4
TAMP 35-45
Section 6.5 Pedestrian and Cyclist access
Table 7.1 TAMP6
Community record fortnightly meetings with Healthscope
Table 3.3 TA7
Section 6.4
TAMP 35-45
Section 6.5 Pedestrian and Cyclist access

Stage 1 Project

Construction Traffic Impacts

A construction traffic management plan would be developed and implemented as part of the Stage 1 Project. The construction traffic management plan would focus on maintaining general traffic flow and specifying appropriate site accesses and construction traffic routes. It would include:

- Traffic Control Plans showing the access arrangements and the details of required signs and devices.
- Pedestrian and Cyclist Management Plans.
- Consultation strategy for access requirements to adjacent properties including The Forest High School and Frenchs Forest Forest Police Station.
- Hours of operation, including prohibitions on queuing outside sites prior to commencement of work.
- Road safety audit requirements.
- Any localised improvements/adjustments to existing traffic management arrangements.

Preparation of the plan would include consultation with Health Infrastructure to accommodate, where reasonable and feasible, construction traffic issues associated with hospital construction.

Subject to safety reasons and other environmental impacts (e.g. noise), construction traffic movements would be limited to off-peak periods, with peak period construction staggered to minimise construction traffic during these periods.

Priority would be given to the use of the arterial road network for construction vehicle access routes.

Use of additional compound site

Use of the additional compound site would be subject to a site-specific traffic control plan under the proposed construction traffic management plan.

Noted and actioned in accordance within the CEMP - Appendix B1 - Traffic & Access Management Plan for Stages 1 and 2 (Aug 2016)
Table 7.1 TAMP 58
Section 6.4
TAMP 35-45
Section 6.5 Pedestrian and Cyclist access
Table 7.1 TAMP6
Community record fortnightly meetings with Healthscope
Table 3-3 AF1
Section 6.4
TAMP 35-45
Section 6.5 Pedestrian and Cyclist access

Table 3-3 AF1
Section 6.4
TAMP 35-45
Section 6.5 Pedestrian and Cyclist access

Cumulative Construction Traffic Impacts

Consultation would be undertaken with Health Infrastructure to coordinate scheduling of construction activities and deliveries.

Consultation would be undertaken with Health Infrastructure regarding the need for construction access to the hospital site to focus on the Warringah Road/Bantry Bay Road intersection.

Proprietary Access

Access to properties along affected roads would be maintained during construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners.

Noted and actioned in accordance within the CEMP - Appendix B8 Construction Compound and Ancillary Facilities Management Sub-Plan (Aug 2016)
Table 3-3 AF1
Section 6.3
TAMP 35-45
Section 6.5
Table 7-1 AFMM9
TAMPs included with the Consistency Assessment Report for any new compounds

The surrounding DFEC would be protected from inadvertent damage with the implementation of an exclusion zone (perimeter fencing/screening) established around the site where the site borders identified DFEC.

Following completion of the construction work, the site would be revegetated with local native trees, shrubs and groundcovers that occur within DFEC.

The surrounding DFEC would be protected from inadvertent damage with the implementation of an exclusion zone (perimeter fencing/screening) established around the site where the site borders identified DFEC.

Stockpiles would be covered, or stabilised where possible, to minimise dust generation during windy conditions.

Operational Traffic

An operational traffic review would be undertaken within 12 months of opening of the Stage 1 Project to confirm the operational traffic impacts of the project on Forest Way, Naree Road, Frenchs Forest Road, Warringah Road and Wakehurst Parkway in close proximity to the hospital. The assessment would be based on actual traffic counts and will assess the level of service at major intersections within the assessed road network. Where necessary, the outcomes of the operational traffic review would be used to identify any additional reasonable and feasible measures to be implemented where it is determined that the level of service has significantly deteriorated as a result of the Stage 1 Project, compared to the levels described in Section 7.

Temporary car park was made available at the vacant land opposite KFC.

Yes. Patanga one way proposal has signage plan.

Yes. Council was heavily involved on this Proposal.

For vehicles wishing to access the Skyline Shops, compensatory parking would be provided along Frenchs Forest Road East.

Signage would be provided to inform drivers of the access restrictions on Patanga Road.

The performance of the intersection of Forest Way and Adams Street would be monitored following completion of construction works for the project.

Shall this identify a continued performance issue, further investigation would be carried out with regard to work that could be implemented (as a separate project) that would improve traffic flow.

Noted for action as required.

Actions required when Construction is completed.

Development of the strategy would address all relevant issues including number of signs, and types and locations of directional signage for all road users.

Table 7.1 TAMP56
Section 6.4
Table 3.3 TA7
Table 7.1 TAMP56
Section 6.4
Appendix B8 Construction Compound and Ancillary Facilities Management Sub-Plan (Aug 2016)
Table 3-3 AF1
Section 6.4
TAMP 35-45
Section 6.5 Pedestrian and Cyclist access

Subject to safety reasons and other environmental impacts (e.g. noise), construction traffic movements would be limited to off-peak periods, with peak period construction staggered to minimise construction traffic during these periods.

Priority would be given to the use of the arterial road network for construction vehicle access routes.

Use of additional compound site

Use of the additional compound site would be subject to a site-specific traffic control plan under the proposed construction traffic management plan.

Noted and actioned in accordance within the CEMP - Appendix B1 - Traffic & Access Management Plan for Stages 1 and 2 (Aug 2016)
Table 7.1 TAMP 58
Section 6.4
TAMP 35-45
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Consultation would be undertaken with Health Infrastructure regarding the need for construction access to the hospital site to focus on the Warringah Road/Bantry Bay Road intersection.

Proprietary Access

Access to properties along affected roads would be maintained during construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners.

Noted and actioned in accordance within the CEMP - Appendix B8 Construction Compound and Ancillary Facilities Management Sub-Plan (Aug 2016)
Table 3-3 AF1
Section 6.3
TAMP 35-45
Section 6.5
Table 7-1 AFMM9
TAMPs included with the Consistency Assessment Report for any new compounds

The surrounding DFEC would be protected from inadvertent damage with the implementation of an exclusion zone (perimeter fencing/screening) established around the site where the site borders identified DFEC.

Following completion of the construction work, the site would be revegetated with local native trees, shrubs and groundcovers that occur within DFEC.

Stockpiles would be covered, or stabilised where possible, to minimise dust generation during windy conditions.

Operational Traffic

An operational traffic review would be undertaken within 12 months of opening of the Stage 1 Project to confirm the operational traffic impacts of the project on Forest Way, Naree Road, Frenchs Forest Road, Warringah Road and Wakehurst Parkway in close proximity to the hospital. The assessment would be based on actual traffic counts and will assess the level of service at major intersections within the assessed road network. Where necessary, the outcomes of the operational traffic review would be used to identify any additional reasonable and feasible measures to be implemented where it is determined that the level of service has significantly deteriorated as a result of the Stage 1 Project, compared to the levels described in Section 7.

Temporary car park was made available at the vacant land opposite KFC.

Yes. Patanga one way proposal has signage plan.

Yes. Council was heavily involved on this Proposal.

For vehicles wishing to access the Skyline Shops, compensatory parking would be provided along Frenchs Forest Road East.

Signage would be provided to inform drivers of the access restrictions on Patanga Road.

The performance of the intersection of Forest Way and Adams Street would be monitored following completion of construction works for the project.

Shall this identify a continued performance issue, further investigation would be carried out with regard to work that could be implemented (as a separate project) that would improve traffic flow.

Noted for action as required.

Actions required when Construction is completed.
Remold construction would consider the need for the additional crossing legs at the intersections of Romford Road/Frenchs Forest Road West and Wakehurst Parkway/Frenchs Forest Road West

Rocks and Maritime would continue to consult with the Department of Education and Communities, The Forest High School and other stakeholders during detailed design to ensure appropriate consideration of all relevant issues relating to safe access to the school.

Revised Safeguards and Management Measures - Noise and Vibration

### Concept Proposal

**General construction noise and vibration impacts**

A Construction Noise and Vibration Management Plan would be prepared for the Stage 1 Project and Stage 2 Project. The plan would provide details of noise and vibration management measures and procedures to be undertaken during construction to minimise and manage noise impacts on sensitive receivers.

CEMP Stage 1 & 2 (Aug 2016) App B4 - Construction Noise & Vibration Management Sub Plan approved for use in August 2016 incorporating Stages 1 and 3

**Operational road traffic noise**

Operational noise impacts associated with both stages of the Project would be assessed and presented in the Stage 2 EIS

Stage 2 EIS completed

**Noise impacts generally**

Roads and Maritime would continue to include The Forest High School Working Group on consultation activities related to managing project impacts that affect the school

Regular monthly meetings have occurred with the Forest High School Working Group as well as monthly with the Traffic & Transport liaison Group, Healthscope and PCG.

### Stage 1 Project

**General construction noise and vibration impacts**

A Construction Noise and Vibration Management Plan would be prepared for the Stage 1 Project. The plan would provide details of noise and vibration management measures and procedures to be undertaken during construction to minimise and manage noise impacts on sensitive receivers, including:

- Noise and vibration monitoring and reporting requirements
- A map showing the locations of all sensitive receivers
- Specific mitigation treatments, management methods and procedures to be implemented to control noise and vibration during construction
- Construction timetabling to minimise noise impacts including time and duration restrictions, respite periods and frequency
- Procedures for notifying residents, business owners, schools and other sensitive receivers of construction activities likely to affect their amenity through noise and vibration
- Contingency procedures to be implemented in the event of non-compliances and noise complaints.

### Construction Hours

Where reasonable and feasible, works would be undertaken within ICG recommended working hours.

All works being undertaken under EPL 20673 which conforms with the ICG.

Where works are required to be undertaken outside of recommended working hours, all appropriate approvals would be obtained prior to works, and all affected receivers would be notified of all relevant details relating to the works.

### Construction Vibration

Where reasonable and feasible, use lower vibration generating items of excavation plant and equipment e.g. smaller capacity rock breaker hammers.

Use dampened rock breakers and/or ‘soft’ rock breakers to minimise the impacts associated with rock breaking works.

If vibration-intensive works are required within the safe working distances, vibration monitoring or attended vibration trials would be undertaken to ensure that levels remain below the cosmetic damage criterion.

### Impacts on sensitive receivers

Local residents would be advised of hours of operation (including out of hours works) and duration of works, and supplied with a contact name and number for queries and complaints regarding noise and vibration matters.

Complaints received are to be recorded and attended to promptly in accordance with the Roads and Maritime Draft Community Consultation Framework.

### Operational road traffic noise

Noise mitigation in the form of acoustic treatment of existing individual dwellings will be considered, where feasible and reasonable at receivers that exceed the RNV noise criteria.

Operational noise review has been approved by the DPE and is being implemented.

### Requirement noted for action

Within 12 months of the commencement of operation an operational noise review will be undertaken. This will include:

- Monitoring to compare actual noise performance of the project against predicted noise performance
- An assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of all feasible and reasonable mitigation measures
- Identification of any additional feasible and reasonable measures that will be implemented with the objective of meeting the criteria in the NSW Road Noise Policy (EPA 2011), when these measures will be implemented and how their effectiveness will be measured and reported.

### Revised Safeguards and Management Measures - Biodiversity

### Concept Proposal

**General biodiversity impacts**

A Construction Flora and Fauna Management Plan would be prepared for the Stage 1 Project and Stage 2 Project. The plan would provide details of biodiversity management measures and procedures to be undertaken during construction to minimise and manage impacts on flora and fauna.


Operational impacts would be offset through the biodiversity offset strategy developed for the Concept Proposal.

Biodiversity Offset program has been prepared and is under review with DPE. Contracts are being issued and offset program is being enacted concurrently with DPE review.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Section</th>
<th>Referenced Document</th>
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<tbody>
<tr>
<td>Loss of DFEC and threatened species habitat</td>
<td>Establish exclusion zones around the areas of DFEC and other native vegetation to be retained within the construction impact area, including those within the construction site compound.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 7-1 FF5 &amp; covered by Appendix C Pre-clearing checklist Sensitive Area Plans (Appendix A7 to the CEMP) Section 8.2 Training - Inductions. Sighted Pre-clearing checklist for clearing of DFEC in front of the hospital (Wakehurst Parkway) in June and for Aquatic Drive clearing in August. All clearing permits have Sensitive Area Maps attached showing any important ecological, environmental and heritage areas which need to be excluded. DFEC is not specifically referred to in the checklist, but all sensitive areas are acknowledged and exclusion zones are erected (orange para-web) if applicable.</td>
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<td>Threats to threatened species habitat</td>
<td>Implement sediment and erosion controls in accordance with the Blue Book (Landcom 2004) during construction.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 7-1 FF6 &amp; covered by Soil and Water Quality Management Sub Plan (Appendix B4 to the CEMP) PESC. Progressive Erosion Sediment Control Plans (PESC) are developed for each package of works prior to work commencement (Hold Point) and these are amended to meet work scope requirements as work progresses. These are developed in line with the blue book and all environmental staff have undertaken the Blue Book training. The project engages a Soil Conservationist to visit site weekly and provide advice on sediment and erosion control implementation.</td>
</tr>
<tr>
<td>Investigate reasonable and feasible options for sustaining moisture in Red-crowned Toadlet breeding habitat during detailed design for the remainder of the Concept Proposal area.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 7-1 FF11 &amp; covered by Appendix A Ecological Monitoring Program Detailed Design.</td>
<td>Books listed the latest version of the draft Ecological Monitoring Program Implementation 2016/17 report in the last week of August (24/8/17) which addresses the latest monitoring results and recommendations for managing Red Crowned Toadlet habitat and species. The latest round of monitoring found active species in the monitoring locations after finding none in the last 2 quarters.</td>
</tr>
<tr>
<td>Nest boxes would be installed in accordance with the Roads and Maritime Biodiversity Guidelines. The number and type of nest boxes required would be based on the number, quality and size of hollows that would be removed from the Concept Proposal area.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 7-1 FF9 &amp; covered by Appendix C Nest Box Plan. Nest Box tracking register shows # and location of nest boxes located - evidence folder. The draft Ecological Monitoring Program Implementation 2016/17 Report also reports on nest boxes. Monitoring cameras are installed for a period every 6 months - Spring &amp; autumn. Last monitoring was June 2017. 144 nest boxes have been installed so far. 6 additional this last reporting period.</td>
<td></td>
</tr>
<tr>
<td>Should removal of the tree used by the Powerful Owl in the grounds of The Forest High School be required it would be undertaken outside of the breeding season.</td>
<td>Powerful Owl Habitat Tree was retained. Tree was felled off outside the TPZ to ensure TPZ was not affected by the hardstand TPZ fenced off so no need for porous material - TPZ remains undisturbed. Car park construction is now complete.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 7-1 FF8 &amp; covered by Appendix C Pre-clearing checklist App F - Unexpected Threatened Flora Species/ EEC Finds Procedure</td>
</tr>
<tr>
<td>Habitat corridor and wildlife connectivity</td>
<td>Detailed design would aim to minimise vegetation clearing and indirect impacts on vegetation within the area mapped by Warringah Council as Priority 1 Wildlife Corridor during construction.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 7-1 FF7 &amp; covered by the ULDR. Has been considered - fauna connectivity infrastructure to be installed.</td>
</tr>
<tr>
<td>Prioritise investigation of offset sites that contribute to maintenance of wildlife connectivity in the local area.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 3-3 FF6 &amp; covered by Roads and Maritime Offset Strategy and Package - options being considered by RMS.</td>
<td></td>
</tr>
<tr>
<td>General biodiversity impacts</td>
<td>A Construction Flora and Fauna Management Plan would be prepared for the Stage 1 Project. The plan would provide details of biodiversity management measures and procedures to be undertaken during construction to minimise and manage impacts on flora and fauna, including: - Management strategies for pre-construction, construction and post-construction activities including control measures for pre-processing - An map showing the DFEC and other native vegetation to be retained - Fauna rescue and release procedure - Procedure for controlling the introduction and spreading of weeds and pathogens - Proposed strategies for use of coarse woody debris and bushrock - Unexpected threatened species finds procedure consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011) to manage any unexpected finds during construction.</td>
<td>Stage 1 construction Flora and Fauna Management Sub Plan approved by DPM and issued for construction (Nov 15) And CEMP Stage 1 &amp; 2 App B2 FFMS-P approved for construction in August 2016.</td>
</tr>
<tr>
<td>Loss of DFEC and other native vegetation</td>
<td>Establish exclusion zones around areas of DFEC and other native vegetation to be retained outside of the construction impact area.</td>
<td>RSMM incorporated into Stage 1 &amp; 2 App B2 FFMS-P Referred to Table 3-3 FF2 Sensitive Area Plan referencing (Appendix A7 to the CEMP), Inductions - And implemented for Stage 1 &amp; 2 works. Signed Pre-clearing checklist for clearing of DFEC in front of the hospital (Wakehurst Parkway) in June and for Aquatic Drive clearing in August. All clearing permits have Sensitive Area Maps attached showing any important ecological, environmental and heritage areas which need to be excluded. DFEC is not specifically referred to in the checklist, but all sensitive areas are acknowledged and exclusion zones are erected (orange para-web) if applicable.</td>
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<td>Locate construction access tracks and additional ancillary facilities in previously cleared/disturbed areas.</td>
<td>RSMM incorporated into Stage 1 &amp; 2 App B2 FFMS-P Referred to Table 3-3 FF2 Sensitive Area Plan referencing (Appendix A7 to the CEMP), Inductions - And implemented for Stage 1 &amp; 2 works. Signed Pre-clearing checklist for clearing of DFEC in front of the hospital (Wakehurst Parkway) in June and for Aquatic Drive clearing in August. All clearing permits have Sensitive Area Maps attached showing any important ecological, environmental and heritage areas which need to be excluded. DFEC is not specifically referred to in the checklist, but all sensitive areas are acknowledged and exclusion zones are erected (orange para-web) if applicable.</td>
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<td>Detailed design would aim to minimise impacts on DFEC and other moderate to good condition native vegetation.</td>
<td>CEMP Stage 1 &amp; 2 App B2 FFMS-P Referred to in Table 3-3 FF2 &amp; covered by Detailed design Appendix C Pre-clearing checklist Sensitive Area Plans (Appendix A7 to the CEMP) Aecorn have developed and issued the Urban Landscape and Design Report (ULDR) which addresses minimising impact to DFEC. Clearing is still occurring, however, the full clearing budget has not been used. Clearing has been minimised to only what is necessary for construction. Sections of DFEC have been left as a consequence of this.</td>
<td></td>
</tr>
</tbody>
</table>
Implement sediment and erosion controls in accordance with the Blue Book (Landcom 2004) during construction.

