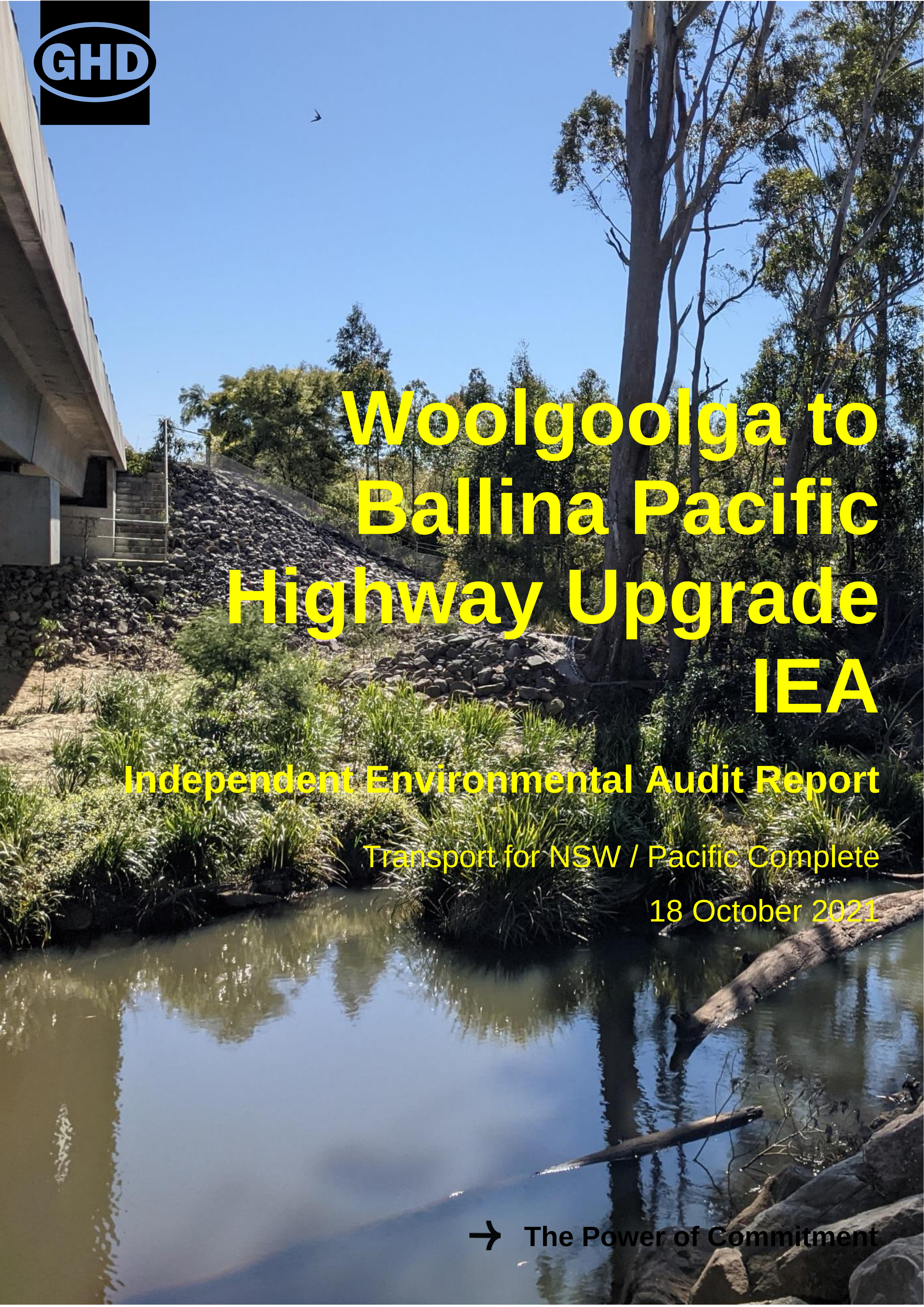

Woolgoolga to Ballina Pacific Highway Upgrade IEA

Independent Environmental Audit Report

Transport for NSW / Pacific Complete

18 October 2021

→ The Power of Commitment

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Printed date	18/09/2021 03:24PM
Last saved date	03 March 2022
File name	https://projectsportal.ghd.com/sites/sp01_02/woolgoolgatoballinap/ProjectDocs/Audit/12548125 REP W2B IEA Report.docx
Author	Avanish Panikkar
Project manager	Avanish Panikkar
Client name	Transport for NSW / Pacific Complete
Project name	Woolgoolga to Ballina Pacific Hwy upgrade- Independent Env Audit
Document title	Woolgoolga to Ballina Pacific Highway Upgrade IEA | Independent Environmental Audit Report
Revision version	Rev 1
Project number	12548125

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S3	A	A Panikkar	D Scott	On file	D Scott	On file	23.09.2021
S4	B	A Panikkar	D Scott	On file	D Scott	On file	15.10.2021
S2	0	A Panikkar	D Scott	On file	D Scott	On file	18.10.2021
S2	1	A Panikkar	D Scott	On file	D Scott	On file	03.03.2022

Executive summary

GHD Pty Ltd (GHD) was engaged by Transport for NSW / Pacific Complete (TfNSW / PCo) to undertake an Independent Environmental Audit (IEA) of the Woolgoolga to Ballina Pacific Highway Upgrade project. The Minister for Planning approved the development pursuant to Section 115ZB of the *Environmental Planning and Assessment Act 1979* on 24 June 2014 (Ministers Conditions of Approval (MCoA).

The Woolgoolga to Ballina Pacific Highway Upgrade Project upgraded 155 kilometres of dual carriageway highway to a motorway standard or arterial road, from about six kilometres north of Woolgoolga to about six kilometres south of Ballina.

Condition D30 of the MCoA requires an IEA within 12 months of commencement of operation. This report presents the findings of the IEA.

At the time of audit, TfNSW / PCo demonstrated a high level of compliance with the requirements of the MCoA and EPBC approval. The timing of the audit limited the assessment that could be made of the construction phase of the road upgrade. The majority of conditions related to construction phase and compliance was assessed based on documented evidence.

Separate Construction Environmental Management Plans (CEMP) were prepared for the various stages of the project which included the programs and plans developed in accordance with the MCoA. These plans provide guidance on the management and monitoring tasks as well as the frequency for these to be undertaken. Environmental monitoring was being undertaken for the project. It is noted that some monitoring activities are to continue further and will be reviewed in subsequent audits.

Biodiversity conservation and management formed a large component of the project conditions. Based on desktop review of documentation available for the project, no major concerns have been raised. The project team is commended for the positive outcomes as noted considering the large footprint of the project and the large number of relevant sensitive species therein.

TfNSW/PCo cooperated throughout the audit including in the planning and organisation of site investigation along the 155 km stretch of upgraded highway. Travel limitations and reduced opportunities for face-to-face audit interview sessions, due to COVID-19 restrictions, were managed by employing backup resources as possible and via teleconference discussions, which resulted in extended audit timeline.

Compliance and improvement opportunities were identified related to historical incidents reported in EPL annual returns and reporting on implementation of various frameworks, plans and strategies through the compliance tracking program.

This report is subject to, and must be read in conjunction with, the limitations set out in section 1.5 and the assumptions and qualifications contained therein as well as details provided in its Appendices.

Contents

Table index

Appendices

1. Introduction

1.1 Project Background

Transport for NSW (TfNSW) appointed Laing O'Rourke Australian Construction Pty Ltd and WSP / Parsons Brinckerhoff Australia Pty Ltd (Pacific Complete JV – PCo) to manage and deliver the Woolgoolga to Ballina, Pacific Highway upgrade project. The project upgraded 155 kilometres of dual carriageway highway to a motorway standard or arterial road, from about six kilometres north of Woolgoolga to about six kilometres south of Ballina.

As per the project application, Environmental Impact Statement and the Submissions Report and Preferred Infrastructure Report, the construction included:

- Forty bridge crossings of waterways or floodplains, including major bridges over the Clarence and Richmond rivers
- Fifty-five overpasses and underpasses to maintain access along local roads crossed by the project
- Viaducts located where the project would cross low-lying or flood-prone areas
- Service roads and access roads to maintain connections to existing local roads and properties
- Structures to help wildlife cross above or below the project, including three median crossings for arboreal mammals, eight dedicated culverts and four land bridges
- Rest areas located at around 50-kilometre intervals at: Pine Brush, Tyndale (for northbound and southbound traffic), North of Mororo Road (for southbound traffic) and North of Richmond River (for northbound and southbound traffic)
- Checking stations for heavy vehicles near Halfway Creek

Construction and delivery of the project was undertaken in a number of separate stages. These stages are detailed in the Staging Report prepared to satisfy NSW Government Approval – Minister's State Significant Infrastructure (SSI) Condition of Approval (MCoA) SSI 4963 Condition A7.

The Project is separated into 11 Sections as outlined below:

- Section 1 – Woolgoolga to Halfway Creek
- Section 2 – Halfway Creek to Glenugie
- Section 3 – Glenugie interchange to the Tyndale interchange
- Section 4 – Tyndale interchange to the existing highway at the Maclean interchange
- Section 5 – Maclean interchange to the Iluka Road interchange at Woombah
- Section 6 – Iluka Road at Woombah to Devil's Pulpit
- Section 7 – Devils Pulpit to Trustums Hill
- Section 8 – Trustums Hill to Broadwater National Park
- Section 9 – Broadwater National Park to the Richmond River
- Section 10 – Richmond River to the interchange at Coolgardie Road
- Section 11 – Coolgardie Road to the tie-in with the Pimlico to Teven project.

1.2 Purpose of this report

GHD Pty Ltd (GHD) was commissioned by PCo and approved in advance by the NSW Department of Planning, Industry and Environment (DPIE), to conduct an independent environmental audit (IEA) for the construction of the Woolgoolga to Ballina Pacific Highway upgrade project.

This report records the findings of the IEA including review of documentation provided by the audited organisation and observations from a site audit against the Audit Scope and Criteria as noted in section 1.3 of this report.

1.3 Scope of the Audit

The IEA was undertaken to address the MCoA Condition D30 and EPBC Approval Condition 22 as per the below:

The MCoA Condition D30 requires:

Within 12 months of the commencement of operation, and then as required by the Secretary, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the SSI. This audit shall:

- *a. be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;*
- *b. include consultation with the relevant agencies;*
- *c. assess the environmental performance of the SSI and assess whether it is complying with the requirements in this approval, and any other relevant approvals (including any assessment, plan or program required under these approvals);*
- *d. review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and*
- *e. recommend measures or actions to improve the environmental performance of the SSI, and/or any strategy, plan or program required under these approvals.*

Note:

- *This audit team shall be led by a suitably qualified auditor, and include experts in biodiversity, noise and vibration, hydrology and any other fields specified by the Secretary.*
- *The audit may be staged to suit the staged operation of the SSI.*

The DoE EPBC Approval 2012-6394 condition 22 requires:

Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the condition of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.

This is the first IEA on the project. The methodology for the audit is outlined in section 2. The period of the audit is January 2015 to July 2021 (the audit period).

1.4 Audit Team

The audit team comprised:

- Dr Avanish Panikkar (GHD Project Manager), Lead Auditor
- Elliot Holland, back up Lead Auditor
- Demelza Scott (GHD Project Director), audit peer reviewer, Lead Auditor
- Felicity Williams, Technical Specialist Biodiversity
- Pri Pandey, Technical Specialist Noise and Vibration
- Tyler Tinkler, Technical Specialist in Hydrology
- Callum Bryan-Mathieson, Technical Specialist in Landscape Management

The audit team were approved by DPIE in a letter dated 27/05/2021 to undertake this audit. Details of the audit team and letter of endorsement from DPIE are given in Appendix A of this report.