ESCPs are developed for each area of works before clearing occurs (Hold Point).

Preclearing surveys completed for Stage 1. Clearing undertaken in accordance with clearing and grubbing method statements incorporating actions for habitat removal, bush rock and hollows recovery, and controls on potential pollution pathways. Pathogen and Weed Management Plan implemented to mitigate impacts.

No pesticides have been used on the Project. RSMM incorporated into Stage 1 FFMP refer to Table 7-1 FF23 to FF31 and is implemented for Stage 1 works.

Implement reasonable and feasible measures to prevent pollution of waterways and drainage lines in the area downstream of the proposed works during and post-construction. Preclearing surveys completed for Stage 1. Clearing undertaken in accordance with clearing and grubbing method statements incorporating actions for habitat removal, bush rock and hollows recovery, and controls on potential pollution pathways. Pathogen and Weed Management Plan implemented to mitigate impacts.

Injured Fauna has been delivered to local Allambie Heights Vet - no direct relocations have occurred. Appendix D of the FFMP Fauna Handling Procedure addresses identifying suitable release areas for fauna species encountered during construction. Potential mitigation of impacts being considered as part of detailed design. Revegetation to be consistent with Roads and Maritime Biodiversity Guidelines in the Urban Landscape and Design Report.

Biosis has been issued a permit to undertake a habitat offset program. Biosis is to provide report on suitable habitat.

Detailed design would aim to minimise vegetation clearing and indirect impacts on vegetation within the area mapped by Warringah Council as Priority 1 Wildlife Corridor during construction.

RSMM incorporated into Stage 1 FFMP refer to Table 7-1 FF23 to FF31 and is implemented for Stage 1 works.

No revegetation has occurred yet. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed.

Biosis undertake 6-monthly weed monitoring. Biosis issued the latest version of the draft Ecological Monitoring Program Implementation 2016/17 report in the last week of August (24/8/17) which addresses weed management. This latest report found no new areas of weed infestations were recorded during the quarterly monitoring surveys and a reduction in the area of weed infestations within the project footprint was observed. In areas of vegetation clearance new weed recrudes were suppressed.

Implement reasonable and feasible options for sustaining moisture in Road-crowned Treeid breeding habitat during detailed road design for the remainder of the Concept Proposal area.

Investigate reasonable and feasible options for sustaining moisture in Road-crowned Treeid breeding habitat during detailed road design for the remainder of the Concept Proposal area.

New treated roads would be constructed to improve the flow through exposed road areas in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011). The number and type of nest boxes required would be based on the number, quality and size of hollows that would be removed.

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Should removal of dead wood and trees be required it should be replaced in suitable areas as part of post-construction restoration in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011).

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Identify areas of suitable habitat nearby for release of any fauna species encountered during construction in accordance with Roads and Maritime Biodiversity Guidelines (RTA 2011) including the hygiene protocol standards for the control of disease in frogs.

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Implement reasonable and feasible measures to control weeds during and post-construction, particularly near watercourses and immediately before/during wet weather.

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Impacts
Local Amenity
Impacts
Property
Development
Consultation
Community
Access
Traffic and
Impacts
Property
Business,
Revised Safeguards and Management Measures - Socio-economic, land use and property

Avoid impacts on potential Koala habitat in ESU 4 and avoid the removal of Koala feed trees wherever reasonable and feasible.

No core or potential Koala habitat found within the Pre-construction Survey

Undertake pre-clearing surveys for threatened plants that could potentially occur in the construction impact area. Any threatened plants identified would be managed in accordance with the unexpected threatened species finds procedure consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011).

RSMM incorporated into Stage 1 FFMP refer to Table 7-1 FF23 to FF31 and is implemented for Stage 1 works.

Preclearing surveys completed for Stage 1. Clearing undertaken in accordance with clearing and grubbing method statements incorporating actions for habitat removal, bush rock and hollows recovery, and controls on potential pollution pathways. Pathogen and Weed Management Plan implemented to mitigate impacts.

The UDLR addresses management of bushrock in 4.4.1 Removal of bushrock and large woody debris. No core or potential Koala habitat found within the Pre-construction Survey

Pre-clearance surveys are occurring for all clearing. There is a 2-stage clearing process with a clearing permit being issued and pre-clearing surveys occurring. Monitoring is being carried out by Biosis.

Revised Safeguards and Management Measures - Socio-economic, land use and property

<table>
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<tr>
<th>Concept Proposal</th>
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</table>
| Business,
Economic and
Property Impacts | Provide compensation for land acquisitions in accordance with Land Acquisition (Just Terms Compensation) Act 1991. | Compensation has been provided for acquisitions.

Impacts were considered and have been addressed as per design.

Investigations into alignment refinements along Warringah Road would be undertaken to avoid or minimise property impacts to the south during the preparation of the Stage 2 EIS.

RSMM incorporated into Stage 1 Traffic and Access Management Plan (TAMP) approved by DP&E (refer to Table 7-1 TAMP25 and TAMP26). RSMM incorporated into Stage 2 revised TAMP for DP&E approval.

Access to businesses along affected roads would be maintained during construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners and a signage strategy would be implemented to explain new access arrangements where required.

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Traffic and Access

Develop, implement and communicate the construction traffic management plan with the aim of minimising traffic impacts and disruptions.

RSMM incorporated into TAMP section 8.3. Communications on traffic management undertaken in accordance with Community Communications Strategy.

Develop and implement a consultation program consistent with the Roads and Maritime Draft Community Consultation Framework that will ensure businesses, residents and others stay informed about the type, timing and duration of construction impacts and any mitigation measures being put in place (refer to Section 7.1.3).

Consultation with Council ongoing as detailed design progresses.

In the last 6 months, Council has been provided with details on Pedestrian movement plans and Naree Rd closure as well as the - FFRRE and FFRW one-way system. -Council has been sent the STMPs and the updates have been raised at a meeting during a council meeting in early August.

Traffic and Access

Develop, implement and communicate the construction traffic management plan with the aim of minimising traffic impacts and disruptions.

RSMM incorporated into TAMP section 8.3. Communications on traffic management undertaken in accordance with Community Communications Strategy.

Develop and implement a consultation program consistent with the Roads and Maritime Draft Community Consultation Framework that will ensure businesses, residents and others stay informed about the type, timing and duration of construction impacts and any mitigation measures being put in place (refer to Section 7.1.3).

Consultation with Council ongoing as detailed design progresses.

In the last 6 months, Council has been provided with details on Pedestrian movement plans and Naree Rd closure as well as the - FFRRE and FFRW one-way system. -Council has been sent the STMPs and the updates have been raised at a meeting during a council meeting in early August.

Local Development

Warringah Council would be provided with suitable information to facilitate the provision of advice to applicants with regard to circumstances requiring the referral of development applications to Roads and Maritime.

Subject to obtaining planning approval, a final full list of all affected properties would be provided to Warringah Council so that a layer can be created in Council’s GIS system for DA assessment and referral purposes.

No core or potential Koala habitat found within the Pre-construction Survey

No core or potential Koala habitat found within the Pre-construction Survey

Community Consultation

Develop and implement a consultation program consistent with the Roads and Maritime Draft Community Consultation Framework that will ensure businesses, residents and others stay informed about the type, timing and duration of construction impacts and any mitigation measures being put in place (refer to Section 7.1.3).

Community team formed who manage the Community Communication Strategy. Regular notices are sent to community and affected residents. Hotlines exist.

TTTG (Traffic and Transport Liaison Group) - monthly meetings attended by FYJV traffic & Community Relations Managers, RMS, TINSV, Northern Beaches Council, local NSW Police, NSW fire & Rescue, Ambulance NSW, Sydney Buses (STA), Forest Coach Lines, Taxi Council, Sydney Taxis

These meetings occur on the last Thursday of every month. Discussions centre around Project progress and impact on traffic flow/traffic access/ pedestrian and cyclist access/ disruptions to road conditions.

Stage 1 Project

Business,
Economic and
Property Impacts

Undertake consultation with local land owners and businesses impacted by project about the duration, location and timing of construction and the potential impacts on business operations.

RSMM incorporated into Community Communications Strategy with consultation being undertaken with land owners and businesses.

RSMM incorporated into TAMP Table 7-1 TAMP25, with consultation ongoing with businesses on temporary access arrangements.

Community consultation has been ongoing with local businesses.

Roads and Maritime will investigate alternative options to provide on-street parking along the widened section of Frenchs Forest Road East between Allambie Road and Warringah Road. Further consultation would be undertaken with Council and local businesses.

The detailed design has determined that parking for Skyline Shop customers will be located on FFRE in front of the KFC parking area on the westbound side of the road between Allambie Rd and Warringah Rd.

Initially several shop owners of the Skyline Shopping complex were not happy. Ongoing consultation with the shop owners and Council came to an amicable agreement after the justification for the location was explained. The last meeting on this matter held with the FYJV, shop owners and Council was in March this year.

Property Impacts

Provide compensation to those property owners directly impacted by project in accordance with Land Acquisition (Just Terms Compensation) Act 1991.

Compensation has been provided for acquisitions considered under just terms act.

Local Amenity Impacts

Undertake consultation with the local community about the duration, location and timing of construction and the potential impacts throughout the construction phase.

RSMM incorporated into Community Communications Strategy with communications with local community being undertaken including forums, and updates on RMS Project website.

Noise mitigation in the form of acoustic treatment of existing individual dwellings will be considered, where feasible and reasonable at receivers that exceed the RNP noise criteria.

Operational noise review has been approved by the DPIE and letters have been issued to affected residents. Actions are occurring as a result of the letters and residents are being actively engaged by the FY community relations team.

Noise mitigation in the form of acoustic treatment of existing individual dwellings will be considered, where feasible and reasonable at receivers that exceed the RNP noise criteria.

Operational noise review has been approved by the DPIE and letters have been issued to affected residents. Actions are occurring as a result of the letters and residents are being actively engaged by the FY community relations team.

Reduce visual impacts of project on residents through the implementation of design elements and safeguards noted in the landscape character and visual impact assessment (refer to Section 3.12).

ULDR addresses these issues. It has been approved for the Project.

Subject to obtaining planning approval, a final full list of all affected properties would be provided to Warringah Council so that a layer can be created in Council’s GIS system for DA assessment and referral purposes.

Development consents that would be affected by road works would be identified during detailed design referral purposes

Subject to obtaining planning approval, a final full list of all affected properties would be provided to Warringah Council so that a layer can be created in Council’s GIS system for DA assessment and referral purposes.

Development consents that would be affected by road works would be identified during detailed design referral purposes

Subject to obtaining planning approval, a final full list of all affected properties would be provided to Warringah Council so that a layer can be created in Council’s GIS system for DA assessment and referral purposes.

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Community Services

- Undertake consultation with schools, child care centres, medical facilities and recreational facilities throughout construction about the duration, location and timing of construction and the potential impacts on their activities.
- Ensure access is maintained to community facilities and open space throughout construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property owners/tenants and a signage strategy would be implemented to explain new access arrangements where required.
- The FYJV Community team have regular interactions with directly impacted residents and property owners. To this date, there have not been any access problems with residents - alternative arrangements have been agreed and accepted. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment databases.

Traffic and Access

- Develop, implement and communicate traffic management plan with the aim of minimising traffic impacts and disruptions (refer to Section 7.1.3).
- The FYJV Community team have regular interactions with directly impacted residents and property owners. To this date, there have not been any access problems with residents - alternative arrangements have been agreed and accepted. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment databases.

Community Soverignty and Cohesion

- Ensure existing pedestrian and cyclist networks are maintained or provide alternate arrangements where necessary that cause an impact to identified sites Trefoil Creek 1 and/or Trefoil Creek 2, an updated visual impact assessment would be undertaken and appropriate management and mitigation measures formulated.
- Vegetation currently located between construction site compound and adjacent residential areas will be retained where practical to screen views.
- Landscaping would be progressively introduced to provide screening between adjacent residences and the road corridor.

Community Consultation

- Develop and implement a consultation program consistent with the Roads and Maritime Draft Community Consultation Framework that will ensure businesses, residents and others stay informed about the type, timing and duration of construction impacts and any mitigation measures being put in place (refer to Section 7.1.3).

Revised Safeguards and Management Measures - Landscape character and visual impact

Visual Impacts

- A detailed landscape plan will be prepared for the project. The landscape plan will build on the finding of the Urban Design, Landscape Character and Visual Working Paper and will include detailed set out, landscaping and planting guides.
- The visual impact of construction site compound on adjacent residential areas will be minimised through careful planning and positioning of temporary offices, other plant and material laydown areas, and specific management of lighting and potential for light spill within the identified construction site compound.
- Vegetation currently located between construction site compound and adjacent residential areas will be retained where practicable to screen views.