1.5 Limitations

This report has been prepared by GHD for Transport for NSW / Pacific Complete and may only be used and relied on by Transport for NSW / Pacific Complete for the purpose agreed between GHD and Transport for NSW / Pacific Complete as set out in section 1.4 of this report.

GHD otherwise disclaims responsibility to any person other than Transport for NSW / Pacific Complete arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section 2 and Appendix C of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Transport for NSW / Pacific Complete and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of this report are constrained by the particular site conditions, such as the location of audited road corridor, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this report.

Site conditions (including vegetation, site structures the presence of hazardous substances and/or site contamination) may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change.

2. Audit Methods

The audit was carried out in accordance with the requirements of ISO 19011:2018 ‘Guidelines for auditing management systems’ and the ‘Independent Audit Guideline’ (Department of Planning and Environment, 2020). In particular, the GHD team conducted the audit considering the following:

- The key principles of auditing including the requirement of auditors to conduct themselves in an ethical manner, report truthfully and accurately, be diligent and have the appropriate competency to conduct the audit, be independent, and apply an evidence-based approach to conducting the audit.
- The audit objectives, scope and criteria were based on the MCoA. The scope of the audit was limited to compliance with the conditions of SSI 4963 and EPBC Approval 2012-6394, the environmental performance of the project, and the adequacy of strategies plans or programs under the approval.
- An appropriate audit team was selected with skills and experience in environmental auditing to ensure that an adequate assessment of compliance with the MCoA could be made.
- Relevant documentation (as detailed below) was reviewed prior to the audit to make an initial determination of conformity of the system to the requirements of the MCoA, and to prepare an audit checklist containing appropriate questions to address during the site audit.
- Audit opening and closing meetings were conducted with the auditee to explain the format of the audit upfront and to highlight preliminary audit findings at the conclusion of the site audit.
- During the site inspection, audit interviews were conducted with PCo personnel and additional documentary evidence was discussed. An inspection of the site was conducted across three days along the entire road corridor and specifically at select locations to verify relevant compliance aspects of the audit.
- Verifiable evidence was collected and recorded throughout the audit and evaluated against the MCoA to determine conformity or non-conformity. All evidence was recorded on the Compliance Tables (Appendix D).
- A complete and accurate report was prepared and distributed to provide a record of the audit and its findings.

A teleconference meeting with relevant TfNSW/Pacific Complete was undertaken at project inception stage to confirm the audit program and timeline. The format of the audit, potential COVID-19 travel restriction and its impact on site inspection were discussed. Agency consultation details were also discussed and confirmed at this meeting. The list of personnel attended this meeting is given in Table 2.1.

Table 2.1 Personnel attending project start up meeting

Name	**Organisation**
Mark Leigh	TfNSW/Pacific Complete
Martin Mulhearn	TfNSW/Pacific Complete
Jeff Boylan	TfNSW/Pacific Complete
Mark Woods	TfNSW/Pacific Complete
Simon Wilson	TfNSW/Pacific Complete
Scott Lawrence	TfNSW/Pacific Complete
Simon Cross	TfNSW/Pacific Complete
Colm Magee	TfNSW/Pacific Complete
Prudence Burke	TfNSW/Pacific Complete
Nabil Makram	TfNSW/Pacific Complete
Michael Heathwood	TfNSW/Pacific Complete
Kate Leseberg	TfNSW/Pacific Complete
Toni Hawkins	TfNSW/Pacific Complete
Shayne Walker	TfNSW/Pacific Complete
Lee Gillingham	TfNSW/Pacific Complete
Stephen Alford	TfNSW/Pacific Complete
Demelza Scott	GHD
Avanish Panikkar	GHD

2.1 Document Review

GHD reviewed documentation related to pre-construction, construction and operational stages of the W2B project including:

- Construction Environmental Management Plans and specific sub-plans
- Reports, Frameworks, Strategies and Management Plans required by EPBC conditions and MCoA
- Monitoring / Compliance Tracking Reports
- Correspondence relating to submission and approval of frameworks, strategies, plans and packages
- Requirements related to permits and licences
- Site procedures

Reference to documentation sighted by audit team is made in the compliance tables presented in Appendix D.

2.2 Consultation with Agencies

Consultation with key project stakeholders such as regulatory authorities is required by Condition D30(b) . GHD consulted with the following agencies prior to site audit:

- Rous Water
- NSW Environment Protection Authority (EPA)
- NSW Department of Primary Industries (DPI) (Fisheries)
- DPIE (Compliance)
- DPIE Transport Assessments and
- W2B Independent Environmental Representative.

A letter was sent to each of the abovementioned agencies advising of the upcoming audit, GHD’s role in conducting the audit and requesting comments on the project performance as it related to their agency. A sample letter is included in Appendix B. GHD received written comments from EPA, DPI (Fisheries), DPIE (Compliance) as shown in Appendix B and Table 2.2 as noted below. Consultation with DPIE (Transport Assessments) and the W2B Independent Environmental Representative was via telephone.

Table 2.2 Agency Responses

Agency / Response Date	Response Comments	Comment
DPI Fisheries / Email 08/07/2021	DPI Fisheries recommends that the environmental audit includes a focus on the Operational Management Measures section of the Threatened Fish Management Plan (TFMP). Section 7.2 of the TFMP outlines the performance criteria of the management strategy during operation and includes:	Operational management with regard to TFMP - reviewed and assessed as noted in Appendix D Tables D-2 and D-4. Section 7.2 of the TFMP outlines the performance criteria of the management strategy during operation regarding maintaining water quality and no negative impacts to OPP. Annual water monitoring reports and six monthly compliance reports indicate compliance to this condition.
	– No negative impact on threatened species (i.e. Oxleyan Pygmy Perch);	Conditions B40, B41, B42, B73, D12, D22 were reviewed and found to be compliant as noted in Appendix D Tables D-2 and D-4.
	– To maintain water quality within the thresholds established during the pre-construction monitoring;	Conditions B41, B42, D12, D22 were reviewed and found to be compliant as noted in Appendix D Tables D-2 and D-4.
	– To maintain critical habitat condition during operation at known and potential habitat locations for threatened fish species; and	Conditions B13, B73 were reviewed and found to be compliant as noted in Appendix D Table D-2.
	– To maintain natural stream flow and velocity and connectivity for threatened fish.	Conditions B38, B41, B42, B43, B73 were reviewed and found to be compliant as noted in Appendix D Table D-2.
	The above criteria should be examined to ensure that they are being achieved. Specific areas of interest to DPI Fisheries include: – Ensuring no reduction in water quality in Oxleyan Pygmy Perch receiving waters by measures such as correct sizing and operation of detention basins;	Conditions B41, B42, D12, D22 were reviewed and structures sighted during site audit and found to be compliant as noted in Appendix D Tables D-2 and D-4.
	– Ensuring water quality monitoring is being undertaken within key fish habitat adjacent to the alignment and that changes identified within water quality monitoring results are being managed appropriately;	Conditions B41, B42, D12, D22 were reviewed and water quality monitoring reports sighted, found to be compliant as noted in Appendix D Tables D-2 and D-4.
	– Ensuring continued connectivity through waterway crossing structures located within key fish habitat and that the frequency of inspection and maintenance regimes ensures continued connectivity; and	Conditions B38, B41, B42, B43, B73 were reviewed, site inspected and found to be compliant as noted in Appendix D Table D-2.
	– Ensuring impacted bed and banks located within key fish habitat have been reinstated to a condition similar to or better than the original condition, ensuring that there are no adverse impacts on the aquatic values, and ensuring that inspection and maintenance regimes are of a frequency that allows prompt rectification to any identified deterioration of reinstatement works.	Conditions B41, B42, D12, D22 were reviewed, compliance tracking reports and water quality monitoring reports sighted, found to be compliant as noted in Appendix D Tables D-2 and D-4. Site photos 13-14 included in Appendix E.

Agency / Response Date	Response Comments	Comment
	– Table 7.3 of the TFMP outlines specific mitigation goals and corrective actions that should form part of the audit proceedings.	Table 7.3 of TFMP was reviewed. Section 8 of TFMP details the monitoring program to monitor effectiveness of mitigation measures. Reports of monitoring of mitigation measures and corrective actions sighted in compliance tracking reports. Conditions B41, B42, D12, D22 were reviewed, compliance tracking reports and water quality monitoring reports sighted, found to be compliant as noted in Appendix D Tables D-2 and D-4.
	In addition to the above, DPI Fisheries also recommends that the audit investigates the biodiversity offset requirements for impacts of the project to marine vegetation communities.	Condition B13 requires minimising riparian vegetation clearing during construction and refers to targeted rehabilitation program. Condition D5 refers to the biodiversity offset package in the context of marine environment, which includes specified biometric vegetation types. TFMP includes operational measures with regard to biodiversity offset requirements. Compliance tracking reports and annual water quality monitoring reports were reviewed to assess compliance to this condition, as noted in Appendix D Table D-2 and per Photo 30 included in Appendix E.
DPIE Compliance / Email 20/7/2021	D29 – inclusion of project in an existing environmental management system prior to operation – can the audit review the adequacy of the EMS in managing the operation of the project	Condition D29 – discussed with auditee and noted in Appendix D Table D-4 of this report.
	– Flooding – status of Maclean levee works, implementation of at-property hydrological mitigation works, and replacement bridge works on Somervale Road upstream of the project at Champions Creek, including Mr Byrne's property and the area receiving the Richmond bridge runoff (which is in the Sapphire to Woolgoolga project)	Flooding – checked status of mitigation measures as noted in Appendix D especially related to conditions B31, B33, B49, D2, D9, D13-14 and D16 in Table D-2 & D-4 of this report. Section 6 of Hydrological Mitigation Report states that numerous design innovations and value engineering options were tested in the flood model. As per D14, constructed mitigation measure included adjustment to the Maclean levee. Byrne's property and other items assessed per condition B49. Hydrological Mitigation Reports was being updated (at the time of audit) to capture the finalised details of any areas that are considered to be a departure of the flood management objectives.

Agency / Response Date	Response Comments	Comment
	– Biodiversity – have structures been provided in accordance with the D2 Connectivity Strategy, and if not, what processes was followed in approving an alternative design or location. Considering known conflict with Emu, koala and road users. Green Leave Rose Walnut management.	Biodiversity structures have been assessed as compliant against condition D2. Green Leave Rose Walnut tree reviewed in condition D26e.
	– Landscaping – implementation of landscaping in accordance with D20 urban design and landscaping plan, its performance and maintenance of landscaping. Rehabilitation of waterways crossing, particularly where they are also used by cattle and access between severed properties.	Landscaping has been assessed as compliant against condition D20. Waterways crossing also reviewed against condition B38.
	– Water quality – adequacy of water quality monitoring reports, particularly discussion of monitoring data and results, identification of trends and where water quality parameters have been exceeded, identification of point source, performance and effectiveness of operational water quality basins. Especially at Broadwater cut groundwater, OPP creek crossings in Tabbimoble.	Water quality monitoring including particular points mentioned have been reviewed as compliant against conditions B47, B81, D12 and D26c in Appendix Table D-2 and D-4.
	– Rehabilitation of ancillary facility/compound sites, borrow pits and temporary construction areas.	Rehabilitation at Ancillary sites, borrow sites and temporary construction areas assessed as compliant against conditions B73-81 in Appendix Table D-2.
	– Maintenance and disposal of surplus land.	Maintenance of surplus land, as per auditee response, is as per rehabilitation requirements for ancillary sites assessed as compliant per condition B73 in Appendix D Table D-4.
	– The performance of the ER.	Performance of ER has been found compliant against condition D29.
	– Aboriginal Heritage outcomes – Iluka Road to Ballina (see FYI for additional comments).	Aboriginal Heritage outcome – Iluka Rd to Ballina, was noted to be an ongoing discussion topic – see condition B45 in Appendix D Table D-2 and D26d in Appendix D Table D-4.
	– Conditions D12 and D13 outcomes.	Conditions D12 and D13 have been assessed as compliant – see Appendix D Table D-4.
	– Condition B81 outcomes with Rous Water.	Condition B81 - Six monthly compliance tracking report section 5.1 refers to Annual Monitoring Report, which refers to potential incidents and assesses water quality risks to the Woodburn borefield. Consultation with Rous Water noted.
	– Noise Management - The following is for your information. • Operational traffic noise – discussions with TfNSW about the operational noise compliance reports under D28 (initially Stage 1 Glenugie to Maclean) is ongoing.	Noise monitoring has been assessed as compliant per Condition D28. Operational noise compliance reporting and Aboriginal heritage discussions are ongoing as at the time of this audit, per audit

Agency / Response Date	Response Comments	Comment
	- Use of structures, roadkill and fauna fencing, revegetation and translocation sites will be reported in the operational biodiversity monitoring reports required under the D8 and D9 threatened species management plans. The D5 biodiversity offset package has not yet been submitted for approval (expected Q3 2021). – Aboriginal Heritage outcomes – Iluka Road to Ballina – still ongoing discussions about location the final location of artefacts. Resolution still hasn't reached.	discussions with Pacific Complete. Biodiversity Offset Package 2020 was sighted and referenced in condition D5a in, Appendix D Table D-4. Other comments- checked on site during site audit and reviewed as per compliance tracking/monitoring reports as noted on Conditions D5, D8 and D9 in Appendix D Table D-4.
NSW EPA / email 9/7/2021	Non-compliance: Penalty Notice on 18 October 2019 - failed to comply with Condition D26(e) of SSI 4963 which resulted in the removal of a Green-leaved Rose Walnut tree. The only major (biodiversity related) non-compliance was the destruction of the Green-Leaved Rose Walnut at Maclean cut. As such the project was penalised ($15k) by DPIE Planning and a remediation plan drawn up. Emphasis around protecting threatened plant species should be bolstered.	The penalty notice has been discussed at audit and noted in the compliance checklist (Appendix D Table D-2 Condition D26-e). Green-leaved Rose Walnut protection measures sighted during site visit (ref photo 33, Appendix E).
	Other issues: With consideration to clearing, discretion should be given to ecologists when it comes to felling of trees on the boundary line – numerous trees were felled that in the end probably didn't need to be. Likewise, (suitably qualified) ecologist discretion (in consultation with EPA/EES) should be engaged when making considerations around pre-clear requirements etc. With reference to Oxleyan Pygmy Perch, comments from DPI Fisheries should be sort. There were issues with compliance regarding work around OPP waterways I recall. When considering connectivity structures it would help to either tighten up wording in the connectivity strategy to ensure compliance but this may, in turn, result in perverse outcomes if incorrectly worded. Ecologist discretion should be the first point of call when contractors are seeking to vary away from the strategy for numerous reasons. EPA consultation should be enacted before ecologist recommendations are carried out. Issues like the width and robustness of fauna furniture, the requirement of natural substrate installation in culverts, the requirement for coarse woody debris in culverts, the connection of lead ropes to adequate trees in the canopy, re-vegetation around connectivity structures were all very regular issues/discussion points. Ensuring adequate re-vegetation around connectivity structures is a major component contributing to the structures success or otherwise. Too often culverts and bridges are left too long without landscape maintenance and weeds/pasture grasses take over, compromising fauna access. This needs far better attention. Please see attached pic for example. There were often negative outcomes where fixed price contracts had been drawn up at the start of the contract and once it came time to install final connectivity structures years later, there was new evidence to suggest a minor change was beneficial for wildlife but this could not be enacted because of the contract drawn up years before – resulted in poorer outcomes	Other comments have been discussed and checked on site as noted in Appendix D including koala tree plantings and koala fencing. Comments were sought from DPI Fisheries in this audit as included in this table. These comments are noted and advised to proponent.

Agency / Response Date	Response Comments	Comment
	for fauna. An example of this was the glide poles with both launch arms not singular, it would have cost all of $50 to add another arm but was considered too contractually difficult. Often where conditions were varied with negotiation and agreement from EPA, the alternative arrangements agreed upon were not carried out or carried out with minimal effort. An example of this was the removal of the koala grid at Mororo Rd in lieu of further koala tree plantings to better connect the koala connectivity structure at Banana Rd. These trees were planted poorly, not staked and inundated by weeds very quickly – a token effort. Another example was where the EPA agreed to vary the requirement to install escape structures for fauna on the highway as evidence showed they did not work. The extra koala fencing negotiated (Woodburn interchange East side) for the removal of the escape structure requirement has not yet been installed.	The issue of connectivity at Banana Road has been reviewed against condition D2 and rectification found to be compliant during site visit (Photos 9-10 in Appendix E). The Woodburn Interchange koala fencing was also confirmed with Pacific Complete to be reinstated (Photo 38 in Appendix E).
DPIE Transport Assessments / Phone 8/7/2021	Points discussed with Michael Young (stated to be included in collective comments via email from DPIE Compliance): • Incorporation of project into existing Environmental Management System • Three reports were outstanding in submission – Operational Noise Compliance Report, Biodiversity Offset Strategy approval and Aboriginal relics at Iluka Road	Condition D29 – discussed with auditee and noted in Appendix D Table D-4. Checked on site during site audit and reviewed as per compliance tracking/monitoring reports as noted in Appendix D Table D-2 and D-4. Noise monitoring has been assessed as compliant per Condition D28. Operational noise compliance reporting and Aboriginal heritage discussions are ongoing as at the time of this audit, per audit discussions with Pacific Complete. Biodiversity Offset Package 2020 was sighted and referenced in condition D5, Appendix D Table D-4. Biodiversity Offset Strategy ver 2015 was cited with regard to condition D3g as noted in Appendix D Table D-4.
Environmental Representative / Phone 13/7/2021	No major concerns were raised in conversation with Murray Curtis, ERM. Some points noted: • End of construction marked opening the project to traffic, however there are some areas to be considered still in construction • There were 15 primary contractors during active phase • Continuity of Environmental Management • Environmental management of temporary structures • Category 1 incidents reported by RMS were approximately 50 – including soil binder run off incident • The project set up of ERG comprised the ER and RMS, undertaking routine inspections and discussions. ER was engaged 4 days per fortnight during the peak of activities. • Section 7 – water quality works were open at the end of construction works – ERG had noted concerns on investigation and action. Well managed through monthly monitoring for management of outliers.	Points noted as information during audit. Complaints are managed in online system as noted in Appendix D Tables D-2 and D-4 and discussed in Section 3.1.9.

Agency / Response Date	Response Comments	Comment
	• Construction phase did not raise many noise issues, The complaints register was to migrate / move to operational phase • Section 9 – sand quarry had unearthed 1000s of heritage artefacts and relocation of these was part of ongoing discussions with local aboriginal land council who had raised the need for smoking ceremonies	

2.3 Site Audit and Inspection

The inspection was conducted by GHD auditors Elliot Holland and Tyler Tinkler across three days from 28th to 30th July 2021. The following TfNSW / PCo personnel accompanied the audit team during the site visit:

- Brock Tupper
- Mark Leigh
- Mark Woods, PCo
- Martin Mulhearn, Environment Manager, PCo
- Scott Lawrence, Environment Manager - Development and Delivery North, TfNSW
- Simon Cross
- Simon Wilson, TfNSW and
- Wayne Walshe

It is noted that majority of the MCoA related to construction phase of the project and this audit was undertaken post-construction. Therefore, site assessment focused on how relevant conditions were met for long term / operational phase environmental performance and compliance.

The audit team conducted interviews with relevant personnel and observations guided by the audit criteria which addressed the conditions of SSI 4963 and EPBC 2012-6394. As the audited site was an operational highway, review of documentation or interview with personnel were limited to opening and closing meeting and during other phases of the audit. TfNSW / PCo personnel provided both soft and hard copies of documentary evidence to support compliance with audit criteria including a selected cross section of data, records, correspondence, procedures and management plans. Information gathered from each day's site inspection was discussed at the day's close out meetings as noted in section 2.3.1.

Weather condition on the site audit days were pleasant and conducive for field inspections. Select photographs and observations from site visit are provided in Appendix E.

2.3.1 Opening and Closing Meetings

An opening meeting was held at the end of field inspection covering Stages 1 and 2 of the W2B Pacific Highway upgrade project (Woolgoolga to Glenugie), at the TfNSW / Pacific Complete office at Grafton. A closing meeting at the end of field inspection for day 2 and a final audit closing meeting at the end of day 3 were held at the same venue. List of participants is provided in Table 2.3, Table 2.4 and Table 2.5.

Table 2.3 Personnel attending opening meeting, 28 Jul 2021

Name	Organisation
Martin Mulhearn	TfNSW/Pacific Complete
Chris Greenway	TfNSW/Pacific Complete
Jeff Boylan	TfNSW/Pacific Complete
Brock Tupper	TfNSW/Pacific Complete
Mark Woods	TfNSW/Pacific Complete
Scott Lawrence	TfNSW/Pacific Complete
Simon Cross	TfNSW/Pacific Complete
Nicole Greale	TfNSW/Pacific Complete
Prudence Burke	TfNSW/Pacific Complete
Nabil Makram	TfNSW/Pacific Complete
Michael Heathwood	TfNSW/Pacific Complete
Toni Hawkins	TfNSW/Pacific Complete
Shayne Walker	TfNSW/Pacific Complete
Rob Leslie	TfNSW/Pacific Complete
Simon Wilson	TfNSW/Pacific Complete
Elliot Holland	GHD

Name	Organisation
Tyler Tinkler	GHD
Avanish Panikkar	GHD

Table 2.4 Personnel attending day two closing meeting, 29 Jul 2021

Name	Organisation
Martin Mulhearn	TfNSW/Pacific Complete
Mark Woods	TfNSW/Pacific Complete
Simon Wilson	TfNSW/Pacific Complete
Wayne Walshe	TfNSW/Pacific Complete
Elliot Holland	GHD
Tyler Tinkler	GHD
Avanish Panikkar	GHD

Table 2.5 Personnel attending audit closing meeting, 30 Jul 2021

Name	Organisation
Mark Leigh	TfNSW/Pacific Complete
Martin Mulhearn	TfNSW/Pacific Complete
Jeff Boylan	TfNSW/Pacific Complete
Mark Woods	TfNSW/Pacific Complete
Chris Greenway	TfNSW/Pacific Complete
Scott Lawrence	TfNSW/Pacific Complete
Stephen Alford	TfNSW/Pacific Complete
Shayne Walker	TfNSW/Pacific Complete
Michael Heathwood	TfNSW/Pacific Complete
Rob Leslie	TfNSW/Pacific Complete
Colm Magee	TfNSW/Pacific Complete
Nicole Greale	TfNSW/Pacific Complete
Simon Wilson	TfNSW/Pacific Complete
Simon Cross	TfNSW/Pacific Complete
Brock Tupper	TfNSW/Pacific Complete
Prue Burke	TfNSW/Pacific Complete
Toni Hawkins	TfNSW/Pacific Complete
Elliot Holland	GHD
Tyler Tinkler	GHD
Avanish Panikkar	GHD

2.4 Reporting

This audit report presents the findings of the IEA undertaken on the Woolgoolga to Ballina Pacific Highway upgrade project as required by SSI 4963 Condition D30. This report responds to the scope of the audit as per Table 2.6. Input from technical specialists is included in the form of audit checklist comments on relevant conditions and no separate technical report are prepared. Completed compliance tables are included in Appendix D. Independent Audit Submission form is included in Appendix C.