Construction Visual Impacts

- The visual impact of construction site compound on adjacent residential areas will be minimised through careful planning and positioning of temporary offices, other plant and material laydown areas, and specific management of lighting and potential for light spill within the identified construction site compound.

Revised Safeguards and Management Measures - Aboriginal Heritage

Concept Proposal and Stage 1 Project

Refinements to detailed design construction impact area

- Prior to construction, a review of the detailed design would be undertaken against the construction impact area shown in Figure 13 Appendix J. If changes to the current construction impact area are necessary due to unforeseen conditions, the visual impact assessment would be undertaken and appropriate management and mitigation measures formulated.

Newly recorded sites within the Stage 1 area: Trefoil Creek 1, Trefoil Creek 2

- Avoidance of impacts on these two sites would be a clear design objective for detailed design. Periodic reviews would be carried out during detailed design to monitor design development and ensure these sites are not impacted.

Unexpected heritage items

- Should any Aboriginal finds be uncovered during construction, their management should be in accordance with the Roads and Maritime Standard Management Procedure. Unexpected Heritage items. All staff should be made aware of their obligations under various Federal and State heritage legislation during their site induction and copies of this Procedure should be on site and available at all times to all staff.

Awareness of Aboriginal Heritage and legislative obligations

- Aboriginal cultural awareness training for all relevant staff and contractors would be carried out prior to commencing work onsite.

Revised Safeguards and Management Measures - Non Aboriginal Heritage

General Non-Aboriginal Impacts

- A construction heritage management plan would be prepared for the Stage 1 project. The project would

- Provide details of management measures to be undertaken during construction to minimise and manage impacts on non-Aboriginal heritage, including:

  - Management measures to be implemented to prevent and minimise impacts on heritage items - Procedures for dealing with previously unidentified heritage objects;

- Heritage induction is to be carried out in advance of the proposed works. All relevant staff, contractors and subcontractors should be made aware of their statutory obligations for heritage under the National Parks and Wildlife Act 1974.

Stage 1 & 2 works are being undertaken in accordance with approved CEMP Appendix B5 - Construction Heritage Management Sub Plan issued for construction (Aug 2016)

Pear Tree, Former Holland's Orchard Trees

- Excavations required in proximity to retained trees which may impact the critical root zone are to be undertaken in consultation with a suitability qualified and experienced arborist to ensure roots are not damaged in a way that could detrimentally affect tree health.

- Prior to works that will impact the pear tree a suitability qualified and experienced arborist would examine the tree to determine if relocation is a viable option. If relocation is not viable, propagation will be undertaken. Warringah Council and the Department of Education and Training would be consulted regarding a receiving site for the relocated or propagated tree. The FYJV Community team have regular interactions with directly impacted residents and property owners. To this date, there have not been any access problems with residents - alternative arrangements have been agreed and accepted. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment databases.

- Should any non-Aboriginal finds be uncovered during construction, their management should be in accordance with the Roads and Maritime Unexpected Finds Protocol. All staff should be made aware of their obligations under various Federal and State heritage legislation during their site induction and copies of this Protocol should be on site and available at all times to all staff.

Unexpected finds

- Should any non-Aboriginal finds be uncovered during construction, their management should be in accordance with the Roads and Maritime Unexpected Finds Protocol. All staff should be made aware of their obligations under various Federal and State heritage legislation during their site induction and copies of this Protocol should be on site and available at all times to all staff.

Revised Safeguards and Management Measures - Air Quality

General Air Quality

An Air Quality Management Plan will be prepared for each construction stage of the Concept Proposal. The plan will detail air quality control measures and procedures to be undertaken during construction.

Construction Air Quality Management Sub Plan prepared as part of the CEMP for Stage 1 and Stage 2 (Aug 2016)
General air quality impacts

Air Quality Management Plan will be prepared to detail air quality control measures and procedures to be undertaken during construction, including:
- air quality and dust management objectives consistent with DECCW guidelines
- emissions from diesel construction plant
- potential sources and impacts of dust, identifying all dust-sensitive receptors
- mitigation measures to minimise dust impacts to sensitive receptors and to the environment
- a monitoring program to assess compliance with the identified objectives
- contingency plans to be implemented in the event of non-compliances and/or complaints about dust.

The Air Quality Management Plan would include safeguards and management measures including, but not limited to:
- minimising areas of exposed surfaces through construction site planning and programming
- implementation of control measures to minimise dust emissions from stockpile sites and other areas
- covering of truck loads when transporting materials to and from the site
- avoiding/making construction activities during high wind periods
- progressive rehabilitation of completed sections of works
- regular review of the efficacy of dust suppression measures and revision of these as required.

Construction Air Quality Management Sub-Plan prepared prior to Stage 1 construction as part of the CEMP (Appendix B) and revised in August 2016 to incorporate Stage 2.

Safeguards and management measures incorporated into Table 7-1 of the AQMP.

Impacts on local air quality during construction

Areas of exposed surfaces are to be minimised through construction site planning and programming, to reduce the area of potential construction dust emission sources.

Control measures, such as compaction stabilisation or covering would be implemented in order to minimise dust from stockpile sites.

Dust suppression measures, such as the use of water carts or soil binders, would be used in any unvegetated surfaces and other exposed areas.

All trucks would be covered when transporting materials to and from the site.

Construction activities that would generate dust would be avoided or modified during high wind periods.

Work activities would be reviewed if the dust suppression measures are not adequately restricting dust generation.

Rehabilitation of completed sections would be progressively undertaken.

RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Dust monitoring and inspections, and dust suppression measures have been conducted and are progressing as part of Stage 1 construction works.

Induction addresses dust management.

Stonehaw has been used on stockpiles and areas of site being left uncovered for long durations. Different attachment have been utilised for rock breaking to minimise dust.

Exhaust emissions

Construction plant and equipment would be maintained in good working condition in order to limit impacts on air quality.

Where practicable, vehicles will be fitted with pollution reduction devices.

RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Equipment maintenance monitored as part of WHS management plan requirements. These are covered under AQMP 16 & 17 which are addressed in Section 8.3 and Incoming Plant Verification Checklists and daily plant pre-starts.

Revised Safeguards and Management Measures - Geology, Soils and Contamination

Concept Proposal

Managing Impacts on soil in general

A Soil and Water Management Plan will be prepared for the each construction stage of the Concept Proposal in accordance with the principles and guidelines set out in Soils and Construction – Managing Urban Stormwater series, comprising Volume 1 (Landcom, 2004) and Volume 2 – Main Roads (DECC, 2008).

Warringah Road 'slot cut face' may be susceptible to erosion and slope stability during construction

As part of future stage(s) design development, subsoil drainage would be incorporated into the 'slot' to ensure the ongoing stabilisation of face. The extent of the drainage network would be finalised during detailed design.

RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Requirements being considered for Stage 2 detailed design - Slot yet to commence.

Impact to contaminated land

Preparation of a Phase 2 assessment would be required prior to construction of the Stage 2 Project. Outcomes and management measures identified in the Phase 2 assessment would be incorporated into the CEMP for the Stage 2 Project.

Stage 1 construction Soil and Water Quality Sub Plan approved by DP&E and issued for construction (Nov 15).

Stage 2 requirements incorporated into revised SWMP approved in August 2016.

RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Equipment maintenance monitored as part of WHS management plan requirements. These are covered under AQMP 16 & 17 which are addressed in Section 8.3 and Incoming Plant Verification Checklists and daily plant pre-starts.

Stage 1 Project

Managing Impacts on soil in general

A Soil and Water Management Plan will be prepared for each construction stage of the Concept Proposal in accordance with the principles and guidelines set out in Soils and Construction – Managing Urban Stormwater series, comprising Volume 1 (Landcom, 2004) and Volume 2 – Main Roads (DECC, 2008), including:
- Consideration of soil erodibility
- Management strategies to be used to minimise surface and groundwater impacts, including identification of water treatment measures, discharge points and erosion and sediment control measures
- Sedimentation basin construction and management
- Measures to monitor and manage spoil, fill and materials stockpile sites
- Dewatering procedure
- Water quality monitoring and checklists

RSMM incorporated into Stage 1 SWMP approved by DP&E (refer to Table 7-1 SW31, SW32 of SWMP), and the construction Waste and Energy Management Sub Plan (Appendix B7 of the CEMP). Contaminated areas of concern (AECs) were further investigated and defined as part of the Stage 2 EIS Phase 2 Contamination Site Assessment, defining AECs within Stage 2 project area. These areas will be managed as part of Stage 2 construction. Contaminated Land Plan has been completed.


Disturbance of Contaminated or potentially contaminated land

A Contaminated Land Management Plan will be prepared in accordance with the Contaminated Land Management Act 1997, relevant EPA Guidelines and Roads and Maritime Guideline for Management of Contamination (RMS 2013) and will include at a minimum:
- Contaminated land legislation and guidelines including any relevant licences and approvals to be obtained
- Identification of locations of known or potential contamination and preparation of a map showing these locations
- Identification of rehabilitation requirements, classification, and transport and disposal requirements of any contaminated land within the construction footprint
- Contaminated land management including waste classification and reuse procedures and unexpected finds procedures for unanticipated discovery of contaminated material during construction.


Investigations into the CEMP for the Stage 2 Project.

Outcomes and management measures identified in the Phase 2 assessment would be incorporated into the CEMP for the Stage 2 Project.

Completion of Stage 2 EIS. Outcomes of Phase 2 assessment incorporated into Stage 2 revised SWMP submitted for DP&E approval.

Phase 2 Contamination Assessment: Northern Beaches Hospital - Stage 2 Network Enhancement Works, URS, June 2015 - captured in Sections 5.1.5 & 6.6 & Table 5-2, Table 7-2 SW65, SW66, SW67, SW68, SW69.

Construction

Accidental spills

An emergency spill response procedure will be prepared to minimise the impact of spills including details on the requirements for managing, cleaning up and reporting.

Spill kits and adequate quantities of suitable material to counteract spillage would be kept readily available.

Any potential hazardous or contaminated materials (for example, fuels, curing compounds, and cements) would not be stored within 50 metres of any watercourses or drainage lines, flood-prone areas, or on slopes steeper than 1:10. Storage areas would be impervious and adequately bunded.

The refuelling of plant and machinery would be undertaken in impervious bunded areas. Refuelling would be attended at all times.

Vehicle wash-downs and/or concrete truck washouts would be undertaken within a designated bunded area of an impervious surface or undertaken off-site.

Machinery would be checked daily to ensure that there are no oil, fuel, or other liquid leaks.

Operation

Accidental Spills

Detailed design would consider reasonable and feasible measures to optimise pollution mitigation. Requirement being considered in detailed design.

Revised Safeguards and Management Measures - Hydrology, Water Quality and Flooding

Concept Proposal

Operational Impacts on Water Quality

The ultimate operational water quality treatment strategy for the Concept Proposal (covering both stages) would be developed and confirmed during the respective detailed design stages and would address the matters noted by the EPA in its submission (Issue 10).

EPA’s submission is being considered as part of detailed design and addressed in the Water Management Plans developed for stages 1 and 2.

Impact on Council Stormwater Infrastructure

Council would be consulted with regard to matters related to its stormwater drainage infrastructure. Requirements and consultation being undertaken as part of detailed design progression.

Sedimentation of surrounding watercourses and drainage lines

A Soil and Water Management Plan will be prepared for each construction stage of the Concept Proposal in accordance with the principles and guidelines set out in Soils and Construction – Managing Urban Stormwater series, comprising Volume 1 (Landcom, 2004) and Volume 2D – Main Roads (DECC, 2008). This would also consider and address the matters noted by the EPA in its submission (Issue 11).

RSMIM incorporated into Stage 1 & 2 SWQMP approved by DP&E (refer to Table 7-1 SWMM31, SWMM32 of SWQMP), and the concept Waste and Energy Management Sub Plan (Appendix A of the SWQMP).

Contamination of surrounding watercourses and drainage lines

An emergency spill response procedure will be prepared to minimise the impact of spills including details on the requirements for managing, cleaning up and reporting. The requirements of the plan are detailed in Section 15.5 of the EIS.

RSMIM incorporated into Stage 1 & 2 SWQMP approved by DP&E (refer to Table 7-1 SWMM7). These measures are in place for Stage 1 works. Environmental Incident & Spill Response Protocol Doc # NBHRDC-EN-SWMP- APPA_PLN forms Appendix A of the SWQMP.

Management of groundwater quantity and quality

Consultation with the EPA and NSW Office of Water would be undertaken prior to construction, regarding monitoring and the management of groundwater quality from contamination sources. Parameters to be monitored would be agreed with the EPA and the NSW Office of Water.

Consulation with council and DPI Water as required under conditions Water Management Plan has been reviewed. SMEC are currently managing water monitoring for the Project. The latest report was submitted in March 2017. So far the Project has to influence surface water. Groundwater interception is expected to occur when the excavation begins for the slot.

Pre-construction monitoring of groundwater quality, groundwater flows and groundwater levels would continue to be undertaken to establish existing groundwater quality, flow paths and levels of the Concept Proposal.

Pre-construction monitoring is ongoing along with construction monitoring being managed by both RMS and FY2V.

Groundwater flow impacts

Monitoring of the Red-crowned Toadlet habitat would be undertaken prior to and during construction to determine any groundwater impacts on the habitat.

RSMIM incorporated into Stage 1 SWMP approved by DP&E (refer to Table 7-1 SWMM9) FFMP 4.2 Stage 2 Consulting & Ecological Monitoring Plan SWQMP Table 3.3 SWMM31. Groundwater not intercepted to date. Biois issued the latest version of the draft Ecological Monitoring Program Implementation 2016/17 report in the last week of August (24/8/17) which addresses the latest monitoring results and recommendations for managing Red Crowned Toadlet habitat and species. The latest round of monitoring found active species in the monitoring locations - after finding none in the last 2 quarters. the Stage 2 Project Biodiversity Assessment 2015 (Biodiversity Assessment) conducted by SMEC suggests that Red-crowned Toadlet GDE in Curr Curl Creek is dominated by surface water flows, and a reduction in groundwater discharge to surface water will not adversely impact the Red-crowned Toadlet Habitat. Monitoring will continue when slot works begin.

Interception of groundwater during construction

Groundwater flows intercepted by project structures (sloits and cuttings) would be collected, treated as necessary and recharged into water courses or stormwater.

Engineering methods, such as cross drains, would be used to capture and manage groundwater flows during construction.

Water management plan completed and approved for Stage 1. No groundwater interception at this stage.

Water sharing plans

Consultation with NSW Office of Water would be undertaken concerning relevant water sharing plans and the need for groundwater extraction licences or approvals prior to construction.

Project has consulted with DPI Water. A licence is not required.
Erosion and sediment control (construction)

A Soil and Water Management Plan will be prepared for each construction stage of the Concept Proposal in accordance with the principles and guidelines set out in Soils and Construction – Managing Urban Stormwater series, comprising Volume 1 (Landcom, 2004) and Volume 2D – Main Roads (DECC, 2008), including:

- Consideration of soil erodibility
- Management strategies to be used to minimise surface and groundwater impacts, including identification of water treatment measures, discharge points and erosion and sediment control measures
- Sedimentation basin construction and management
- Measures to monitor and manage spoil, fill and materials stockpile sites
- Dewatering procedure
- Water quality monitoring and checklists.