Table 2.6 Audit Scope Requirements

MCoA Requirement	Reference
D30. *Within 12 months of the commencement of operation, and then as required by the Secretary, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the SSI. This audit shall:*	This audit
(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;	Section 1.4; Appendix A
(b) include consultation with the relevant agencies;	Section 2.2; Appendix B
(c) assess the environmental performance of the SSI and assess whether it is complying with the requirements in this approval, and any other relevant approvals (including any assessment, plan or program required under these approvals);	Section 3.1; Appendix D
(d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and	Section 0; Appendix D
(e) recommend measures or actions to improve the environmental performance of the SSI, and/or any strategy, plan or program required under these approvals.	Section 4; Appendix D
Note: • *This audit team shall be led by a suitably qualified auditor, and include experts in biodiversity, noise and vibration, hydrology and any other fields specified by the Secretary.* • *The audit may be staged to suit the staged operation of the SSI.*	Note only
D31. *Within 60 days of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary and relevant public authorities, together with its response to any recommendations contained in the audit report.*	This report

3. Audit Findings

This section summarises the audit’s assessment of the W2B as per audit criteria stated in section 1.3:

– Assess the environmental performance of the project
– Review the adequacy of any strategy / plan / program required under this approval.

Further details are noted in the compliance tables presented in Appendix D.

3.1 Overall Environmental Performance

Overall, environmental performance on the project has been to a high standard, given the scale of construction work. A dedicated website including document library is maintained for the project where most of the project plans, reports and frameworks are available for public view. Auditees were cooperative during the documentation review and audit process including in the planning and organisation of site investigation along the 155 km stretch of upgraded highway.

Good implementation of post-construction site management measures was noted during the site inspection. No non-compliances were noted based on observations in field on the days of site investigation. TfNSW/PCo accompanied the auditors during site audit to areas of relevance as assessed and requested. Matters raised in agency consultation (Appendix B) were checked and found to have been complied with, unless otherwise noted in the compliance tables (Appendix D). Generally, all management plans and strategy/framework documentation required during pre-construction, construction and the current operational stages have been developed by TfNSW / PCo which address the requirements unless otherwise stated in this section and in the compliance tables in Appendix D. Some specific areas of importance and opportunities for improvement are identified as noted below.

3.1.1 Biodiversity

TfNSW/PCo demonstrated a high level of understanding and compliance with the conditions related to the several conditions related to biodiversity conservation and management, which formed the majority of this audit’s criteria. Based on desktop review of documentation available from the project website document library and obtained in response to RFIs, no major concerns have been raised.

Management of temporary structures in known Oxleyan Pygmy Perch (OPP) habitat has specifically been noted in the MCoA and reviewed for compliance. The connectivity strategy describes how the connectivity measures proposed will be effective in successfully mitigating the barrier and fragmentation impact to relevant species and provides monitoring and performance objectives and evaluation of connectivity structures in section 9. Threatened species monitoring reports have shown evidence of use by most threatened species (Koala, Coastal Emu, microbats, frogs, Phascogale, Rufous Bettong, OPP). It is noted that Quolls were largely excluded from monitoring due to sparse distribution, but that one record of a quoll using a fauna crossing was recorded. Site inspection confirmed that connectivity structures are deemed functional for purpose.

3.1.2 Noise and Vibration

Management of noise and vibration, based on information / documentation available to review in this audit, has been satisfactory. Historic non-compliance was noted (as reported in EPL Annual Returns for Out of Hours Work without approvals and an exceedance of air blast overpressure during 2016 with appropriate corrective measures undertaken – NC1 and NC2). No other noise and vibration related non-compliances are noted during pre-construction, construction or operational stages as at the time of this audit other than delays in finalising the Operational Noise Monitoring Report, currently under discussions/review. Given most of the MCoA that constitute the audit scope were related to the construction stage, installation of noise barrier structures along the road corridor was the only matter to confirm during site audit, and these were confirmed to be installed.

3.1.3 Soil, Water and Hydrology

During the site inspection and throughout the review of presented documentation, a good understanding of the site’s geological features was observed. Requirements for management of the site’s hydrology, in particular maintenance of OPP habitat and conditions related to soil, water and hydrology in general, been complied with. A few historical non-compliances were noted in EPL Annual Reports that resulted in disturbance / pollution of waters where EPA had noted appropriate action taken by the licensee. This audit reiterates that continued monitoring and management in accordance with approved water management plans is required for maintenance activities that may involve use of earthmoving equipment during construction / maintenance activities and cause site disturbance.

3.1.4 Traffic and Access

Traffic and access management during construction stage is considered to have been adequate based on available documentation and compliance tracking reports.

3.1.5 Heritage

In response to the agency consultation invite, DPIE Compliance section commented that certain Aboriginal Heritage outcomes – Iluka Road to Ballina – were still under ongoing discussions about location the final location of artefacts. A resolution is yet to be reached.

3.1.6 Air Quality

Documentation related to construction stage of the project is assessed to be satisfactory and no non-compliances are raised.

3.1.7 Landscape Management

The audited locations and reviewed documentation relevant to landscape management are found to comply with relevant conditions and no major non-compliances are noted.

3.1.8 Waste / Spoil Management

No major concerns were noted in the audit regarding management of soil and waste produced. One non-compliance noted in EPL annual return during 2018 related to movement of excavated material classified as ENM without proper waste classification being undertaken (NC3). A non-conformance is not raised in this audit as relevant actions were undertaken at the time of incident. Project documentation indicated re-use of spoil from excavation work used in other sections of the construction corridor.

3.1.9 Complaints and Incident Management

The below provides a summary of incidents and complaints during the audit period. All incidents are managed via the online IMPACT system where details and close out are recorded while complaints are managed via Consultation Manager database where details and close out are recorded. Sample screen shots were viewed during the audit. Incidents and complaints are reported as part of each six-monthly compliance report as relevant to the reporting period.

Incidents

A total of 650 incidents were noted in the IMPACT system for the audit period, with none remaining open.

Complaints

A total of 2238 complaints were raised in the Consultation Manager database from 24 June 2014 to 14 October 2021, with eleven (11) complaints currently open.

3.2 Adequacy of Strategy/Plan/Program

The audit assessed the adequacy of strategies and management plans prepared for the W2B project. Adequacy was determined based on inclusion of content in relevant conditions and the *Post approval guidance: Environmental Management Plan Guideline for Infrastructure Projects* (DPIE, 2020), suitability of the plans for the project construction and effectiveness in management of environmental impacts. In many cases, evidence provided as part of RFI4 were not complete for the purpose of this audit and have been noted as recommendations in Appendix D and summarised in section 4.2 of this report.

3.2.1 Biodiversity

Based on evidence reviewed, the strategies, frameworks, plans and programs are generally accepted as adequate to the requirements, unless otherwise noted in section 3.1.1 and Appendix D of this report. For Koala monitoring, the Year 2 report noted corrective actions taken with regard to road mortality and exclusion fencing while the Year 3 report raised concern over high level statistical uncertainty in relation to population estimates with a change of survey pattern. Ongoing monitoring is expected to alleviate this uncertainty.

3.2.2 Reporting

The compliance tracking reports sighted predominantly assess compliance based on preparation and approval of management plans and do not include adequate discussion on the implementation of frameworks, strategies, plans or packages as required under EPBC condition 21 and various MCoAs that require frameworks, strategies, plans or packages to be implemented. The EPBC compliance report (Final 2020-2021), for example, provides action of developing the various documentation during pre-construction stage (Timing) and notes Status as compliant with Compliance Status providing details of approvals of the document. However, the status report does not report how these had been implemented. A recommendation (R1) has been noted.

3.3 Audit Findings Summary

A summary of compliance with the conditions of SSI 4963 and EPBC Approval 2012/6394 is provided in Table 3.1. A summary of non-compliances is provided in Table 3.2.

Table 3.1 Summary of Compliance

Compliance Status	Details	Conditions assessed
Compliant	Sufficient verifiable evidence sighted to demonstrate that all elements of the requirement have been complied with within the scope of the audit.	142
Non-compliant	One or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.	3
Not triggered	A requirement has an activation or timing trigger that has not been met during the temporal scope of the audit being undertaken (may be a retrospective or future requirement), therefore an assessment of compliance is not relevant. Sub-clauses or components of a condition may be assessed as not-triggered however not counted in this table if other parts of the condition has been assessed as compliant or non-compliant.	10
Note	Clauses are note only	1
	TOTAL	156

Table 3.2 Summary of non-compliances

NC identifier	Condition	Non-compliance
NC1	MCoA B16	Several incidents are noted in the EPL Annual Return referenced against EPL condition L5.1 that breaches the OOHW without approvals. It is noted that Appropriate Action was undertaken in each instance and no further action was required by authorities. No corrective action is required.
NC2	MCoA B22	Airblast overpressure limits in Condition B22 were exceeded on a small number of occasions throughout the project. No further corrective action is required as all blasting associated with the project is complete.
NC3	MCoA B70	ENM was transported offsite prior to testing and classification being completed. This was reported as a non-compliance in the relevant annual return. No further corrective action is required as works have concluded on the project.

4. Recommendations

Detailed audit findings are presented in Appendix D, and summarised in section 4.1 and 4.2 below.

4.1 Corrective actions

The non-compliances noted in section 3.3 of this audit report are all noted to be historic in nature. Therefore, no corrective actions are prescribed.

4.2 Recommendations

Recommendations seek to address matters of concern raised by agencies that were not found to have been corrected, lack of adequate documented information or matters that may lead to a non-compliance or where elements of the proponent’s systems and plans were not found to be adequate. The rationale is noted in the audit compliance tables (Appendix D) and mentioned in sections 3.1 and 3.2 of this report to assist.

Table 4.1 Summary of Recommendations

Compliance Identifier	Condition Clause	Recommendation
R1	EPBC 21 Various MCoAs	Include details of how the plans/strategies/frameworks have been implemented in future Compliance Tracking Reports.

Appendices

Appendix A

ENDORSEMENT OF AUDIT TEAM

Mr Scott Lawrence
Environmental Manager
Transport for NSW
76 Victoria Street
Grafton NSW 2460

27/05/2021

Dear Mr Lawrence

Pacific Highway - Woolgoolga to Ballina – SSI-4963

Independent Audit Team Approval Request

I refer to your request (SSI-4963-PA-80) for the Secretary's approval of suitably qualified persons to prepare the Independent Audit for the Pacific Highway – Woolgoolga to Ballina (SSI-4963) - Independent Audit Team Approval Request.

The Department has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced.

In accordance with Condition D30 of SSI-4963 (the 'Consent') and the Independent Audit Post Approval Requirements, the Secretary has agreed to the following audit team:

- Elliot Holland – Senior Environmental Scientist, Lead Auditor, GHD;
- Dr Avanish Panikkar – Technical Project Manager, Senior Engineer & Auditor, GHD;
- Felicity Williams – Environmental Scientist, GHD;
- Leigh Maloney – Senior Ecologist, GHD;
- Tyler Tinkler – Water Engineer, GHD;
- Rowan Robinson – Civil Engineer, GHD;
- Pri Pandey – Senior Engineer – Noise & Vibration, GHD;
- Simon Ritchie – Senior Acoustic Engineer – Transport Infrastructure, GHD;
- Lee Allen – Director Urban Designer, Landscape Architect, GHD;
- Callum Bryan-Mathieson – Senior Landscape Architect, GHD; and
- Demelza Scott – Senior Environmental Scientist, GHD.