Surface water quality during operation

Three in-line pollutant control devices would be designed and installed at the following locations:

- Drainage Line 1 – Cobb Street (refer to Appendix M Figure 8.1, Sheet 1 of 4 for location)
- Drainage Line 2 – Outlet of new piped stormwater drainage line in Wakehurst Parkway reserve
- Drainage Line 3 – End of cul de sac in Winkles Avenue

Gross Pollutant Traps are being installed in both stage 1 and stage 2 to contain run-off from the operational road and drain line spits - located in following locations: Cobb St., Rabbett St, Patanga Rd, Fitzpatrick Rd Wakehurst Parkway North

Scour of bank drainage line and potential channel erosion

Outlet scour protection, such as a rock rip rap apron with an energy dissipation structure, would be considered as part of the detailed design at the pipe outlet in the drainage line downstream (west) of Wakehurst Parkway.

Water management plan completed and approved for Stage 1.

Interception of groundwater during construction

Groundwater flows intercepted by project structures, such as cuttings, would be collected, treated as necessary and recharged into watercourses or stormwater.

Water management plan completed and approved for Stage 1.

Inappropriate waste handling or disposal of waste

A Resource and Waste Management Plan will be prepared for each construction stage of the Concept Proposal to identify the hierarchy for sourcing and use of resources. Wastes would be managed consistent with the WARR Act principles of avoidance, reduction, reuse and recycling.

- A waste register detailing types of waste collected, amounts, date, time, and details of disposal
- A resource management strategy detailing beneficial reuse options for surplus and/or unsuitable material.

Classification Guidelines: Part 1 Classifying Waste

Disposal of any non-recyclable waste will be in accordance with the POED Act and Waste Classification Guidelines: Part 1 Classifying Waste.

A Resource and Waste Management Plan will be prepared for each construction stage of the Concept Proposal and Stage 1 Project.

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Water management plan completed and approved for Stage 1.

Interception of groundwater during construction

Groundwater flows intercepted by project structures, such as cuttings, would be collected, treated as necessary and recharged into watercourses or stormwater.

Water management plan completed and approved for Stage 1.

Inappropriate waste handling or disposal of waste

A Resource and Waste Management Plan will be prepared to identify the hierarchy for sourcing and use of resources. The plan will adopt the Resource Management Hierarchy principles of the WARR Act and include:

- Identification of the waste streams that will be generated during construction
- A waste register detailing types of waste collected, amounts, date, time, and details of disposal
- A resource management strategy detailing beneficial reuse options for surplus and/or unsuitable material.

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Outlet scour protection, such as a rock rip rap apron with an energy dissipation structure, would be considered as part of the detailed design at the pipe outlet in the drainage line downstream (west) of Wakehurst Parkway.

Water management plan completed and approved for Stage 1.

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Groundwater flows intercepted by project structures, such as cuttings, would be collected, treated as necessary and recharged into watercourses or stormwater.

Water management plan completed and approved for Stage 1.

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- A waste register detailing types of waste collected, amounts, date, time, and details of disposal
- A resource management strategy detailing beneficial reuse options for surplus and/or unsuitable material.

Classification Guidelines: Part 1 Classifying Waste

Disposal of any non-recyclable waste will be in accordance with the POED Act and Waste Classification Guidelines: Part 1 Classifying Waste.

A Resource and Waste Management Plan will be prepared for each construction stage of the Concept Proposal and Stage 1 Project.
The Proponent will be responsible for any breaches of the conditions of approval resulting from the actions of all persons that are involved in the SSI.

The compliance of any non-compliance identified during the environmental auditing, reviewing of compliance or incident notification.

The condition is noted for both Stage 1 & 2 Stage 2 construction works.

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The condition is noted for both Stage 1 & 2 Stage 2 construction works.
The Proponent must provide all relevant information to Council and/or NSW State Emergency Service, to assist in the preparation of representative monitoring locations; WMP Section 8

Compliance with this requirement is a being undertaken as part of detailed design strategy as per Scope of Works and Technical Statements.

The Water management plan was not approved yet for Stage 2. No groundwater interception at this stage.

Compliance with this requirement is a being undertaken as part of detailed design strategy as per Scope of Works and Technical Statements.

Prior to the commencement of operation, the Proponent must constitute a ‘Wakehurst’ Parkway Flooding Study. This study must assess the flooding characteristics of the Wakehurst Parkway between the NBH and the Sydney Academy of Sport and Recreation, in the Middle Creek catchment. The Study must be prepared in consultation with relevant Councils and:

- identify the locations on the Parkway which are likely to experience flooding during storm events and estimate the frequency of flood events at these locations;
- institute suitable measures to improve stormwater management to minimise the frequency and duration of road closure due to flooding during recent storm events;
- undertake surveys to identify ground features likely to affect stormwater discharges and implement reasonable measures to reduce flooding impacts; and
- include a strategy for implementing the recommendations of the study.

CEMP Appendix B4 Soil and water Quality Management Plan Rev. 3 was updated for Stage 1 and Stage 2 inclusion in August 2016 which includes Appendix B4 - Surface Water Monitoring Program. The Water management plan completed and approved for Stage 1 - Not approved yet for Stage 2. No groundwater interception at this stage.

The Water management plan was prepared by DPE on 1/2/2017. No groundwater interception has occurred at this stage, in this reporting period.

All previous flood studies for the study area;

- the interim Water quality Objectives Design Guidelines in Appendix F of the Warringah WMP, and water sensitive urban design principles consistent with the Guidelines for Riparian Corridors on Waterfront Land (DPI Water 2011);
- consider previous flood studies for the study area;
- the 10 year ARI hydrologic standard for surface roads; and
- any new or necessary update(s) to the relevant plans and documents in relation to flooding, to reflect changes in flooding levels, footprint. Where impacts during construction of the SSI are unavoidable, works must be undertaken in accordance with the strategy developed for mitigation and/or removal of contaminated soil or groundwater.

For land to be disturbed by the SSI, where the investigations identify that the site is suitable for the intended operations and that there is no need for a specific remediation strategy, measures to identify, handle and manage potential contaminated soils and materials and groundwater must be identified in the report and incorporated into the Construction Environmental Management Plan required under conditions D27 and D28. A remediation strategy report must be submitted for addressing the disturbed area, and how the environmental and human health risks will be managed during the disturbance, remediation and/or removal of contaminated soil or groundwater.

The WMP was reviewed in consultation with DPI Water and Council prior to the commencement of construction, unless otherwise agreed by the Secretary.

The WMP was prepared by SMEC in March 2017 and has been approved for use by the Project on 1/2/2017. The WMP covers all conditions and regular groundwater and soil quality is continuing as the Project progresses.

B6 Prior to the commencement of operation, the Proponent must implement a Traffic & Access Management Plan (WMP) for the SSI to ensure that the SSI is designed, constructed and operated to achieve the water and flood objectives of this approval. The WMP must include, but not be limited to:

- identification of works and activities during construction and operation of the SSI, including emergency and quiet periods, that are subject to the flood and water quality objectives of the WMP, and water sensitive urban design principles consistent with the guidelines developed for mitigation and/or removal of contaminated soil or groundwater.
- a detailed description of the water sensitive systems that could potentially be affected by the SSI, including:
  - potential impacts on existing water quality and flows in receiving waters, groundwater levels, quality and yield in the region, and
  - private-owned groundwater bores, that could be affected by the project.

B7 The WMP must be prepared or reviewed by a suitably qualified expert in consultation with DPI Water and Council, and approved by the Secretary prior to the commencement of the relevant activities identified in condition B5(b). The WMP must be implemented for a minimum of three years following the commencement of operation, unless otherwise agreed by the Secretary. Any requests to deviate from the implementation of the WMP must be supported by advice from an independent expert confirming that the criteria identified by condition B5(b) are met.

The FYJV Community team have regular interactions with approved CEMP - Appendix B5 Construction Heritage and/or Water Sensitive Urban Design Principles included in CEMP - Appendix B5 Construction Heritage and/or Water Sensitive Urban Design Principles included in the Strategy. Residents have not been able to identify specific works or remediation works required for construction.

The Water Management plan was approved by DPE on 1/2/2017. No groundwater interception has occurred at this stage, in this reporting period.

B8 The Proponent must provide all relevant information to Council and/or NSW State Emergency Service, to assist in the preparation of representative monitoring locations; WMP Section 8

Compliance with this requirement is a being undertaken as part of detailed design strategy as per Scope of Works and Technical Statements.

The Water management plan was not approved yet for Stage 2. No groundwater interception at this stage.

Compliance with this requirement is a being undertaken as part of detailed design strategy as per Scope of Works and Technical Statements.

Notes:

The Phase 2 Contamination Site Assessment completed during Stage 2 is for areas which may be subject to a Site Contamination Report targeting ACUs which are above investigation levels. Works are being undertaken in accordance with the SWMAP for Stage 2 works including the implementation of Unexpected Discovery of Contaminated Land Procedure (Appendix H).

The Water management plan was prepared by SMEC in consultation with DPI Water and Council.

Notes:

The Phase 2 Contamination Site Assessment completed during Stage 2 is for areas which may be subject to a Site Contamination Report targeting ACUs which are above investigation levels. Works are being undertaken in accordance with the SWMAP for Stage 2 works including the implementation of Unexpected Discovery of Contaminated Land Procedure (Appendix H).

The Water management plan was approved in July 2017, which was at the end of this reporting period.

Notes:

The Water management plan was approved by DPE on 1/2/2017. No groundwater interception has occurred at this stage, in this reporting period.

Notes:

The Water management plan was approved by DPE on 1/2/2017. No groundwater interception has occurred at this stage, in this reporting period.
The objectives and biodiversity outcomes to be achieved; timing and responsibilities for the implementation of the provisions of the Package; and monitoring of the condition of species and ecological communities at offset (including translocation) locations.

Each stage is scatted at the design phase – and then scatted after Construction to complete. Stage 2 is being scatted as part of an ongoing Audit schedule.

Stage 1 in accordance with approved Construction Plans and Fauna Management Sub Plan issued for construction (Nov 2015) and now incorporated into updated Stage 2 CEMP Rev 3 (Aug 2016) Appendix B FFMP

Stage 1 in accordance with approved Construction Plans and Fauna Management Sub Plan issued for construction (Nov 2015) and now incorporated into updated Stage 2 CEMP Rev 3 (Aug 2016) Appendix B FFMP
The Proponent, in consultation with the Council, must where feasible and reasonable, implement the urban design objectives. A copy of each current strategy, plan, program or other document required under this approval.

Prior to the commencement of permanent built works and/or landscaping, or as otherwise agreed by the Secretary, the Proponent must prepare, to include stage 2 and was approved on 5th August 2016.

Community Communications Strategy (CCS) was updated to include stage 2 and was approved on 5th August 2017.
2 The Environment Representative must prepare and submit to the Secretary a monthly report on the Environmental Representative’s actions and decisions on matters specified in condition D1. The report must be submitted within seven (7) days for the end of each month for the duration of construction of the SSL, or as otherwise agreed by the Secretary. Notwithstanding, the Environment Representative must be given the independence to report to the Secretary at any time and/or at the request of the Secretary.

Monthly reports are being prepared in accordance with this requirement.

3 The Environment Representative must comply with (a) Managing Urban Stormwater – Soils and Construction Votes 1 and 2, (b) Soil and water management measures consistent with Managing Urban Stormwater – Soils and Construction Votes 1 and 2, (c) minimise parking or queuing on public roads; and (d) minimise idling and queuing in local residential streets where practicable;

CEMP Rev 3 (Aug 2016) App B4 Table 7-1 SW8
Where feasible on-site water is used for dust suppression

4 Where available and practicable, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources must be used in preference to potable water for construction activities, including dust control;

CEMP Rev 3 (Aug 2016) App B4 Table 7-2 SW9
(Where feasible on-site water is used for dust suppression

5 Except as permitted by an EPL, high-noise impact works and activities (including, but not limited to rock breaking, rock hammering) must only be undertaken:

(a) during the hours of 6:00 am to 6:00 pm Monday to Friday;
(b) between the hours of 8:00 am to 1:00 pm Saturday; and
(c) between the hours of 6:00 am to 1:00 pm Sunday.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

6 Except as permitted by an EPL, road works with a noise level greater than 55 dB(A) above background level on local residential streets (as referenced in Australian Standard AS 2187.2-2006 Explosives – Storage and use – Use of Explosives); and

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

7 Where feasible on-site water is used for dust control (including periods when there is less than one hour per day between cleaning and recommencing any of the work of the subject of this condition).

CEMP Rev 3 (Aug 2016) App B4 Table 7-2 SW9
(Where feasible on-site water is used for dust suppression

8 The SSI must be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009); and

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

9 Where feasible on-human exposure to vibrating structures is to be maintained at or below the thresholds defined in Part 3 of the Interim Construction Noise Guideline (DECC, 2009);

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

10 Where feasible, reasonable, and operation noise mitigation measures must be implemented at the start of construction (or at other times during the construction) to minimize construction noise impacts;

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

11 During construction, affected educational institutions (including The Front High School) must be consulted and feasible and reasonable steps taken to ensure that noise-generating construction works in the vicinity of affected schools are not implemented during examination periods (where practicable), unless other reasonable arrangements to the affected institutions are made at no cost to the affected institution.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

12 No blasting is permitted on site unless reviewed and approved by the Secretary in consultation with the EPA.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

13 The SSI must be constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust emissions; and

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

14 The SSI must be constructed, where feasible and reasonable, to avoid the use of local roads outside of the SSL footprint (through residential areas) by heavy vehicles to gain access to ancillary facilities.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

15 Access to construction compounds on local roads must be limited to standard construction hours, where practicable, unless otherwise detailed within the Construction Traffic and Access Management Plan required by condition D38(b).

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

16 Silt and water erosion measures must be used in preference to potable water for construction activities, including dust control.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

17 Soil and water management measures consistent with Managing Urban Stormwater – Soils and Construction Votes 1 and 2.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

18 The use of potable water for construction activities, including dust control, must be avoided.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

19 The Environment Representative must be the principal point of advice in relation to the environmental performance of the SSI.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

20 The Environment Representative must ensure that all noise management plans and monitoring programs required under the approval and any associated EPL are implemented.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)

21 The Environment Representative must monitor the implementation of environmental management plans and monitoring programs required under this approval and any associated EPL to ensure compliance and the performance of any required actions has been implemented.

Stage 1 and 2 works are being conducted in compliance with approved Construction Noise and Vibration Management Sub Plan and Environment Protection Licence 20737 implemented for Stages 1 & 2 (Issued June 2016)
D18 Upon determining the baseline metrics for construction vehicles associated with the SSD, and prior to construction, a suitably qualified and experienced independent expert must prepare a Road Dilapidation Report for all roads utilised. The Report must include details of the road and demonstrate measures to restore any damage that may result from the transport and transportation related to the construction of the SSD. The Report must be submitted to the Council for review prior to the commencement of construction.

Following completion of construction, a subsequent Report must be prepared to assess any damage to the road that may have resulted from the construction of the SSD. The Reports must be submitted with Council's existing pavement management system and collected data on roughness, rutting, cracking and patching before and after works. Measurements undertaken to restore or reinstate roads affected by the SSD must be undertaken in a timely manner, in accordance with the Council’s maintenance program and at the full expense of the Proponent.

D19 The clearing of native vegetation must be undertaken with the objective of reducing impacts to any threatened species or endangered Ecological Communities to the greatest extent practicable. Impacted vegetation must be re-established with endemic species to the greatest extent practicable.

D20 For liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume, within the bund; and

of low environmental risk in respect to waste management and impacts on flora and fauna, soil and water, and heritage; and

not require vegetation clearing beyond that already required by the SSD.

be located within or adjacent to land where the SSD is being carried out;

the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Section 4.1.2 measures for the handling, treatment and management of hazardous and contaminated materials (including asbestos);

D21 Dangerous goods, as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with:\n
(a) all relevant Australian Standards;

(b) the volume, number and total volume requirement of (110%) of the volume of the largest single stored volume, within the bund; and

(c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Section 4.1.2 measures for the handling, treatment and management of hazardous and contaminated materials (including asbestos); Appendix B7 WEMP

D22 The clearing under the provisions of section 5.1 paragraph (d) must be undertaken within an active construction compound that is adjacent to residential, educational and/or commercial properties, with the objective of being consistent with the surrounding context.