Please ensure this correspondence is appended to the Independent Audit Report.

The Independent Audit must be prepared, undertaken and finalised in accordance with the Independent Audit Post Approval Requirements. Failure to meet these requirements will require revision and resubmission.

The Department reserves the right to request an alternate auditor or audit team for future audits.

Notwithstanding the agreement for the above listed audit team for this Project, each respective project approval or consent requires a request for the agreement to the auditor or audit team be submitted to the Department, for consideration of the Secretary. Each request is reviewed and depending on the complexity of future projects, the suitability of a proposed auditor or audit team will be considered.

If you wish to discuss the matter further, please contact Angie Hollister, Senior Compliance Officer on 02 6670 8654.

Yours sincerely

SMcPhee

Shelley McPhee
Compliance Team Leader
Compliance

As nominee of the Planning Secretary

Table A1 Audit Team Details

Dr Avanish Panikkar **Lead Auditor, GHD Project Manager**

Exemplar Global #113142

Avanish has cumulative 20 years' experience across consulting, research, academic and industrial sectors in environmental engineering. His skills include water quality, wastewater treatment, waste management, environmental management, EMS, water audits, environmental compliance audits, quality management and project management. He has a deep understanding and considerable experience with ISO14001 and ISO9001 standards. He is a JAS-ANZ contracted wastewater treatment plant audit technical specialist. He has previously been approved by DPIE as Principal Auditor on various Independent Environmental Audits reviewing compliance with conditions of approval and other legislative requirements for mines, quarries and other industrial entities. He has held the Exemplar Global Principal Level certification for over a decade.

Elliot Holland **Lead Auditor (backup)**

Exemplar Global #115351

Elliot is a Senior Environmental Scientist with over nine years' experience in environmental auditing, with a range of clients, both public and private. He has experience in delivering Environmental Management Representative (EMR) roles, environmental audits, assessments and reviews for mining and extractive industry projects in NSW. These projects range from preparation of Environmental Impact Statements and associated specialist studies, to post-approval operational support.

Elliot has previously been approved by DPIE as a Lead Auditor on IEAs. As Lead Auditor, he has led a number of teams considering compliance with relevant conditions of consent/approval; reporting to the NSW Department of Planning, Industry and Environment (DPIE).

Demelza Scott **GHD Project Director, Audit Peer review**

Exemplar Global #112890

Demelza is an environmental professional with 18 years' experience in environmental management. She has significant knowledge of environmental management systems, environmental auditing and environmental management planning for construction and operational projects. Demelza's extensive site and audit experience has involved development and review of environmental management plans against conditions of approval as well as the implementation of environmental controls on site for construction projects including solar farms, roads, pipelines and dam upgrades, and for operational facilities including ports, factories, intensive agriculture and mines.

Felicity Williams **Biodiversity**

Felicity has over eight years' experience in applied ecology, including four years in environmental consulting. Felicity has a sound understanding of environmental legislation and has undertaken threatened species survey, assessment and salvage for a range of projects including residential and commercial property developments, road and rail construction, wind farms and mining exploration. Felicity has extensive experience working on threatened microbat impact assessment.

Leigh Maloney **Biodiversity (backup)**

Leigh is a Senior Ecologist based in GHD's Wagga Wagga office in southern New South Wales. Leigh has over 17 years' experience in terrestrial ecology and impact assessment with a strong focus on vegetation and botany. Leigh has completed more than 250 of ecological assessments. Leigh was accredited as a BioBanking Assessor under the now repealed NSW Threatened Species Conservation Act 1995 in 2009 and has retained this accreditation as well as now being an accredited BAM Assessor under the NSW Biodiversity Conservation Act 2016.

Leigh has been responsible for the field surveys and reporting for a range of impact assessments including BDARs as the lead assessor including solar farms, road and rail infrastructure. Leigh has been involved in the preparation of referrals for both controlled and not controlled actions under EPBC Act including preparation of preliminary documentation for controlled actions under the EPBC Act.

Tyler Tinkler **Hydrology**

Tyler is a water engineer with experience in surface water assessment, design and management, particularly in rural and regional settings. Tyler has a thorough understanding of the hydrology, surface water infrastructure and regulatory requirements in NSW from leading the surface water specialist assessment for various EIS/REFs and has experience with Independent Environmental Audits in technical specialist capacity.

Rowan Robinson **Hydrology (backup)**

Rowan is a Civil Engineer with over 9 years' experience in the industry. He has worked on a broad range of projects from the design of small stormwater or potable water networks ($50k or less project cost) to large highway, rail and infrastructure projects (over $1bn project costs) He has project experience ranging from initial kickoff/concept meetings with the client, to tender, detail and construction phase services.

Pri Pandey **Noise/Vibration**

Pri has over seven years of experience working on road traffic acoustic assessments in NSW and other Australian states. Pri has undertaken these assessments in accordance with the RNP, NCG, NMG, ECRTN, ENMM, ICNG and AVTG state guidelines and policies using the noise modelling software SoundPLAN and CadnaA. Pri is experienced in road traffic noise modelling, noise barrier design and construction noise and vibration assessments. Pri has also undertaken the peer review of numerous third party road traffic noise assessments for the Department of Planning.

Simon Ritchie **Noise/Vibration (backup)**

Simon is a senior engineer with more than 14 years' experience in the assessment and control of noise and vibration. Simon has undertaken assessments for major highway bypasses, road and rail line upgrades, new rail lines, and light rail projects to the requirements of the relevant state guidelines, from initial feasibility through to post construction compliance and mitigation verification.

Simon is an experienced and skilled user of various noise modelling software and is competent in the processing, analysis and clear presentation of large sets of data often generated during the noise monitoring, modelling and assessment process.

Simon has worked on significant transportation projects including Newcastle Light Rail, Inland Rail (multiple packages), Newcastle inner city bypass, Sydney Light Rail, West Gate Tunnel Project and North East Link Project.

Lee Allen **Landscape Management**

Lee has 20 years' extensive project experience including urban design and landscape for road infrastructure. Lee has worked in the western Sydney area on the M12 and the Camden Valley Way road upgrade where he developed schemes to enable the project to integrate into the natural context. Lee also has experience in delivering natural creek and riparian corridors. Lee's role includes coordinating the habitat restoration, storm water management and the integration of public amenity including walking and cycle networks. Lee has a proven ability of working within, or leading, a multidisciplinary design team to develop projects from master planning to detail design.

Callum Bryan-Mathieson **Landscape (backup)**

Callum has experience in all facets of Landscape Architecture, building a range of skills that apply to landscape master planning and design, design documentation, environmental impact assessment, independent verification, community consultation and contract administration.

Callum has had the opportunity to apply these skills at both local and international level, working on a variety of road projects for the private and public sector. He has been involved with both large- and small-scale projects, applying an integrated design approach that result in high performing landscapes, which enhance the road user experience.

Appendix B

AGENCY CONSULTATION

20 Smith Street, Level 6
Parramatta, New South Wales 2150
Australia
www.ghd.com

Your ref: -
Our ref: 12548125

25 June 2021

Shelley McPhee
Far North Team Leader - Compliance
DPIE

via email: shelley.mcphee@planning.nsw.gov.au

WOOLGOOLGA TO BALLINA PACIFIC HIGHWAY UPGRADE - INDEPENDENT ENVIRONMENTAL AUDIT IN ACCORDANCE WITH MINISTER’S CONDITION OF APPROVAL D30

Dear Shelley

GHD Pty Ltd has been engaged by Transport for NSW (represented by Pacific Complete) to undertake an independent environmental audit of the Pacific Highway Upgrade, Woolgoolga to Ballina, in accordance with the below Development Consent granted by the Department of Planning, Industry and Environment:

- DoE W2B EPBC Approval 2012-6394
- DPE Infrastructure Approval W2B – No SSI-4963

The scope of the Audit is to:

- Assess the environmental performance of the project
- Assess whether it is complying with the requirements in the consent or other (including any assessment, plan or program required under these approvals)
- Review the adequacy of strategies, plans or programs required under the consents, and
- Recommend appropriate measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or program required under the consents.

TfNSW / Pacific Complete has auditable obligations under the Development Consent (attached). I am writing to you to invite comments from DPIE Compliance in regard to these obligations.

It would be appreciated if you could provide your comments in regard to the performance of Pacific Complete and TfNSW in meeting these obligations under the following headings:

- Compliance with requirements
- Progress to meeting requirements
- Details of incidents of non-compliance
- Adequacy of actions taken
- Adequacy of the requirements of the licence.

I also invite you to comment on Pacific Complete's performance with other requirements relevant to this project, as you may deem appropriate.

The site visit for the audit is scheduled to be conducted on 14-16 July 2021. We would be available for a short teleconference, prior to the audit, in the week of 12 July to discuss your feedback so that we may adequately address any concerns during the audit.

Upon receipt of this letter, please advise GHD of the primary contact within your organisation that will be coordinating this request. It would be appreciated if you could submit your written comments by COB Friday 9 July 2021.

All correspondence in relation to this matter should be directed to Avanish Panikkar, GHD Lead Auditor on 02 9239 7667 or avanish.panikkar@ghd.com.

Regards

Avanish Panikkar
Technical Project Manager, Lead Auditor

02 9239 7667
avanish.panikkar@ghd.com

From: Mulhearn, Martin
To: Avanish Panikkar
Cc: Leseberg, Kate; Hawkins, Toni (Pacific Complete); Woods, Mark (Pacific Complete); Scott Lawrence (InTouch)
Subject: RE: W2B Independent Audit
Date: Tuesday, 20 July 2021 1:35:13 PM
Attachments: image003.png
image004.png
image005.png
image006.png
image007.png
image008.png

Hi Avanish,
Copy of DPIE correspondence as referenced below attached FYI and action.
Regards
Martin

From: no-reply@majorprojects.planning.nsw.gov.au [mailto:no-reply@majorprojects.planning.nsw.gov.au]
Sent: Tuesday, 13 July 2021 2:40 PM
To: Scott Lawrence <Scott.LAWRENCE@transport.nsw.gov.au>
Cc: Mark Woods <Mark.WOODS@transport.nsw.gov.au>
Subject: Communication regarding Input into the Scope of IEA SSI-4963-PA-86

Dear Scott ,

Dear Mr Panikkar,

The Department of Planning, Industry and Environment (Department) thanks you for your request to the input into the scope for the proposed Independent Audit (IEA) for W2B project. The Department would like the following matter to be considered in the proposed IEA.

- D29 – inclusion of project in an existing environmental management system prior to operation – can the audit review the adequacy of the EMS in managing the operation of the project.
- Flooding – status of Maclean levee works, implementation of at-property hydrological mitigation works, and replacement bridge works on Somervale Road upstream of the project at Champions Creek, including Mr Byrne's property and the area receiving the Richmond bridge runoff (which is in the Sapphire to Woolgoolga project)
- Biodiversity – have structures been provided in accordance with the D2 Connectivity Strategy, and if not, what processes was followed in approving an alternative design or location. Considering known conflict with Emu, koala and road users. Green Leave Rose Walnut management
- Landscaping – implementation of landscaping in accordance with D20 urban design and landscaping plan, its performance and maintenance of landscaping. Rehabilitation of waterways crossing, particularly where they are also used by cattle and access between severed properties.
- Water quality – adequacy of water quality monitoring reports, particularly discussion of monitoring data and results, identification of trends and where water quality parameters have been exceeded, identification of point source, performance and effectiveness of operational water quality basins. Especially at Broadwater cut groundwater, OPP creek crossings in Tabbimoble.
- Rehabilitation of ancillary facility/compound sites, borrow pits and temporary construction areas.
- Maintenance and disposal of surplus land
- The performance of the ER
- Aboriginal Heritage outcomes – Iuka Road to Ballina (see FYI for additional comments)
- Conditions D12 and D13 outcomes.
- Condition B81 outcomes with Rous Water.
- Noise Management

The following is for your information.