D23 The location of the ancillary facilities must be identified in the Construction Environmental Management Plan required under condition D27.

D24 Unless approved by the Secretary, the location of Ancillary Facilities not identified in the documents listed in condition A1 must:

be located within or adjacent to land where the SSD is being carried out;

not require vegetation clearing beyond that already required by the SSD;

not impact on heritage items (including areas of archaeological significance) beyond those already impacted by the SSD;

not unreasonably affect the use of residential properties;

be above the (AS 3260) flood level unless a contrary opinion in relation to flood management is prepared and implemented; and

be protected from stormwater and sediment run-off).

D25 All ancillary facilities and access points must be rehabilitated to at least their pre-construction condition or better, unless otherwise agreed by the landowner where relevant.

D26 The Secretary’s approval is not required for minor ancillary facilities (e.g. pump sheds, office sheds, and portable toilet facilities) that do not comply with the criteria set out in condition D24 and D25.

D27 Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent must prepare and implement (following approval) a Construction Environmental Management Plan (CEMP) for the SSD. The CEMP is to be prepared in consultation with Council, for the approval of the Secretary. The CEMP must outline the environment management practices and procedures that are to be followed during the construction. The CEMP is to be submitted in accordance with the Guidelines for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004); however, it is not necessary to be limited to:

(a) a description of activities to be undertaken during the construction (SSIs including staging and scheduling);

(b) monitoring and other obligations that the Proponent is required to fulfill during construction, including approvals and investigations, assessment of harm to flora and fauna, air and water, and heritage, and the CEMP is to be implemented in accordance with the Construction Environmental Management Plan for the project.

E07 Specific requirements for the SSD area as follows:

(a) a description of activities to be undertaken during the construction (SSIs including staging and scheduling);

(b) monitoring and other obligations that the Proponent is required to fulfill during construction, including approvals and investigations, assessment of harm to flora and fauna, air and water, and heritage, and the CEMP is to be implemented in accordance with the Construction Environmental Management Plan for the project.

(d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and

(e) details of how environmental performance will be managed and monitored to meet acceptable outcomes, including what actions will be taken to achieve acceptable outcomes, potential adverse environmental impacts (including any impacts arising from the staging of the construction of the SSD). These should include consideration of cumulative impacts in relation to other major potential construction activities in the project area (including the NSW project and Stage 1 Project). In particular, if the following environmental performance issues must be addressed in the CEMP:

overall project

(i) measures for reducing dust and protecting air quality; and

(ii) measures for reducing noise and protecting air quality.

(iii) measures for reducing noise and protecting air quality.

(iv) measures for reducing noise and protecting air quality.

(v) measures for reducing noise and protecting air quality.

(vi) measures for reducing noise and protecting air quality.

(vii) measures for reducing noise and protecting air quality.

(viii) measures for reducing noise and protecting air quality.

(ix) measures for reducing noise and protecting air quality.

(x) measures for reducing noise and protecting air quality.
The CEMP must include procedures for the periodic review and updating (including the sub-plans required under Condition D28) of the CEMP, as necessary (including where minor changes can be approved by the Environmental Representative).

Section 1.6

(ii) The CEMP must be submitted for the approval of the Secretary no later than one month prior to the commencement of construction on an affected development site, or the relevant stage has been reached. The CEMP may be revised from time to time, however, construction work must not commence until the written approval of the relevant stage has been received from the Secretary.

The Plan must be developed in consultation with NOVW and Council and include but not be limited to:

The Plan must be developed in consultation with NOVW and Council and include but not be limited to:

A Construction Noise and Vibration Management Plan to detail how noise and vibration impacts will be minimised and managed. The Plan must be prepared in consultation with the Forest High School Working Group. The Plan must include, but not be limited to:

(i) identification of construction noise and vibration levels at sensitive receivers; including consideration of cumulative impacts associated with adjoining development sites;

(ii) procedures and mitigation measures to ensure relevant vibration criteria are achieved, including applicable buffer distances for vibration sensitive works, use of bite-vibrating equipment, bite-vibration dampeners or alternative construction methods, and pre- and post-construction vibration surveys of receivers where vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria).

(iii) a Construction Traffic and Access Management Plan to detail the management of construction traffic impacts on sensitive areas, including the proposed schedule of works, temporary road work traffic control measures, onsite vehicle queuing and parking areas and management arrangements and what steps will be taken to minimise and manage construction noise and vibration impacts during construction, clearly indicating the monitoring frequency, monitoring locations, and the nature and duration of those impacts.

(iv) an Out-of-Hours Work Protocol for the assessment, management and approval of works outside of the hours specified in condition D3, for the Secretary’s approval. The Out-of-Hours Work Protocol must include:

(5) As part of the CEMP for the SSI, the Proponent must prepare and implement (following approval):

(i) a Construction Compound and Ancillary Facilities Management Plan to detail the management of site compounds associated with the infrastructure activity. The Plan must be developed in consultation with NOVW and Council and include but not be limited to:

(ii) an Action Plan for the management of construction dust at the facility and the site to be decommissioned (including any necessary rehabilitation); and

The CEMP must be submitted for the approval of the Secretary no later than one month prior to the commencement of construction on an affected development site, or the relevant stage has been reached. The CEMP may be revised from time to time, however, construction work must not commence until written approval of the relevant stage has been received from the Secretary.

The Plan must be developed in consultation with NOVW and Council and include but not be limited to:

(i) a description of the facility, its components and the surrounding environment;

(ii) details of activities to be carried out at each facility, including the hours of use and the storage of dangerous and hazardous goods;

(4) As part of the CEMP for the SSI, the Proponent must prepare and implement (following approval):

(iii) an Out-of-Hours Work Protocol for the assessment, management and approval of works outside of the hours specified in condition D3, for the Secretary’s approval. The Out-of-Hours Work Protocol must include:

(iv) identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts);
Compliance Tracking Program Appendix B - Stage 2 Project Approval
<table>
<thead>
<tr>
<th>Ref</th>
<th>Sub Ref</th>
<th>STAGE 2 CONDITIONS OF APPROVAL</th>
<th>January 2017 Status</th>
<th>August 2017 Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Commitment/Obligation</td>
<td>(e.g. Date submitted to DP&amp;E, Approval obtained etc.)</td>
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</tr>
<tr>
<td>(a)</td>
<td></td>
<td>Details on average daily traffic volumes across the SSI area during the daytime and night-time periods, based on recorded observations, including but not limited to traffic volumes along Warringah Road and the intersections with Wakehurst Parkway, Inverew Street and Forest Way.</td>
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<td>(b)</td>
<td></td>
<td>Details of any complaints and enquiries received in relation to operational noise generated by the SSI between the date of commencement of operation and the date the report was prepared.</td>
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<td>(c)</td>
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<td>Any required recalibrations of the noise model taking into consideration factors such as actual traffic numbers and proportions.</td>
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<tr>
<td>(d)</td>
<td></td>
<td>An assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, a reassessment of feasible and reasonable mitigation measures.</td>
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<td>(e)</td>
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<td>Inclusion of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition E3, if required, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Policy (DECCW, 2015), when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.</td>
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<td>(g)</td>
<td></td>
<td>Details of any complaints received relating to traffic, transport and access impacts, and how they have been addressed in the Review.</td>
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| (h) |         | Noted for action. | | }

Note: The Review must be submitted to the Secretary and to the Council within 60 days of its completion and made publicly available. If the Review indicates traffic, transport and access impacts attributable to the SSI and the NBH development if operational at the time of the Review, including consideration of higher traffic generation; the Review must be undertaken in consultation with the Transport Management Centre, Transport for NSW, Council, and Health Infrastructure and include, but not necessarily be limited to:

- Traffic and road network performance of the SSI against expected performance, including consideration of higher traffic generation;
- Local street and property access (such as ingress and egress from local roads onto Warringah Road and property during morning and afternoon peak periods);
- Broader downstream impacts;
- Any parking impacts, including off-street parking to the north of Warringah Road in the vicinity of the proposed new shared pedestrian/bicycle overbridge;
- Pedestrian and cycle facilities and use, including connectivity at the project area fringes with other proposed non-project facilities; and
- Details on average daily traffic volumes across the SSI area during the daytime and night-time periods, based on recorded observations, including but not limited to traffic volumes along Warringah Road and the intersections with Wakehurst Parkway, Inverew Street and Forest Way.

The Review must be undertaken within six months following operation of the SSI (and to be inclusive of both Stage 1 and Stage 2) and six months following operation of the NBH development, or as otherwise agreed by the Secretary.

The Review must be undertaken in consultation with the Transport Management Centre, Transport for NSW, Council, and Health Infrastructure and include, but not necessarily be limited to:

- Traffic and road network performance of the SSI against expected performance, including consideration of higher traffic generation;
- Local street and property access (such as ingress and egress from local roads onto Warringah Road and property during morning and afternoon peak periods);
- Broader downstream impacts;
- Any parking impacts, including off-street parking (such as ingress and egress from local roads onto Warringah Road and property during morning and afternoon peak periods);
- Details on average daily traffic volumes across the SSI area during the daytime and night-time periods, based on recorded observations, including but not limited to traffic volumes along Warringah Road and the intersections with Wakehurst Parkway, Inverew Street and Forest Way.

The Review must be submitted to the Secretary and to the Council within 60 days of its completion and made publicly available. If the Review indicates traffic, transport and access impacts attributable to the SSI and the NBH development if operational at the time of the Review, including consideration of higher traffic generation; the Review must be undertaken in consultation with the Transport Management Centre, Transport for NSW, Council, and Health Infrastructure and include, but not necessarily be limited to:

- Traffic and road network performance of the SSI against expected performance, including consideration of higher traffic generation;
- Local street and property access (such as ingress and egress from local roads onto Warringah Road and property during morning and afternoon peak periods);
- Broader downstream impacts;
- Any parking impacts, including off-street parking (such as ingress and egress from local roads onto Warringah Road and property during morning and afternoon peak periods);
- Details on average daily traffic volumes across the SSI area during the daytime and night-time periods, based on recorded observations, including but not limited to traffic volumes along Warringah Road and the intersections with Wakehurst Parkway, Inverew Street and Forest Way.

The Review must be submitted to the Secretary and to the Council within 60 days of its completion and made publicly available. If the Review indicates traffic, transport and access impacts attributable to the SSI and the NBH development if operational at the time of the Review, including consideration of higher traffic generation; the Review must be undertaken in consultation with the Transport Management Centre, Transport for NSW, Council, and Health Infrastructure and include, but not necessarily be limited to:

- Traffic and road network performance of the SSI against expected performance, including consideration of higher traffic generation;
- Local street and property access (such as ingress and egress from local roads onto Warringah Road and property during morning and afternoon peak periods);
- Broader downstream impacts;
<table>
<thead>
<tr>
<th>Impact</th>
<th>STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES</th>
<th>September 2017 Status</th>
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</thead>
<tbody>
<tr>
<td>Considerations</td>
<td><strong>Revised Safeguards and Management Measures - Traffic and Transport</strong></td>
<td>(e.g. Date submitted to DP&amp;E, Approval obtained etc.)</td>
</tr>
<tr>
<td><strong>Construction Traffic Impacts</strong></td>
<td>A construction traffic management plan would be developed and implemented as part of the Stage 2 Project. The construction traffic management plan would focus on maintaining general traffic flow and specifying appropriate site access and construction traffic routes. It would include:</td>
<td>CEMP Stage 1 &amp; 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 TAMP1</td>
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<tr>
<td></td>
<td>• Traffic Control Plans showing the access arrangements and the detail of required signs and devices</td>
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<td>• Pedestrian and cyclist management plans</td>
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<td></td>
<td>• Consultation strategy for access requirements to adjacent properties including The Forest High School and Frenchs Forest</td>
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<td>• Hours of operation, including prohibitions on queuing outside sites prior to commencement of work</td>
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<td>• Road safety audit requirements</td>
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<td>• Any localised improvements/adjustments to existing traffic management arrangements.</td>
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<td></td>
<td>Subject to safety reasons and other environmental impacts (e.g. noise), construction traffic movements would be limited to off-peak periods, with peak period construction staggered to minimise construction traffic during these periods.</td>
<td>CEMP Stage 1 &amp; 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 TAMP2</td>
</tr>
<tr>
<td></td>
<td>Priority would be given to the use of the arterial road network for construction vehicle access routes.</td>
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<td></td>
<td>Consultation would be undertaken with Health Infrastructure to coordinate scheduling of construction activities and deliveries.</td>
<td>RISM incorporated into CEMP Stage 1 &amp; 2 App B1 - Traffic and Access Management Sub Plan Table 7.1 TAMP10</td>
</tr>
<tr>
<td></td>
<td>Consultation would be undertaken with Health Infrastructure regarding the need for construction access to the hospital site to focus on the Warringah Road/Branyan Bay Road intersection.</td>
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<tr>
<td><strong>Cumulative Construction Traffic Impacts</strong></td>
<td>Access to properties along affected roads would be maintained during construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners.</td>
<td>CEMP Stage 1 &amp; 2 App B1 - Traffic and Access Management Sub Plan Table 3.2 B10</td>
</tr>
<tr>
<td></td>
<td>Priority would be given to the use of the arterial road network for construction vehicle access routes. It would include:</td>
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<td></td>
<td>• Pedestrian and cyclist management plans</td>
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<td></td>
<td>• Hours of operation, including prohibitions on queuing outside sites prior to commencement of work</td>
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<td>• Road safety audit requirements</td>
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<td></td>
<td>• Any localised improvements/adjustments to existing traffic management arrangements.</td>
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<tr>
<td><strong>Property Access</strong></td>
<td>Access to properties along affected roads would be maintained during construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners.</td>
<td>CEMP Stage 1 &amp; 2 App B1 - Traffic and Access Management Sub Plan Table 3.2 B10</td>
</tr>
<tr>
<td></td>
<td>Priority would be given to the use of the arterial road network for construction vehicle access routes.</td>
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<td>Consultation would be undertaken with Health Infrastructure regarding the need for construction access to the hospital site to focus</td>
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<td>on the Warringah Road/Branyan Bay Road intersection.</td>
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<tr>
<td><strong>Traffic Operational Impacts</strong></td>
<td>An operational traffic review would be carried out within 12 months of opening of the Stage 2 Project to confirm the operational traffic impacts of the project on Warringah Road, Forest Way and Wakehurst Parkway in close proximity to the hospital. The assessment would be based on actual traffic counts and will assess the level of service at major intersections within the assessed road network. Where necessary, the outcomes of the operational traffic review would be used to identify any additional feasible and reasonable measures to be implemented where it is determined that the level of service has significantly deteriorated as a result of the Stage 2 Project, compared to the levels described in Section 8.3 of the Stage 2 Project EIS.</td>
<td>Noted for action as required after opening.</td>
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<tr>
<td></td>
<td>A Road Safety Audit will be undertaken for the intersection of Madison Way and Aquatic Drive to assess potential road safety issues at the intersection. The audit will be carried out with consideration of existing traffic conditions together with future traffic conditions and increases in traffic resulting from the new access at Aquatic Drive/Wakehurst Parkway.</td>
<td>After Stage 2 is completed. This tracking regular prompts action when completed.</td>
</tr>
<tr>
<td><strong>Revised Safeguards and Management Measures - Noise and Vibration</strong></td>
<td>A Construction Noise and Vibration Management Plan would be prepared for the Stage 2 Project. The plan would provide details of noise and vibration management measures and procedures to be carried out during construction to minimise and manage noise impacts on sensitive receivers, including:</td>
<td>Stage 1 &amp; 2 CVAMP approved by DP&amp;E and issued for construction (Aug 16) and implemented for construction.</td>
</tr>
<tr>
<td></td>
<td>- Noise and vibration monitoring and reporting requirements</td>
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<tr>
<td></td>
<td>- A map showing the locations of all sensitive receivers</td>
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<td></td>
<td>- Specific mitigation treatments, management methods and procedures to be implemented to control noise and vibration during construction</td>
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<td></td>
<td>- Construction timeslots to minimise noise impacts including time and duration restrictions, respite periods and frequency</td>
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<td></td>
<td>- Procedures for notifying residents, business owners, schools and other sensitive receivers of construction activities likely to affect their amenity through noise and vibration</td>
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<td></td>
<td>- Contingency procedures to be implemented in the event of non-compliances and/or noise complaints</td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td>Impact</td>
<td>STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES</td>
<td>September 2017 Status (e.g. Date submitted to DP&amp;E, Approval obtained etc.)</td>
</tr>
<tr>
<td>------------------------</td>
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</tr>
<tr>
<td>Construction Hours</td>
<td>Where reasonable and feasible, work would be carried out within ICNG recommended working hours</td>
<td>All works being undertaken under EPL 20673 which conforms with the ICNG. CNVMP implemented for construction including Out Of Hours Work protocol which is being implemented for construction.</td>
</tr>
<tr>
<td></td>
<td>Where work is required to be carried out outside of recommended working hours, all appropriate approvals would be obtained prior to work commencing, and all affected receivers would be notified of all relevant details relating to the work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Noisy activities that cannot be scheduled during standard construction hours would be scheduled as early as possible during the evening and/or night-time periods</td>
<td>Induction highlights that noised activities are to be completed early if night works occur. This is also stressed in OOHW Permit.</td>
</tr>
<tr>
<td>Construction Vibration</td>
<td>Where reasonable and feasible, use lower vibration generating items of excavation plant and equipment e.g. smaller capacity rock breaker hammers.</td>
<td>RSMM incorporated into Stage 1 NVMP refer to Table 8-2 NVMM27, NVMM28, NVMM29, NVMM30 and Table 8-3 NVMM31, NVMM32, NVMM33, NVMM34, NVMM35, NVMM36, NVMM37. Pre-Construction building surveys completed. Vibration assessments and monitoring undertaken as required.</td>
</tr>
<tr>
<td></td>
<td>Use dampened rock breakers and/or 'city' rock breakers to minimise the impacts associated with rock breaking work.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If vibration-intensive works are required within the safe working distances, vibration monitoring or attended vibration trials would be carried out to ensure that levels remain below the cosmetic damage criterion.</td>
<td></td>
</tr>
<tr>
<td>Building condition surveys would be completed both before and after the works to identify the existing condition and any damage due to the Stage 2 Project works.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impacts on sensitive receivers</td>
<td>Local residents would be advised of hours of operation (including out of hours works) and duration of works, and supplied with a contact name and number for queries and complaints regarding noise and vibration matters.</td>
<td>RSMM incorporated into Stage 1 NVMP refer to Table 8-2 NVMM27, NVMM28, and Table Stage 2 refer to Table 8-3 NVMM31, NVMM32. Community Communication Strategy includes notification requirements and complaint management proposals which is being implemented for construction works.</td>
</tr>
<tr>
<td>Operational noise mitigation measures, such as architectural treatment or noise barriers will be provided as early as practicable in the construction program to reduce potential noise impacts associated with construction activities.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Impact and Commitment/Obligation

#### STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES

**September 2017 Status**

<table>
<thead>
<tr>
<th>Impact</th>
<th>Commitment/Obligation</th>
<th>September 2017 Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic and Transport</td>
<td>Complaints received are to be recorded and attended to promptly in accordance with the Roads and Maritime Draft Community Consultation Framework.</td>
<td>(e.g. Date submitted to DP&amp;E, Approval obtained etc.)</td>
</tr>
<tr>
<td></td>
<td>A protocol would be developed to identify the need for and provision of respite measures for residential receivers in accordance with ICNG. Respite measures may include the restriction to the hours of construction activities resulting in impulsive or tonal noise (such as rock breaking, rock hammering, pile driving), or other appropriate measures agreed between the contractor and residential receiver such as alternative accommodation.</td>
<td>Table 8-3 NVMM36 in the CNVIS. Affected sensitive receivers are offered alternative accommodation for the nights that night works will be affecting them, according to the OOH/4 Protocol.</td>
</tr>
<tr>
<td></td>
<td>Heavy vehicle drivers would be advised of designated vehicle routes, parking locations, acceptable delivery hours and other relevant practices (i.e., minimising the use of engine brakes, and no extended periods of engine idling)</td>
<td>Table 8-3 NVMM45, NVMM47, NVMM48. This is included in the TAMP and the Project on-site induction.</td>
</tr>
<tr>
<td></td>
<td>Noise mitigation in the form of noise barriers, low noise road surfaces and/or acoustic treatment of existing individual dwellings will be considered, where feasible and reasonable at receivers identified for noise mitigation.</td>
<td>Noise mitigation in the form of noise barriers, low noise road surfaces and acoustic treatment of existing dwellings will be considered, where feasible and reasonable at receivers identified for noise mitigation.</td>
</tr>
<tr>
<td></td>
<td>Consideration of the feasible and reasonable noise management strategies presented in Section 8.6 would be carried out during detailed design, and appropriate noise management measures implemented for the operation phase.</td>
<td>Consideration of the feasible and reasonable noise management strategies presented in Section 8.6 would be carried out during detailed design, and appropriate noise management measures implemented for the operation phase.</td>
</tr>
<tr>
<td></td>
<td>Within 12 months of the commencement of operation of the project an operational noise review will be carried out. This will include: - Monitoring to compare actual noise performance of the project against predicted noise performance - An assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of all feasible and reasonable mitigation measures - Identification of any additional feasible and reasonable measures that will be implemented with the objective of meeting the criteria in the NSW Road Noise Policy (EPA 2011), when these measures will be implemented and how their effectiveness will be measured and reported.</td>
<td>Operational noise review has been approved by the DPE. Operations - To be completed once project is completed.</td>
</tr>
</tbody>
</table>

#### Revised Safeguards and Management Measures - Biodiversity

**General biodiversity impacts**

- A Construction Flora and Fauna Management Plan would be prepared for the Stage 2 Project. The plan would provide details of biodiversity management measures and procedures to be undertaken during construction to minimise and manage impacts on flora and fauna, including:
  - Management strategies for pre-construction, construction and post-construction activities including control measures for pre-clearing process
  - A map showing the DPEC and other native vegetation to be retained
  - Fauna rescue and release procedure
  - Protocol for working around trees that includes methods for trimming/lopping and managing excavations near retained trees to maintain tree health.
  - Procedure for controlling the introduction and spreading of weeds and pathogens
  - Proposed strategies for re-use of coarse woody debris and bushrock
  - Unexpected threatened species finds procedure consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011) to manage any unexpected finds during construction.


**Loss of DPEC and other native vegetation**

- Establish exclusion zones around areas of DPEC and other native vegetation to be retained outside of the construction impact area.

- RSMM incorporated into Stage 1 & 2 FFMS-APP. Refer to in Table 3-3 FF2 Sensitive Area Plan referencing (Appendix A7 to the CEMP), Inductions - And implemented for Stage 1 & 2 works.Orange plastic netting used to demarcate areas from work zones.

- Sighted Pre-clearing checklist for clearing of DPEC in front of the hospital (Wakehurst Parkway) in June and for Aquatic Drive clearing in August. All clearing permits have Sensitive Area Maps attached showing any important ecological, environmental and heritage areas which need to be excluded. DPEC is not specifically referred to in the checklist, but all sensitive areas are acknowledged and exclusion zones are erected (orange para-web) if applicable.

- Locate construction access tracks and additional ancillary facilities in previously cleared/disturbed areas.
### Pre-Construction Compliance Report Appendix B Revised Safeguards and Management Measures

#### September 2017 Status

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</thead>
<tbody>
<tr>
<td><strong>CEMP Stage 1 &amp; 2 App B2 FFMS-P</strong></td>
<td>Referred to in Table 7-1 FF11 &amp; covered by Appendix A Ecological Monitoring Program Design (LZKH, Section 2.13 Natural environment potentials and constraints addresses DFEC. A Stage 2 Project Biodiversity Assessment 2015 (Biodiversity Assessment) conducted by SMEC suggests that Red-crowned Toadlets GDE is in Curl Curl Creek is dominated by surface water flows.</td>
</tr>
<tr>
<td><strong>Biodiversity Offset program</strong></td>
<td>has been prepared and is under review with DPE. Contracts are being issued and offset program is being enacted concurrently with DPE review.</td>
</tr>
<tr>
<td><strong>Nest boxes</strong></td>
<td>would be installed in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011). The number and type of nest boxes required would be based on the number, quality and size of hollows that would be removed.</td>
</tr>
<tr>
<td>Impact area</td>
<td>STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES</td>
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</tr>
<tr>
<td>Traffic and Transport</td>
<td>Prioritise investigation of offset sites in accordance with the wildlife connectivity strategy (refer to Appendix E of the Stage 2 Project EIS)</td>
</tr>
<tr>
<td></td>
<td>Detailed design would aim to minimise vegetation clearing and indirect impacts on vegetation within the area mapped by Warringah Council as Priority 1 Wildlife Corridor during construction.</td>
</tr>
<tr>
<td></td>
<td>Fauna fencing, culverts and rope bridges will be implemented as early as possible, informed by the options in the Wildlife Connectivity Strategy (Appendix E) and in consultation with a suitably qualified and experienced ecologist. The final locations of measures will be determined during detailed design.</td>
</tr>
<tr>
<td></td>
<td>A monitoring program will be designed and implemented to assess the effectiveness of connectivity and roadkill mitigation measures.</td>
</tr>
<tr>
<td></td>
<td>Carry out revegetation in accordance with Roads and Maritime Biodiversity Guidelines (RTA 2011) and detailed landscape plan prepared for the project.</td>
</tr>
<tr>
<td></td>
<td>Ensure revegetation works use local native trees, shrubs and groundcovers that occur in DFEC. Revegetation to be undertaken in accordance with approved Urban Landscape and Design Report. No revegetation has occurred yet. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed.</td>
</tr>
<tr>
<td>Impact on native fauna and their habitat</td>
<td>Identify areas of suitable habitat nearby for release of any fauna species encountered during construction in accordance with Roads and Maritime Biodiversity Guidelines (RTA 2011).</td>
</tr>
<tr>
<td></td>
<td>Restrict use of pesticides to control weeds during and post-construction, particularly near watercourses and immediately before/during wet weather.</td>
</tr>
<tr>
<td></td>
<td>Implement reasonable and feasible measures to prevent pollution of waterways and drainage lines in the area downstream of the proposed works during and post-construction.</td>
</tr>
</tbody>
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Impact STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES
Commitment/Obligation

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</thead>
<tbody>
<tr>
<td>Should bushrock removal be required, it should be replaced in suitable areas as part of post-construction restoration in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011).</td>
<td></td>
</tr>
<tr>
<td>Should removal of dead wood and trees be required it should be replaced in suitable areas as part of post-construction restoration in accordance with the Roads and Maritime Biodiversity Guidelines (RTA, 2011).</td>
<td></td>
</tr>
<tr>
<td>Carry out staged habitat removal of hollow-bearing trees and bushrock in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011).</td>
<td></td>
</tr>
<tr>
<td>Restoration and landscaping work post-construction is to include replanting areas of former DFEC with local native species including Allocasuarina trees and nectar producing trees and shrubs that occur in DFEC.</td>
<td></td>
</tr>
<tr>
<td>No revegetation has occurred yet. DFEC seeds have been collected by BIOSIS and are being grown by Harvest Seed.</td>
<td></td>
</tr>
<tr>
<td>Impact on threatened flora and their habitat</td>
<td></td>
</tr>
<tr>
<td>Carry out pre-clearing surveys for threatened plants that could potentially occur in the construction impact area. Any threatened plants identified would be managed in accordance with the Roads and Maritime Biodiversity Guidelines (RTA 2011).</td>
<td></td>
</tr>
<tr>
<td>Pre-clearing surveys completed for all clearing for Stage 2. Clearing undertaken in accordance with clearing and grubbing method statements incorporating actions for habitat removal, bush rock and hollow recovery, and controls on potential pollution pathways. Pathogen and Weed Management Plan implemented to mitigate impacts.</td>
<td></td>
</tr>
<tr>
<td>Impact on threatened fauna and their habitat</td>
<td></td>
</tr>
<tr>
<td>Carry out pre-clearing surveys for threatened fauna (including the Powerful Owl and Red-crowned Toadlet) that could potentially occur in the construction impact area. Any threatened fauna identified would be managed in accordance with the unexpected threatened species finds procedure consistent with the Roads and Maritime Biodiversity Guidelines (RTA 2011)</td>
<td></td>
</tr>
<tr>
<td>Explore and implement options for sustaining moisture in Red-crowned Toadlet breeding habitat during detailed road design</td>
<td></td>
</tr>
<tr>
<td>The Stage 2 Project Biodiversity Assessment 2015 (Biodiversity Assessment) conducted by SMEC suggests that Red-crowned Toadlet GDE in Curl Curl Creek is dominated by surface water flows, and a reduction in groundwater discharge to surface water will not adversely impact the Red-crowned Toadlet habitat.</td>
<td></td>
</tr>
<tr>
<td>Pre-Construction Compliance Report Appendix B Revised Safeguards and Management Measures</td>
<td></td>
</tr>
</tbody>
</table>

Pre-Construction Compliance Report Appendix B Revised Safeguards and Management Measures - Socio-economic, land use and property