- Operational traffic noise – discussions with TfNSW about the operational noise compliance reports under D28 (initially Stage 1 Glenugie to Maclean) is ongoing.
- Use of structures, roadkill and fauna fencing, revegetation and translocation sites will be reported in the operational biodiversity monitoring reports required under the D8 and D9 threatened species management plans. The D5 biodiversity offset package has not yet been submitted for approval (expected Q3 2021).
- Aboriginal Heritage outcomes – Iuka Road to Ballina – still ongoing discussions about location the final location of artefacts. Resolution still hasn't reached.

I hope this information is of assistance, the Department looks forward to the insight from the proposed IEA.

Please call Phillip Rose on (02) 6670 8657 if any additional information is required.

Kind Regards
Phillip Rose

To sign in to your account click here or visit the Major Projects Website.

Please do not reply to this email.

Kind regards

The Department of Planning, Industry and Environment

From: Avanish Panikkar <Avanish.Panikkar@ghd.com>

Sent: Tuesday, 20 July 2021 12:33 PM
To: Mulhearn, Martin <martin.mulhearn@pacificcomplete.com.au>
Subject: W2B Independent Audit

CAUTION - This email was sent from outside Laing O'Rourke

Hi Martin
Could you please check below.
Thanks
Avanish

From: Angie Hollister <Angie.Hollister@planning.nsw.gov.au>
Sent: Tuesday, 20 July 2021 12:27 PM
To: Avanish Panikkar <Avanish.Panikkar@ghd.com>; Heidi Watters <Heidi.Watters@Planning.nsw.gov.au>
Cc: Phillip Rose <Phillip.Rose@planning.nsw.gov.au>
Subject: RE: W2B Independent Audit

Hi Avanish

The Department has prepared a response and I believe it has been submitted back through the major projects website to Mr Scott Lawrence on 13 July 2021.

Please let me know if Scott has not received.

Angie Hollister
Senior Compliance Officer – Far North Region

Compliance | Department of Planning, Industry and Environment
T 02 6670 8654 | **M** 0427 237 154 | **E** angie.hollister@planning.nsw.gov.au
PO Box 72, Murwillumbah NSW 2484 | 135 Murwillumbah Street, Murwillumbah NSW 2484
Please direct all email correspondence to compliance@planning.nsw.gov.au
www.dpie.nsw.gov.au

If you are submitting a compliance document or request as required under the conditions of consent or approval, please note that the Department is no longer accepting lodgement via compliance@planning.nsw.gov.au.

The Department has recently upgraded the Major Projects Website to improve the timeliness and transparency of its post approval and compliance functions. As part of this upgrade, proponents are now requested to submit all post approval and compliance documents online, via the Major Projects Website. To do this, please refer to the instructions available here.

From: Avanish Panikkar <Avanish.Panikkar@ghd.com>
Sent: Tuesday, 20 July 2021 12:23 PM
To: Heidi Watters <Heidi.Watters@Planning.nsw.gov.au>
Cc: Phillip Rose <Phillip.Rose@planning.nsw.gov.au>; Angie Hollister <Angie.Hollister@planning.nsw.gov.au>
Subject: RE: W2B Independent Audit

Hi Heidi

Thought to drop a line to check if any comments as per below please.

Regards
Avanish

From: Heidi Watters <Heidi.Watters@Planning.nsw.gov.au>
Sent: Thursday, 8 July 2021 1:49 PM
To: Avanish Panikkar <Avanish.Panikkar@ghd.com>

Cc: Phillip Rose <Phillip.Rose@planning.nsw.gov.au>; Angie Hollister <Angie.Hollister@planning.nsw.gov.au>
Subject: RE: W2B Independent Audit

Hi Avanish

Thank you for your email and phone call this morning regarding consultation for the upcoming audit. The Department is preparing a response and will send it to you next week.

I also understand that due to the current COVID restrictions in NSW, the site audit has been postponed until the last week of July 2021.

If you have any further queries regarding the audit, please call myself on the details below.

Kind regards

Heidi Watters
Team Leader Compliance

Energy, Industry & Compliance | Planning & Assessment
Department of Planning, Industry and Environment
T 02 6575 3401 | **M** 0472 820 374| **E** heidi.watters@planning.nsw.gov.au
PO Box 3145 | Singleton NSW 2330
www.dpie.nsw.gov.au

If you are submitting a compliance document or request as required under the conditions of consent or approval, please note that the Department is no longer accepting lodgement via compliance@planning.nsw.gov.au.

The Department has recently upgraded the Major Projects Website to improve the timeliness and transparency of its post approval and compliance functions. As part of this upgrade, proponents are now requested to submit all post approval and compliance documents online, via the Major Projects Website. To do this, please refer to the instructions available here.

From: Avanish Panikkar <Avanish.Panikkar@ghd.com>
Sent: Saturday, 26 June 2021 5:52 PM
To: Heidi Watters <Heidi.Watters@Planning.nsw.gov.au>
Subject: RE: W2B Independent Audit

Hi Heidi
As per a vacation notice received in reply to my below email to Shelley, forwarding for your attention please.
Thanks
Avanish

From: Avanish Panikkar
Sent: Saturday, 26 June 2021 5:37 PM
To: Shelley.McPhee@planning.nsw.gov.au
Subject: RE: W2B Independent Audit

Dear Shelley

With regards to the below introduction, please find attached a formal request from GHD inviting comments to help inform the audit.

Regards
Avanish

Dr Avanish K Panikkar
Ph.D., M.Eng.Sc., B.Tech (hons); M.EIANZ;
Accredited Principal Env. Auditor (ExemplarGlobal #113142)
Senior Water Engineer – Technical Project Manager

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D +61 2 9239 7667 | **E** avanish.panikkar@ghd.com

The Power of Commitment

Connect

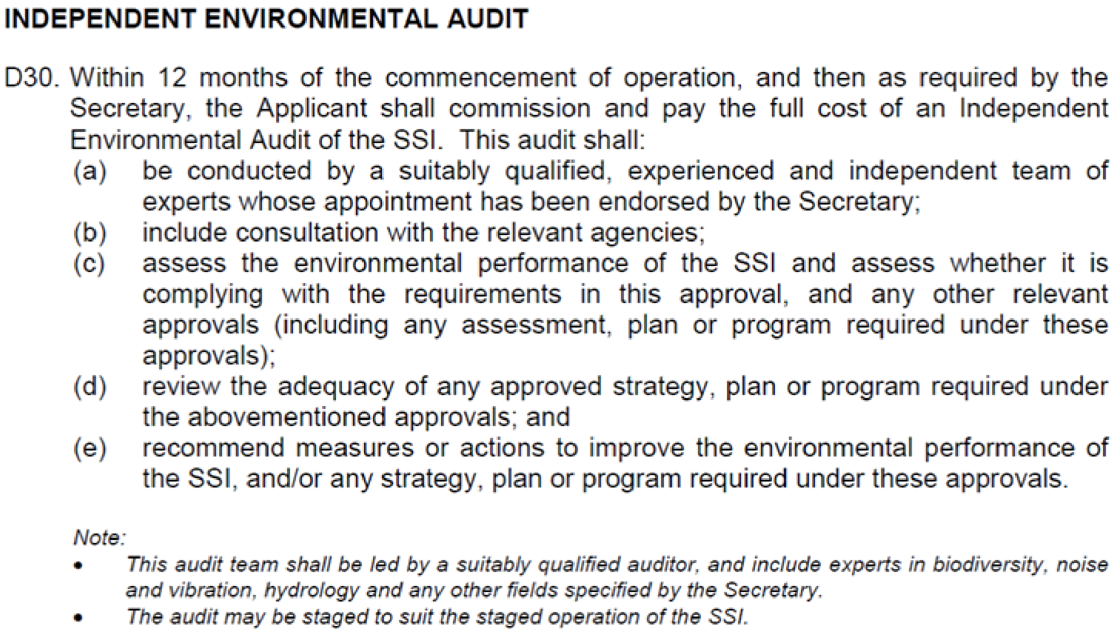
From: Scott Lawrence <Scott.LAWRENCE@transport.nsw.gov.au>
Sent: Friday, 25 June 2021 5:03 PM
To:
Subject: W2B Independent Audit

Dear all,

TfNSW is progressing with the independent environmental audit for the Woolgoolga to Ballina Pacific Highway Upgrade as required under the projects condition of approval

GHD has been approved by DPIE as the independent auditor. GHD will soon be writing to you to assist with their undertaking as per the condition of approval. Copied below.

This email is to introduce you to Avanish Panikkar (cc'd) from GHD who will be leading the audit. Thank you in advance for your cooperation.



INDEPENDENT ENVIRONMENTAL AUDIT

D30. Within 12 months of the commencement of operation, and then as required by the Secretary, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the SSI. This audit shall:

(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
(b) include consultation with the relevant agencies;
(c) assess the environmental performance of the SSI and assess whether it is complying with the requirements in this approval, and any other relevant approvals (including any assessment, plan or program required under these approvals);
(d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
(e) recommend measures or actions to improve the environmental performance of the SSI, and/or any strategy, plan or program required under these approvals.

Note:

- *This audit team shall be led by a suitably qualified auditor, and include experts in biodiversity, noise and vibration, hydrology and any other fields specified by the Secretary.*
- *The audit may be staged to suit the staged operation of the SSI.*

Regards, Scott

Scott Lawrence
Environment Manager
Development and Delivery North
Environment Branch | Safety, Environment & Regulation
Transport for NSW

M 0419 248 583

From: Jonathan Yantsch
To: Avanish Panikkar
Cc: Annette Comerford; James Sakker
Subject: RE: W2B Independent Audit
Date: Thursday, 8 July 2021 4:08:06 PM
Attachments: image003.png
image004.png
image005.png
image006.png
image007.png
image008.png

Hi Avanish

Thank you for providing DPI Fisheries with an opportunity to provide input into the upcoming independent environmental audit for the Woolgoolga to Ballina Pacific Highway Upgrade project as required under the project's condition of approval.

DPI Fisheries recommends that the environmental audit includes a focus on the Operational Management Measures section of the Threatened Fish Management Plan (TFMP). Section 7.2 of the TFMP outlines the performance criteria of the management strategy during operation and includes:

- No negative impact on threatened species (i.e. Oxleyan Pygmy Perch);
- To maintain water quality within the thresholds established during the pre-construction monitoring;
- To maintain critical habitat condition during operation at known and potential habitat locations for threatened fish species; and
- To maintain natural stream flow and velocity and connectivity for threatened fish.

The above criteria should be examined to ensure that they are being achieved. Specific areas of interest to DPI Fisheries include:

- Ensuring no reduction in water quality in Oxleyan Pygmy Perch receiving waters by measures such as correct sizing and operation of detention basins;
- Ensuring water quality monitoring is being undertaken within key fish habitat adjacent to the alignment and that changes identified within water quality monitoring results are being managed appropriately;
- Ensuring continued connectivity through waterway crossing structures located within key fish habitat and that the frequency of inspection and maintenance regimes ensures continued connectivity; and
- Ensuring impacted bed and banks located within key fish habitat have been reinstated to a condition similar to or better than the original condition, ensuring that there are no adverse impacts on the aquatic values, and ensuring that inspection and maintenance regimes are of a frequency that allows prompt rectification to any identified deterioration of reinstatement works.

Table 7.3 of the TFMP outlines specific mitigation goals and corrective actions that should form part of the audit proceedings.

In addition to the above, DPI Fisheries also recommends that the audit investigates the biodiversity offset requirements for impacts of the project to marine vegetation communities.

Please contact me on the details if you have any questions.

Regards

Jonathan

Jonathan Yantsch | Senior Fisheries Manager - Coastal Systems (North Coast)
Aboriginal Fishing & Marine and Coastal Environments
NSW Department of Primary Industries | Fisheries
1243 Bruxner Hwy | Wollongbar | NSW 2477
T: 02 6626 1375 | M: 0447 537 168 | E: jonathan.yantsch@dpi.nsw.gov.au

and collaborative approaches to our work.

From: Avanish Panikkar
Sent: Saturday, 26 June 2021 5:45 PM
To: jonathan.yantsch@dpie.nsw.gov.au
Subject: RE: W2B Independent Audit

Dear Jonathan

GHD Pty Ltd has been engaged by Transport for NSW (represented by Pacific Complete) to undertake an independent environmental audit of the Pacific Highway Upgrade, Woolgoolga to Ballina, as per the below introduction. Please find attached a formal request from GHD inviting comments to help inform the audit.

Regards
Avanish

Dr Avanish K Panikkar
Ph.D., M.Eng.Sc., B.Tech (hons); M.EIANZ;
Accredited Principal Env. Auditor (ExemplarGlobal #113142)
Senior Water Engineer – Technical Project Manager

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D +61 2 9239 7667 | **E** avanish.panikkar@ghd.com

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Connect

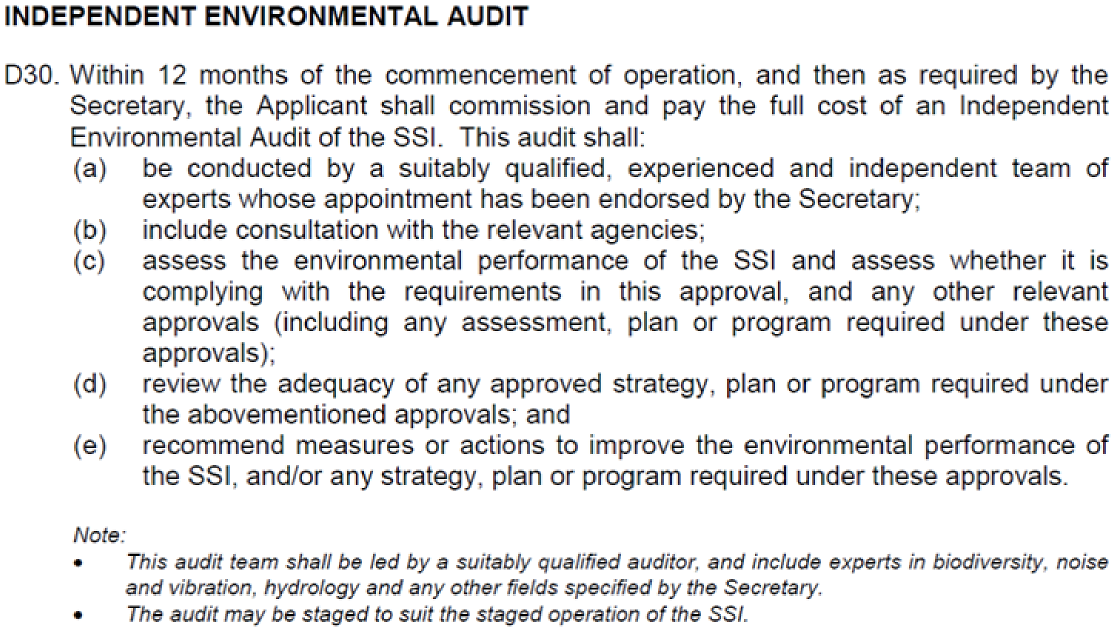
From: Scott Lawrence <Scott.LAWRENCE@transport.nsw.gov.au>
Sent: Friday, 25 June 2021 5:03 PM
To:
Subject: W2B Independent Audit

Dear all,

TfNSW is progressing with the independent environmental audit for the Woolgoolga to Ballina Pacific Highway Upgrade as required under the projects condition of approval

GHD has been approved by DPIE as the independent auditor. GHD will soon be writing to you to assist with their undertaking as per the condition of approval. Copied below.

This email is to introduce you to Avanish Panikkar (cc'd) from GHD who will be leading the audit. Thank you in advance for your cooperation.



INDEPENDENT ENVIRONMENTAL AUDIT

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(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
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(c) assess the environmental performance of the SSI and assess whether it is complying with the requirements in this approval, and any other relevant approvals (including any assessment, plan or program required under these approvals);
(d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
(e) recommend measures or actions to improve the environmental performance of the SSI, and/or any strategy, plan or program required under these approvals.

Note:

- *This audit team shall be led by a suitably qualified auditor, and include experts in biodiversity, noise and vibration, hydrology and any other fields specified by the Secretary.*
- *The audit may be staged to suit the staged operation of the SSI.*

Regards, Scott

Scott Lawrence
Environment Manager
Development and Delivery North
Environment Branch | Safety, Environment & Regulation
Transport for NSW

M 0419 248 583

From: Nicholas Priest
To: Avanish Panikkar
Cc: Annemarie Hopcroft
Subject: RE: W2B Independent Audit
Date: Friday, 9 July 2021 1:06:20 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image010.png
image007.png
image012.png
20713 noncompsfulldetail.xls

Hi Avanish,

Please refer to attached excel spreadsheet for detailed list of POEO related non-compliances and subsequent actions against EPL 20713.

I will preface the following with statement that I was not the responsible officer for the majority of the project, just the final 12 months. Unfortunately, the responsible officer has been on leave the last two weeks.

Since biodiversity aspects were not held to an Environment Protection Licence I will detail some regular occurrences with relation to the MCoA. It should be noted that things the project did well are not mentioned here. The EPA can provide further insight into these things should that be required under the scope of the audit.

Non-compliance:

- Penalty Notice on 18 October 2019 - failed to comply with Condition D26(e) of SSI 4963 which resulted in the removal of a Green-leaved Rose Walnut tree.

The only major (biodiversity related) non-compliance was the destruction of the Green-Leaved Rose Walnut at Maclean cut. As such the project was penalised ($15k) by DPIE Planning and a remediation plan drawn up. Emphasis around protecting threatened plant species should be bolstered.

Other issues:

With consideration to clearing, discretion should be given to ecologists when it comes to felling of trees on the boundary line – numerous trees were felled that in the end probably didn't need to be. Likewise, (suitably qualified) ecologist discretion (in consultation with EPA/EES) should be engaged when making considerations around pre-clear requirements etc.

With reference to Oxleyan Pygmy Perch, comments from **DPI Fisheries** should be sort. There were issues with compliance regarding work around OPP waterways I recall.

When considering connectivity structures it would help to either tighten up wording in the connectivity strategy to ensure compliance but this may, in turn, result in perverse outcomes if incorrectly worded. Ecologist discretion should be the first point of call when contractors are seeking to vary away from the strategy for numerous reasons. EPA consultation should be enacted before ecologist recommendations are carried out. Issues like the width and robustness of fauna furniture, the requirement of natural substrate installation in culverts, the requirement for coarse woody debris in culverts, the connection of lead ropes to adequate trees in the canopy, re-vegetation around connectivity structures were all very regular issues/discussion points. *Ensuring adequate re-vegetation around connectivity structures is a major component contributing to the structures success or otherwise*. Too often culverts and bridges are left too long without landscape maintenance and weeds/pasture grasses take over, compromising fauna access. This needs far better attention. Please see attached pic for example.

There were often negative outcomes where fixed price contracts had been drawn up at the start of the contract and once it came time to install final connectivity structures years later, there was new evidence to suggest a minor change was beneficial for wildlife but this could not be enacted because of the contract drawn up years before – resulted in poorer outcomes for fauna. An example of this was the glide poles with both launch arms not singular, it would have cost all of $50 to add another arm but was considered too contractually difficult.

Often where conditions were varied with negotiation and agreement from EPA, the alternative arrangements agreed upon were not carried out or carried out with minimal effort. An example of this was the removal of the koala grid at Mororo Rd in lieu of further koala tree plantings to better connect the koala connectivity structure at Banana Rd. These trees were planted poorly, not staked and inundated by weeds very quickly – a token effort. Another example was where the EPA agreed to vary the requirement to install escape structures for fauna on the highway as evidence showed they did not work. The extra koala fencing negotiated (Woodburn interchange East side) for the removal of the escape structure requirement has not yet been installed.

Hope this is helpful,

Regards,

Nick.

Nicholas Priest
Senior Ecologist
Environmental Solutions
NSW Environment Protection Authority
M 0402 149 302

www.epa.nsw.gov.au @NSW_EPA

The EPA acknowledges the traditional custodians
of the land and waters where we work. As part of the
world’s oldest surviving culture, we pay our respect
to Aboriginal elders past, present and emerging.

Report pollution and environmental
incidents 131 555 or +61 2 9995 555

From: Avanish Panikkar <Avanish.Panikkar@ghd.com>
Sent: Saturday, 26 June 2021 5:38 PM
To: Nicholas Priest <Nicholas.Priest@epa.nsw.gov.au>
Subject: RE: W2B Independent Audit

Dear Nicholas

With regards to the below introduction, please find attached a formal request from GHD inviting comments to help inform the audit.

Regards

Avanish

Dr Avanish K Panikkar
Ph.D., M.Eng.Sc., B.Tech (hons); M.EIANZ;
Accredited Principal Env. Auditor (ExemplarGlobal #113142)
Senior Water Engineer – Technical Project Manager

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D +61 2 9239 7667 | **E** avanish.panikkar@ghd.com

→ The Power of Commitment

Connect

From: Scott Lawrence <Scott.LAWRENCE@transport.nsw.gov.au>
Sent: Friday, 25 June 2021 5:03 PM
To:
Subject: W2B Independent Audit

Dear all,

TfNSW is progressing with the independent environmental audit for the Woolgoolga to Ballina Pacific Highway Upgrade as required under the projects condition of approval

GHD has been approved by DPIE as the independent auditor. GHD will soon be writing to you to assist with their undertaking as per the condition of approval. Copied below.