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<thead>
<tr>
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<tr>
<td>Business, Economic and Property Impacts</td>
<td>Carry out ongoing communication through a Communication Strategy with local land owners and business impacted by Stage 2 with specific attention given to the duration, location and timing of construction and the potential impact on business operations.</td>
<td>RSMM incorporated into Community Communications Strategy with consultation being undertaken with land owners and businesses.</td>
</tr>
<tr>
<td></td>
<td>Ensure continued communication with businesses that will be affected by acquisition to minimise uncertainty and impacts on business operations, as well as establishing a direct contact at Roads and Maritime for businesses to consult with as required.</td>
<td>RSMM incorporated into TAMP Table 7-1 TAMP23, with consultation ongoing with businesses on temporary access arrangements. Community consultation has been ongoing with local businesses.</td>
</tr>
<tr>
<td></td>
<td>The Construction Traffic Management Plan would include a signage strategy (consistent with Roads and Maritime policy) to allow the public, including local and passing patrons, to access shops, services and businesses during construction.</td>
<td></td>
</tr>
<tr>
<td>Property Impacts</td>
<td>Provide compensation to those property owners directly impacted by project in accordance with Land Acquisition (Just Terms Compensation) Act 1991.</td>
<td>This is undertaken by RMS as required during Stage 1 and Stage 2.</td>
</tr>
<tr>
<td></td>
<td>Carry out consultation with the local community about the duration, location and timing of construction and the potential impacts throughout the construction phase.</td>
<td>RSMM incorporated into Community Communications Strategy.</td>
</tr>
<tr>
<td></td>
<td>RSMM incorporated into Stage 1 Traffic and Access Management Plan (TAMP) approved by DP&amp;E (refer to Table 7-1 TAMP25 and TAMP26). RSMM incorporated into Stage 2 revised TAMP for DP&amp;E approval. The FYJV Community team have regular interactions with directly impacted residents and property owners. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works. - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment database.</td>
<td></td>
</tr>
<tr>
<td>Local Amenity Impacts</td>
<td>Carry out consultation with schools, child care centres, medical facilities and recreational facilities throughout construction about the duration, location and timing of construction and the potential impacts on their activities.</td>
<td>RSMM incorporated into Community Communications Strategy.</td>
</tr>
<tr>
<td></td>
<td>Ensure access is maintained to community facilities and open space throughout construction. The need for any alternative and/or temporary access arrangements would be agreed with affected property managers/owners and a signage strategy would be implemented to explain new access arrangements where required.</td>
<td>RSMM incorporated into Stage 1 Traffic and Access Management Plan (TAMP) approved by DP&amp;E. The FYJV Community team have regular interactions with directly impacted residents and property owners. On a regular basis, updates are issued (Quarterly newsletter) and notifications for specific works. - weekly work updates informing residents of high noise night dates sent automatically to all residents on catchment database.</td>
</tr>
<tr>
<td>Community Services</td>
<td>Develop, implement and communicate traffic management plan with the aim of minimising traffic impacts and disruptions (refer to Section 7.5 of the Stage 2 Project EIS).</td>
<td>RSMM incorporated into TAMP section 8.3. Communications on traffic management undertaken in accordance with Community Communications Strategy.</td>
</tr>
</tbody>
</table>
|                                                                      | Ensure existing pedestrian and cyclist networks are maintained or provide alternate arrangements where needed. | RSMM incorporated into Stage 1 Traffic and Access Management Plan (TAMP) approved by DP&E with Traffic Control Plans issued for construction works sites. CENP Stage 1 & 2 App:RT - Traffic and Access Management Sub Plan Table 7-1 TAMP1 Section 8.3 Pedestrian and Cyclist access TAMP 35-45 Details for each work scope in TCPs.
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<tbody>
<tr>
<td>Community and stakeholder consultation</td>
<td>Develop and implement a consultation program consistent with the Roads and Maritime Draft Community Consultation Framework that will ensure businesses, residents and others stay informed about the type, timing and duration of construction impacts and any mitigation measures being put in place.</td>
<td>RSMM incorporated into Community Communications Strategy with communications with local community being undertaken, and updates on RMS Project website.</td>
</tr>
</tbody>
</table>

### Revised Safeguards and Management Measures - Landscape character and visual impact

#### Landscape Character Impacts

- **Consistency with other road upgrades in the region** is to be achieved by using elements that are identifiable part of the road-user experience in the surrounding area.

- **All walls are to be finished in materials and colours that are complementary to the urban bushland setting.**

- **The revegetation technique is to be determined by a combination of surrounding landscape character, as well as proximity to existing ecological habitats and wildlife corridors.**

- **Use of bush reconstruction and regeneration as a revegetation technique is to be employed for areas near to endemic bushland.**

- **Limited use of ‘feature’ planting would be implemented at key intersections and important cultural areas to provide visual landmarks and enhance local identity.**

#### Visual Impacts

- **A detailed landscape plan will be prepared for the project.** The landscape plan will build on the findings of the Urban Design Landscape Character and Visual Working Paper and will include detailed set-out, species and planting guides.

- **A combination of sandstone cladding, stone block or other material sensitive to the context is to be provided where either facing the road or where associated with residential properties.**

**ULDR addresses FRAMEWORK OBJECTIVE AND PRINCIPLE 7C as “Colour palettes have been developed that complement the surrounding bushland and generally are receding colours and are consistent with the urban design framework. These will assist in featuring the revegetation and new landscape planting works.”**

**ULDR Section 6.3 and Appendix E - Vegetation Management Plan address revegetation.**

**ULDR Section 6.3 and Appendix E - Vegetation Management Plan address revegetation.**

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**ULDR Section 6.3 and Appendix E - Vegetation Management Plan address revegetation.**

**ULDR Section 6.3 and Appendix E - Vegetation Management Plan address revegetation.**

**ULDR issued November 2016 and will be implemented in accordance with Scope of Works and Technical Criteria and detailed design.**

**Addressed in ULDR Report 4.3 Fascia panel details**
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<tbody>
<tr>
<td>Commitment/Obligation</td>
<td>Due to the urban nature of the project, retaining wall finishes are to be of a high quality and visible shotcrete is not to be employed as a finished material</td>
<td>The Urban and Landscape Design Report (ULDR) (NBHRDC-0000-UD-170A) notes in Table 1 that &quot;No exposed shotcrete is proposed as part of the project design&quot;</td>
</tr>
<tr>
<td></td>
<td>Suitable fencing materials would be utilised including timber, brick and pressed steel fencing in colours suited to the local area</td>
<td>The ULD Report (NBHRDC-0000-UD-170A) addresses fencing in 7.2 Furnishing and fixings and states that &quot;The furnishings and fixings components of the public domain will be consistent with the requirements of Northern Beaches Council and RMS.&quot;</td>
</tr>
<tr>
<td></td>
<td>Where possible vegetative screening would be provided to mitigate the visual impact of fencing</td>
<td>The ULDR addresses the use of vegetative screening wherever possible, not just associated with fencing.</td>
</tr>
<tr>
<td></td>
<td>Revegetation is to be carried out to all areas affected by construction work</td>
<td>Appendix E ULDR describe the strategies for revegetation</td>
</tr>
<tr>
<td></td>
<td>Revegetation of fill embankments and shallow cut batters is to be carried out in order to stabilise the earthwork, minimise visual impact and integrate them with the character of the surrounding landscape</td>
<td>Appendix E ULDR describe the strategies for revegetation</td>
</tr>
<tr>
<td></td>
<td>Detailed design of structural elements, including noise barriers, shared pedestrian and cyclist bridges, and retaining walls and retaining wall finishes, are to be in accordance with Beyond the Pavement, Urban design policy, procedure and design principles (Roads and Maritime, 2013) and the associated design guidelines</td>
<td>Section 3 ULDR - Bridges including Shared User path bridges</td>
</tr>
<tr>
<td>Loss of Privacy views into residential properties</td>
<td>Provide landscape buffer screening or glazed or steel mesh panels on bridge, stair and ramp structures to screen views to/from residential properties</td>
<td>Section 3 ULDR - Bridges including Shared User path bridges. In this period The Hilmer Street Pedestrian Bridge has been installed. In order to ensure privacy for all surrounding residents, more screening was placed on the bridge itself. Additional screening is being organised for affected residents at 54-64 Hilmer Street as a result of installation of the Hilmer Street footbridge - additional screening has been installed on the on structure itself and properties are being provided with additional plantings and lattice as arranged with Community Relations team.</td>
</tr>
<tr>
<td>Construction visual impacts</td>
<td>Landscaping would be progressively introduced to provide screening between adjacent residences and the road corridor.</td>
<td></td>
</tr>
</tbody>
</table>

**Revised Safeguards and Management Measures - Aboriginal Heritage**

<table>
<thead>
<tr>
<th>General Aboriginal impacts</th>
<th>Revised Safeguards and Management Measures - Aboriginal Heritage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Construction Heritage Management Plan would be prepared for the Stage 2 Project. The plan would provide details of management measures and procedures to be carried out during construction to minimise and manage impacts on Aboriginal heritage</td>
<td>Stage 1 &amp; 2 works are being undertaken in accordance with approved CEMP Appendix B5 - Construction Heritage Management Sub Plan issued for construction (Aug 2018).</td>
</tr>
</tbody>
</table>
### Revised Safeguards and Management Measures - Non Aboriginal Heritage

**General Non Aboriginal Impacts**
A Construction Heritage Management Plan would be prepared for the Stage 2 Project. The plan would provide details of management measures and procedures to be carried out during construction to minimise and manage impacts on non-Aboriginal heritage, including:
- Management measures to be implemented to prevent and minimise impacts on heritage items
- Procedures for dealing with previously unidentified heritage objects
- Heritage training and induction processes to ensure all relevant staff, contractors and subcontractors are made aware of their statutory obligations for heritage under the Heritage Act 1977

![RSMM incorporated into Stage 1 Heritage Management Sub Plan approved by DP&E - refer to Table 7-1 HMP14. Aboriginal Cultural Awareness training conducted for Stage 1 & 2 construction teams, with further heritage awareness as part of induction training.](image)

**Management of pear tree**
If impacted by the Stage 2 Project, the pear tree would be propagated further and photographically recorded in advance of any construction activities that would impact the tree. Options for a commemorative planting/heritage would be further discussed with Council, Department of Education and Communities and Health Infrastructure during detailed design.

![RSMM incorporated into Stage 1 Heritage Management Sub Plan approved by DP&E - refer to Table 7-1 HMP9. Archival recording and tree cuttings have been undertaken for future propagation, prior to scheduled removal of tree.](image)

**Unexpected finds**
Should any non-Aboriginal finds be uncovered during construction, their management should be in accordance with the Roads and Maritime Unexpected Finds Protocol. All staff should be made aware of their obligations under various Federal and State heritage legislation during their site induction and copies of this Protocol should be on site and available at all times to all staff.

![RSMM incorporated into Stage 1 & 2 Heritage Management Sub Plan approved by DP&E - refer to Table 7-1 HMP20 (Aug 2016) for approval](image)

### Revised Safeguards and Management Measures - Air Quality

**General air quality impacts**
An Air Quality Management Plan will be prepared to detail air quality control measures and procedures to be carried out during construction, including:
- air quality and dust management objectives consistent with DECCW guidelines
- emissions from diesel construction plant
- potential sources and impacts of dust, identifying all dust-sensitive receptors
- mitigation measures to minimise dust impacts to sensitive receivers and to the environment
- a monitoring program to assess compliance with the identified objectives
- contingency plans to be implemented in the event of non-compliances and/or complaints about dust.

![RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Dust monitoring and inspections, and dust suppression measures have been conducted and are progressing as part of Stage 2 construction works. Induction addresses dual management. Stimulation has been used on stockpiles and areas of site being left uncovered for long durations. Different attachment have been utilised for rock breaking to minimise dust](image)

**Impacts on local air quality during construction**
Areas of exposed surfaces are to be minimised through construction site planning and programming, to reduce the area of potential construction dust emission sources.

![RSMM requirements incorporated into management measures within Table 7-1 of the AQMP. Dust monitoring and inspections, and dust suppression measures have been conducted and are progressing as part of Stage 2 construction works. Induction addresses dual management. Stimulation has been used on stockpiles and areas of site being left uncovered for long durations. Different attachment have been utilised for rock breaking to minimise dust](image)

Control measures, such as compaction stabilisation or covering would be implemented in order to minimise dust from stockpile sites.
### Revised Safeguards and Management Measures - Geology, Soils and Contamination

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- **Dust suppression measures**, such as the use of water carts or soil binders, would be used in any unsealed surfaces and other exposed areas.

- All trucks would be covered when transporting materials to and from the site.

- Construction activities that would generate dust would be avoided or modified during high wind periods.

- Work activities would be reviewed if the dust suppression measures are not adequately restricting dust generation.

- Rehabilitation of completed sections would be progressively undertaken.

- Where buildings and structures are required to be demolished, techniques and practices would be developed to minimise dust generation.

- Dust management measures are detailed within Table 7-1 of the AQMP. Dust monitoring and inspections, and dust suppression measures have been conducted and are progressing as part of construction works. Also the Site Induction addresses dust management.

- Exhaust emissions: Construction plant and equipment would be maintained in good working condition in order to limit impacts on air quality.

- RSWM requirements incorporated into management measures within Table 7-1 of the AQMP. Equipment maintenance monitored as part of WHS management plan requirements. These are covered under AQMP 16 & 17 which are addressed in Section 8.3 and Incoming Plant Verification Checklists.

- Where practicable, vehicles will be fitted with pollution reduction devices and switched off when not in use.

- **Warringah Road 'slot' cut face may be susceptible to erosion and slope stability during construction.**

As part of Stage 2 Project design development, subsoil drainage would be incorporated into the 'slot' to ensure the ongoing stabilisation of face. The extent of the drainage network would be finalised during detailed design.

Requirements being considered for Stage 2 detailed design - Slot yet to commence.
### STAGE 2 PROJECT - REVISED SAFEGUARDS AND MANAGEMENT MEASURES

<table>
<thead>
<tr>
<th>Commitment/Obligation</th>
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<tbody>
<tr>
<td><strong>Managing impacts on soil in general</strong></td>
<td>Stage 1 construction Soil and Water Quality Sub Plan approved by DP&amp;E and issued for construction (Nov 15). Stage 2 requirements incorporated into revised SWMP approved in August 2016.</td>
</tr>
<tr>
<td>A Soil and Water Management Plan will be prepared for each construction stage of the Concept Proposal in accordance with the principles and guidelines set out in Soils and Construction – Managing Stormwater series, comprising Volume 1 (Jandacott, 2004) and Volume 2 – Main Roads (DSA, 2008), including:</td>
<td></td>
</tr>
<tr>
<td>– Consideration of soil erosion risks</td>
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<tr>
<td>– Management strategies to be used to minimise surface and groundwater impacts, including identification of water treatment measures, discharge points and erosion and sediment control measures</td>
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<tr>
<td>– Sedimentation basin construction and management</td>
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<tr>
<td>– Measures to monitor and manage spoil, fill and materials stockpiles sites</td>
<td></td>
</tr>
<tr>
<td>– Dewatering procedures</td>
<td></td>
</tr>
<tr>
<td>– Water quality monitoring and checklists</td>
<td></td>
</tr>
<tr>
<td><strong>Disruption of contaminated or potentially contaminated land</strong></td>
<td>RSMM incorporated into Stage 1 SWMP approved by DP&amp;E (refer to Table 7-1 SW31, SW32 of SWMP), and the construction Waste and Energy Management Sub Plan (Appendix B7 of the CEMP). Contaminated areas of concern (AECs) were further investigated and defined as part of the Stage 2 EIS Phase 2 Contamination Site Assessment, defining AECs within Stage 2 project area. These areas will be managed as part of Stage 2 construction.</td>
</tr>
<tr>
<td>A Contaminated Land Management Plan will be prepared in accordance with the Contaminated Land Management Act 1997, relevant EPA Guidelines and Rosella and Maritime Guideline for Management of Contamination (RMS 2013) and will include at a minimum:</td>
<td></td>
</tr>
<tr>
<td>– Contaminated land legislation and guidelines including any relevant licences and approvals to be obtained</td>
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<tr>
<td>– Identification of locations of known or potential contamination and preparation of a map showing these locations</td>
<td></td>
</tr>
<tr>
<td>– Identification of rehabilitation requirements, classification, and transport and disposal requirements of any contaminated land within the construction footprint</td>
<td></td>
</tr>
<tr>
<td>– Measures to manage stockpiled potentially contaminated soil in accordance with the requirements of NSW EPA Waste Guidelines</td>
<td></td>
</tr>
<tr>
<td>– Contamination management measures including waste classification and reuse procedures and unexpected finds procedures for unanticipated discovery of contaminated material during construction.</td>
<td></td>
</tr>
<tr>
<td>A remediation validation report will be developed to ensure that all identified contamination has been remediated, removed from site and/or managed sufficiently once construction work has ceased and the site is in operation</td>
<td></td>
</tr>
<tr>
<td>An Asbestos Management Plan will be developed prior to work commencing and include:</td>
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<tr>
<td>– The locations of asbestos impacted areas within each AEC and</td>
<td></td>
</tr>
<tr>
<td>– The requirements including mitigation measures for asbestos management, asbestos handling and asbestos disposal in accordance with NSW EPA and NSW WorkCover guidelines</td>
<td></td>
</tr>
<tr>
<td>An Asbestos Management Plan forms Appendix K to the Soil and Water Quality Management Sub Plan.</td>
<td></td>
</tr>
<tr>
<td>This reporting period, the FYJV Environment team has strengthened the procedure for managing asbestos and has rolled out a toolbox on managing unexpected/ suspected asbestos on-site to the workforce. This occurred in late August 2017.</td>
<td></td>
</tr>
<tr>
<td><strong>Inappropriate disposal of materials that cannot be reused on the Project</strong></td>
<td>RSMM incorporated into Stage 1 &amp; 2 SWMP approved by DP&amp;E, and the CEMP Rev 2 - Appendix B7 - Construction/Waste and Energy Management Sub Plan (Aug 2016).</td>
</tr>
<tr>
<td>Excavated material that is not suitable for on-site reuse or recycling will be transported to a site that may legally accept that material for reuse or disposal.</td>
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</tr>
<tr>
<td>RSMM incorporated into Stage 1 &amp; 2 SWMP approved by DP&amp;E and the CEMP Plan 2 - Appendix B7 - Construction/Waste and Energy Management Sub Plan (Aug 2016). Waste disposal is being tracked and tracking register sits with environment team. Waste &amp; Energy Register tracks waste classification and use/disposal of excavated material</td>
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</tr>
<tr>
<td>Excavated material leaving the site will be classified in accordance with the Waste Classification Guidelines so that correct resource recovery and or off-site disposal occur.</td>
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</tr>
<tr>
<td><strong>Construction accidental spills</strong></td>
<td>RSMM incorporated into Stage 1 &amp; 2 SWMP approved by DP&amp;E (refer to Table 7-1 SW31, SW32 of SWMP) These measures are in place for Stage 1 works. Environmental Incident &amp; Spill Response Protocol Doc # NHB00DC-EN-SWMP-AJPA-P4X formed Appendix A of the SWMP. Controls inspected during Stage 1 works. Environmental incident checklist addresses spill response. Site induction addresses spill response. Toolboxes have been given on spill response. Spill kits located around site. Refilling included as a checklist item in Weekly environmental Inspections Checklist - Daily Machine maintenance and Inspection Record sighted and in Evidence folder - 26/27/8/16 5T excavator on Lachlan 7 Allen Streets.</td>
</tr>
<tr>
<td>An emergency spill response procedure will be prepared to minimise the impact of spills including details on the requirements for managing, cleaning up and reporting.</td>
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<tr>
<td>Spill kits and adequate quantities of suitable material to counteract spillage would be kept readily available.</td>
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</tbody>
</table>

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Pre-Construction Compliance Report Appendix B Revised Safeguards and Management Measures

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### Revised Safeguards and Management Measures - Traffic and Transport

The refuelling of plant and maintenance of machinery would be undertaken in impervious bunded areas. Refuelling would be attended at all times.

Vehicle wash-downs and/or concrete truck washouts would be undertaken within a designated bunded area of an impervious surface or undertaken off-site.

Machinery would be checked daily to ensure that there are no oil, fuel, or other liquid leaks.

### Revised Safeguards and Management Measures - Hydrology, Water Quality and Flooding

#### Erosion and sediment control (construction)

- A Soil and Water Management Plan will be prepared for each construction stage of the Concept Proposal in accordance with the principles and guidelines set out Soil and Construction – Managing Urban Stormwater series, comprising Volume 1 (Landcom, 2004) and Volume 2D – Main Roads (DECC, 2008), including:
  - Consideration of soil erodibility
  - Management strategies to be used to minimise surface and groundwater impacts, including identification of water treatment measures, discharge points and erosion and sediment control measures
  - Sedimentation basin construction and management
  - Measures to monitor and manage spoil, fill and materials stockpile sites
  - Dewatering procedure.
  - Water quality monitoring and checklists.

- Stage 1 & 2 construction Soil and Water Quality Sub Plan approved by DP&E and issued for construction (Aug 2016).

#### Erosion, sediment and water quality impacts

Where space allows, construction work should consider the potential for locating sediment retention basins or sumps along the southern side of Warringah Road, where widening of the existing westbound carriageway will require land clearing and excavation work, if possible. These basins or sumps would reduce the volume of sediment and turbidity levels in runoff potentially discharging to Catchments 4, 5 and 6.

#### Water Quality impacts during construction

- An emergency spill response procedure will be prepared to minimise the impact of spills including details on the requirements for managing, cleaning up and reporting.

- Requirements being considered for Stage 2 detailed design - Slot yet to commence.

- RSMM incorporated into Stage 1 & 2 SWQMP approved by DP&E (refer to SWQMP). These measures are in place for Stage 1 works. Environmental Incident & Spill Response Protocol DOC # NBHRDC-EN-SWMP-APPY, PLN forms Appendix A of the SWQMP.

- RSMM incorporated into Stage 1 SWQMP approved by DP&E (refer to SWQMP Table 7-1 SWM33, SWM34, SWM35, SWM36, SWM37, SWM38). Controls inspected during Stage 1 works. Environmental inspection checklist addresses spill response.

- Spill kits located around site.

- Refuelling included as a checkbox item in Weekly environmental Inspections Checklist - Daily Machine maintenance and Inspection Record sighted and in Evidence folder - 26-27/8/16 5T excavator on Lachlan 7 allan Streets.
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<tr>
<td>The refuelling of plant and maintenance of machinery would be carried out in impervious bunded areas. Refuelling would be attended at all times.</td>
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<tr>
<td>Vehicle wash-downs and concrete truck washouts would be located within a designated bunded area with an impervious surface or located off-site.</td>
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<tr>
<td>Machinery would be checked daily to ensure that there are no oil, fuel, or other liquid leaks.</td>
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</tr>
<tr>
<td><strong>Operational accidental spills</strong></td>
<td><strong>Operational accidental spills</strong></td>
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<tr>
<td>Detailed design would consider reasonable and feasible measures to optimise pollution mitigation and would include as a minimum: - Spill containment requirements focusing on drainage lines discharging to identified Red-crowned Toadlet habitat - Opportunities to include spill containment provisions in conjunction with the proposed separate below ground detention storages in the vicinity of the Aquatic Drive and Wakehurst Parkway intersection - Consideration of wall wash down and other maintenance requirement.</td>
<td>Marked addressed in Stage 2 EIS and has been incorporated as part of the Stage 2 requirements for the approved Water Management Plan. In March 2017 SMEC issued the Water Management Plan and have continued water monitoring for the Project for surface water and groundwater. These conditions are addressed in the WMP (SMEC 2017) in Appendix A, Section 6.</td>
<td></td>
</tr>
<tr>
<td><strong>Revised Safeguards and Management Measures - Groundwater</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundwater monitoring as part of a broader water quality monitoring program will be developed and implemented for construction and operation in consultation with EPA and NOW. As a minimum the water quality monitoring will include the following analytes: - Total dissolved solids and other inorganic constituents including chloride, sodium and sulphate - pH - Metals including cadmium, iron, lead, nickel, manganese and zinc - Nitrate and phosphate - Petroleum hydrocarbon-related compounds (such as benzene, toluene, ethylbenzene and xylene and poly-aromatic hydrocarbons).</td>
<td>Water quality monitoring will include objectives and parameters to determine the effectiveness of mitigation measures and will also include contingency measures.</td>
<td></td>
</tr>
<tr>
<td><strong>Management of groundwater quality and quantity</strong></td>
<td><strong>Management of groundwater quality and quantity</strong></td>
<td></td>
</tr>
<tr>
<td>Pre-construction monitoring of surface water and groundwater quality; groundwater flow and groundwater levels will continue to be carried out to establish existing baseline conditions for Stage 2.</td>
<td>Marked addressed in Stage 2 EIS and has been incorporated as part of the Stage 2 requirements for the approved Water Management Plan. In March 2017 SMEC issued the Water Management Plan and have continued water monitoring for the Project for surface water and groundwater. These conditions are addressed in the WMP (SMEC 2017) in Appendix A, Section 6.</td>
<td></td>
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<tr>
<td>Groundwater monitoring as part of a broader water quality monitoring program will be developed and implemented for construction and operation in consultation with EPA and NOW. As a minimum the water quality monitoring will include the following analytes: - Total dissolved solids and other inorganic constituents including chloride, sodium and sulphate - pH - Metals including cadmium, iron, lead, nickel, manganese and zinc - Nitrate and phosphate - Petroleum hydrocarbon-related compounds (such as benzene, toluene, ethylbenzene and xylene and poly-aromatic hydrocarbons).</td>
<td>The monitoring program will include objectives and parameters to determine the effectiveness of mitigation measures and will also include contingency measures.</td>
<td></td>
</tr>
<tr>
<td>A Groundwater and Dewatering Management Plan would be prepared to manage the impacts of groundwater drawdown due to seepage into the slot during construction. The Plan would ensure that the proposed method for managing groundwater impacts during construction, including dewatering operations, does not impact on the quality of the receiving surface waters. The Plan would also provide groundwater quality objectives and discharge requirements, the scope of dewatering (including volumes, levels, method and draw down effects) and would be prepared in consultation with the EPA and NOW.</td>
<td>Consultation with council and DPI Water as required under conditions Water Management Plan has been approved and includes managing the impacts of groundwater drawdown in WMP (SMEC 2017) Section 4.3.1.</td>
<td></td>
</tr>
<tr>
<td>Groundwater seepage quality would be treated to background surface water quality to be protective of overall medium environmental values, and then in consideration of ANZECC (2000) freshwater criteria prior to discharge to surface water.</td>
<td>This has been addressed in the Water Management Plan. This condition is addressed in Section 6.4 Table 7.2 SW60 as well as Appendix B Water Management Plan (including the Groundwater and Dewatering Management Plan) These conditions are addressed in the WMP (SMEC 2017) in Section 4.3.2.</td>
<td></td>
</tr>
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</tr>
<tr>
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<td>----------------------------------------------------------</td>
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</tr>
<tr>
<td>Groundwater drawdown - potential settlement</td>
<td>Groundwater drawdown plots will be further developed during detailed design to confirm EIS findings. Additional mitigation measures will be developed should settlement risks be identified.</td>
<td>Consultation with council and DPI Water as required under conditions. Water Management Plan being reviewed</td>
</tr>
<tr>
<td>Slot seepage discharge into surface water during operation</td>
<td>Detailed design of the slot drainage system will confirm the capture, treatment and discharge methods for groundwater and slot seepage. Key requirements include: - Designing the slot infrastructure to prevent interaction of groundwater seepage with surface water run-off from the Stage 2 Project and slot including the need to facilitate flushing/cleaning activities to remove build-up of sludge associated with groundwater precipitates. - Confirmation of discharge quality requirements for groundwater based on background surface water quality and ANZECC (2000) freshwater criteria. - Opportunities to connect into the surface water drainage system/detention storage below Aquatic Drive at the intersection of Wakehurst Parkway (post treatment) to minimise impacts associated with increasing downstream surface water flows. - Consideration of the amount of treatment required on a long term (operational) basis. - Alternative disposal methods if considered feasible and reasonable, including discharge to sewer (subject to Sydney Water trade waste permits).</td>
<td>Consultation occurred with council and DPI Water as required under conditions. Two detention tanks will be installed in the southern corner of Fitzpatrick Avenue East and Warringah Rd, and under Aquatic Drive. These conditions are addressed in the WMP (SMEC 2017) in Section 4.3.2, 4.4 and 5.3.</td>
</tr>
<tr>
<td>Resource and Waste Management</td>
<td>A Resource and Waste Management Plan will be prepared to identify the hierarchy for sourcing and use of resources. The plan will adopt the Resource Management Hierarchy principles of the WARR Act and include: - Identification of the waste streams that will be generated during construction. - A waste register detailing types of waste collected, amounts, date, time, and details of disposal. - A resource management strategy detailing beneficial reuse options for surplus and/or unsuitable material.</td>
<td>Stage 1 construction Waste and Energy Management Sub Plan prepared and issued for construction (Nov 15). Stage 2 requirements incorporated into revised WEMP (Aug 2016).</td>
</tr>
<tr>
<td>Disposal of any non-recyclable waste</td>
<td>Disposal of any non-recyclable waste will be in accordance with the POEO Act and Waste Classification Guidelines: Part 1 Classifying Waste.</td>
<td>RSMM requirements incorporated into management measures within Table 6-1 (WEMM4, WEMM5) and WEMM (Rev 2) (Aug 2016). Waste disposal tracking implemented as part of Stage 2 works.</td>
</tr>
<tr>
<td>Asbestos handling and management</td>
<td>An asbestos survey would be carried out of buildings to be demolished as part of the project. The survey would be conducted by a suitably qualified occupational hygienist.</td>
<td>Asbestos survey completed. Asbestos Management Plan forms Appendix K to the Soil and Water Quality Management Sub Plan</td>
</tr>
<tr>
<td>Inappropriate disposal of excavated material that cannot be reused in the Stage 2 Project</td>
<td>Where possible and fit for purpose, spoil would be beneficially re-used within the project before off-site re-use or disposal options are pursued.</td>
<td>RSMM requirements incorporated into management measures within Table 6-1 (WEMM7 and WEMM8) of the WEMP (Rev 2). Waste disposal tracking implemented as part of Stage 1 works. Fill material has been used elsewhere on the Project where available.</td>
</tr>
</tbody>
</table>
### Revised Safeguards and Management Measures - Traffic and Transport

Before being transported from construction sites, excavated spoil would be classified in accordance with the Waste Classification Guidelines: Part 1 Classifying Waste (DECCW, 2009) to ensure appropriate reuse or disposal.

### Management of Excess Spoil

A Spoil Management Strategy would be developed prior to the commencement of construction and implemented during construction. The strategy would identify spoil disposal site(s) and describe the management of spoil on-site and during off-site transport.

Appendix C - Spoil and Fill Management Procedure of SWQMP (Appendix B4 of the CEMP)

### Revised Safeguards and Management Measures - Greenhouse gas and climate change

**Energy consumption during construction**

Energy (fuel/electricity) efficiency would be assessed in selecting plant and equipment. Where reasonable and feasible, plant and equipment with higher energy efficiency ratings would be selected. RSMM requirements incorporated into management measures within Table 6-1 (WEMM10, WEMM11, WEMM12 and WEMM13) of the WEMP. Being considered in detailed design and construction methods during Stage 2 works.

Use of locally sourced materials to reduce transport emissions where reasonable and feasible.

- **Flyash content within concrete would be specified where feasible.**

- **The feasibility of using biofuels (biodiesel, ethanol, or blends such as E10 or B80) would be investigated by the contractor, taking into consideration the capacity of plant and equipment to use these fuels, ongoing maintenance issues and local sources. Works would be planned to minimise fuel use.**

- **Re-use of excavated road materials**

  Requirements incorporated into management measures within Table 6-1 (WEMM14 and WEMM15) of the WEMP.

  **Re-use of excavated road materials would be maximised as far as possible where they are cost, quality and performance competitive to reduce use of materials (with embedded energy).**

- **Energy consumption during construction**

  Investigate opportunities to use renewable energy sources to operational requirements such as power control systems, lighting and signage where reasonable and feasible.

  Requirement being considered as part of detailed design.

### Revised Safeguards and Management Measures - Cumulative Impacts and Interactions

**Cumulative Impacts**

Broad consultation would be undertaken with potentially affected local community and key stakeholders in coordination with proponents of other nearby projects.

RSMM incorporated as part of Community Communications Strategy. Interface meetings held with NBH Hospital project contractor.
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</table>

Consultation would be undertaken with proponents of other nearby projects to increase the overall awareness of project timeframes/staging and impacts and to provide a more coordinated approach to managing construction in the area.