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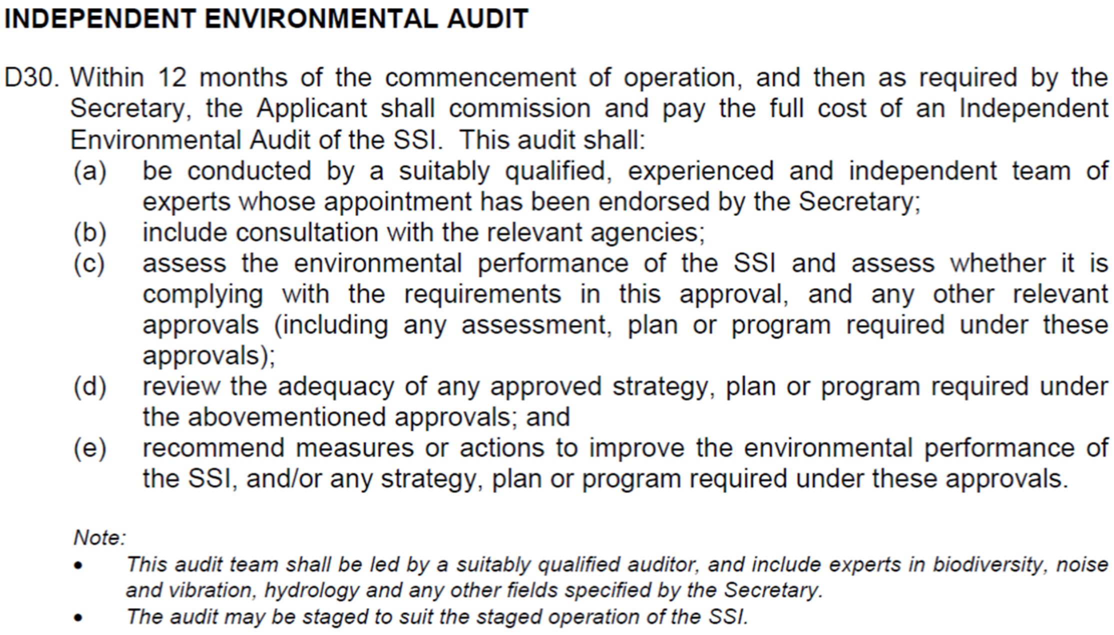

INDEPENDENT ENVIRONMENTAL AUDIT

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Note:

- *This audit team shall be led by a suitably qualified auditor, and include experts in biodiversity, noise and vibration, hydrology and any other fields specified by the Secretary.*
- *The audit may be staged to suit the staged operation of the SSI.*

Regards, Scott

Scott Lawrence
Environment Manager
Development and Delivery North
Environment Branch | Safety, Environment & Regulation
Transport for NSW

Appendix C

INDEPENDENT AUDIT SUBMISSION FORM

Independent Audit Report Declaration Form

Independent Audit Report Declaration Form	
Project Name	Woolgoolga to Ballina Pacific Highway upgrade
Consent Number	W2B NSW Approval – SSI-4963 / W2B Commonwealth EPBC Approval 2012-6394
Description of Project	Construction of 155km of upgraded highway - refer to section 1.3 of the report
Project Address	76 Victoria St, Grafton NSW
Proponent	Transport for NSW / Pacific Complete
Title of Audit	W2B Independent Environmental Audit
Date	03 March 2022

I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:

i. the audit has been undertaken in accordance with relevant condition(s) of consent and the *Independent Audit Compliance Requirements (Department 2019)*;
ii. the findings of the audit are reported truthfully, accurately and completely;
iii. I have exercised due diligence and professional judgement in conducting the audit;
iv. I have acted professionally, objectively and in an unbiased manner;
v. I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the audit, or by relationship as spouse, partner, sibling, parent, or child;
vi. I do not have any pecuniary interest in the audited project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child;
vii. neither I nor my employer have provided consultancy services for the audited project that were subject to this audit except as otherwise declared to the Department prior to the audit; and
viii. I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

Notes:

a) Under section 10.6 of the *Environmental Planning and Assessment Act 1979* a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, $1 million and for an individual, $250,000; and
b) The *Crimes Act 1900* contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both)

Name of Auditor	Avanish Panikkar
Signature	
Qualification	Exemplar Global #113142, CEnvP., Ph.D., M.Eng.Sc., B.Tech Hons.
Company	GHD Pty Ltd
Company Address	Level 6, 20 Smith St, Parramatta NSW 2150

Appendix D

AUDIT COMPLIANCE TABLES

Woolgoolga to Ballina Pacific Highway Upgrade
Independent Environmental Audit 2021

Detailed Findings and Recommendations - TABLE D-1
DPE Infrastructure Approval SSI-4963

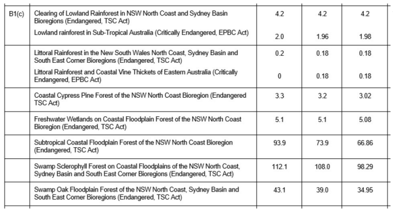
Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
	Sch. 2 Part A. Administrative Conditions				
A1	In addition to meeting the specific performance criteria established under this approval, the Applicant shall implement all feasible and reasonable measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the SSI.	Compliant	Measures have been developed and implemented for pre-construction, construction and operational phases. Site audit observations and discussions indicate reasonable and feasible measures have been implemented.	Various management documentation including CEMP (Early Works Wave 1&3 and 2, Stage 3-11), specific sub plans, compliance monitoring program, compliance tracking reports. Site audit observations	
A2	The Applicant shall carry out the SSI generally in accordance with the:	Compliant			
A2-a	(a) State significant infrastructure application SSI-4963;		The works have been assessed against SSI-4963 in this audit	SSI-4963 approved 24/06/2014 SSI-4963 MOD6 approved on 21/02/2018 Documentation reviewed in this audit	
A2-b	(b) Pacific Highway Upgrade Woolgoolga to Ballina Environmental Impact Statement Volumes 1A, 1B, 2, 3, 4A, 4B, 5, 6A, 6B, 6C, 7A, 7B and 8, prepared by Roads and Maritime Services, dated December 2012;		The works are generally carried out in accordance with the documents listed in the condition	Various management documentation including CEMP (Early Works Wave 1&3 and 2, Stage 3-11), specific sub plans, compliance monitoring program, compliance tracking reports. Site audit observations	
A2-c	(c) Pacific Highway Upgrade Woolgoolga to Ballina Submissions/Preferred Infrastructure Report Main Volume and Appendices, prepared by Roads and Maritime Services, dated November 2013;				
A2-d	(d) Ancillary facility sites listed in Woolgoolga to Ballina Pacific Highway Upgrade - Ancillary descriptions and impact assessment, prepared by Roads and Maritime Services, dated 13 December 2013;				
A2-e	(e) Connectivity structures listed in Woolgoolga to Ballina Alliance Update 20 Feb 2014 Structures Inventory (except Sections 1 and 2) and Woolgoolga to Glenugie Fauna Connectivity Tracking Register 11/02/2014, prepared by Roads and Maritime Services, and email correspondence from Roads and Maritime Services dated 14 March 2014;				
A2-f	(f) Pacific Highway Upgrade Woolgoolga to Ballina: Utilities impact native vegetation (D00395_0102_Utilities Clearing Vegetation_v9), prepared by Roads and Maritime Services, dated 21 May 2014,				
A2-g	(g) Modification request and letter dated 17 November 2014 to modify the definition of construction under subclause f in relation to section 4 utility adjustments and replacement of all references to OEH with EPA;				
A2-h	(h) Modification request and letter dated 24 September 2015 to modify the approval to capture additional works outside the project boundary that may impact on heritage items to require archaeological investigations;				
A2-i	(i) Modification request dated 1 December 2017 and accompanying environmental assessment, to modify the approval to realign the road between the Pacific Highway and Eight Mile Lane, Glenugie; and				
A2-j	(j) conditions of this approval.		The works have been assessed against conditions of SSI-4963 in this audit	SSI-4963 approved 24/06/2014 SSI-4963 MOD6 approved on 21/02/2018 Documentation reviewed in this audit	
A3	If there is any inconsistency between the above documents, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	**Note**	In general, no inconsistencies were noted in the audit		
A4	The Applicant shall comply with any reasonable requirement(s) of the Secretary arising from the Department of Planning and Environment's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted with this approval; and (b) the implementation of any actions or measures contained in these documents.	Compliant	Various management documentation including CEMP, specific sub plans, compliance monitoring program, compliance tracking reports sighted. Updates to documentation in response to DPE review comments and information request noted.	Various management documentation including CEMP, specific sub plans, compliance monitoring program, compliance tracking reports sighted. DPE letters with review comments and approvals.	
A5	This approval shall lapse 10 years after the date on which it is granted, unless the works the subject of this SSI approval are physically commenced on or before that date.	Compliant	The approval is dated 24 Jun 2014. Works commenced within 10 years of this date.		
A6	The Applicant shall ensure that all licences, permits and approvals are obtained as required by law and maintained as required throughout the life of the SSI. No condition of this approval removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.	Compliant	Environment Protection Licence (EPL), Water Licence have been obtained and maintained.	EPL 20713 (Laing O'Rourke W2B), EPL 21330 (Acciona WC2G), DPI Water Licence 30BL207354	

A7	The Applicant may elect to construct and/or operate the SSI in stages. Where staging is proposed, the Applicant shall submit a Staging Report to the Secretary prior to the commencement of each proposed stage. The Staging Report shall provide details of:	**Compliant**	Staging report sighted, as submitted to DPE with letter dated on 24 Mar 2015. DPE response by Karen Jones, Delegate of the Secretary, with approval dated 30 Apr 2015 sighted. The document is available on project website document library as per reference in the final approval letter to condition C4.	W2B Staging Report Mar 2015, provided as W2BP1DR-STAG-DEV-000001 Staging Report v.8 Apr2020 (W2B-PC0-ZH-RPT-00001) Letter of submission to DPIE on 24 Mar 2015, provided as W2BP1DR-ENV-DEV-000057 Letter of approval by DPE ref 14/15001 dated 30 Apr 2015, signed by Karen Jones, provided as W2B-PC0-0-ZH-LET-00037 Letter of submission version 2 to DPIE on 5/4/2016 provided as W2B-RMS-0-TS-LET-00002 includes the staging plan (timeline) Letter of approval on revised staging report for Stage 2, ref 14/11502, dated 2 Aug 2016 by Karen Harragon, provided as W2B-PC0-0-ZH-LET-00006. Revised Staging Report dated 21 Aug 2017, approved by DPE 5 Oct 2017 (Letter provided as W2B-PC0-0-ZH-LET-00026)	-
A7-a	how the SSI would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and	**Compliant**	Section 3 of the Staging Report - Stage 1 refers to Sections 1 and 2 (Woolgoolga to Glenugie); Stage 2 refers to Sections 3-11 (Glenugie to Ballina) and provides general details of work activities. Section 3.3 of the Staging Report provides an indicative construction program and submission letter includes staging plan.	Woolgoolga to Ballina Staging Report v.8 Apr2020 (W2B-PC0-ZH-RPT-00001) Letter of submission version 2 to DPIE on 5/4/2016 provided as W2B-RMS-0-TS-LET-00002 includes the staging plan (timeline)	
A7-b	details of the relevant conditions of approval, which would apply to each stage and how these shall be complied with across and between the stages of the SSI.	**Compliant**	Section 1.3 (Table 1-1) of the Staging Report details the conditions and how these are met in the Report. Section 5 details the relevant conditions and how these would apply to different stages.	Staging Report v.8 Apr2020 (W2B-PC0-ZH-RPT-00001)	
	Where staging of the SSI is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).	**Note**	Note only		
A8	The Applicant shall ensure that any strategy, plan, program or other document required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) is submitted to the Secretary no later than one month prior to the commencement of the relevant stage(s), unless otherwise agreed by the Secretary. Notes: • While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and • If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program shall clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.	**Compliant**	Due to the scale of the project, a large number of plans, strategies, programs and frameworks have been produced in this project, assessed for compliance against particular conditions in this audit as having submitted and approved for each stage of construction commencement, noted in the staging report. Various approval letters have been sighted that refer to acceptance/approval of these plans including acceptance of compliance tracking reports that refer to such documents. The Staging Report provides detail on each of the stages of the project in construction, as well as details of how sections of the project become operational. Appendix A provides specific detail on each of the NSW Conditions of Approval, including which project stage they are relevant to, how the have been addressed, and where relevant details of the plan, strategy, or program that is associated with that condition, including dates of approval.	Staging Report v.8 Apr2020 (W2B-PC0-ZH-RPT-00001) Compliance tracking reports: eg S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Stage 1 Pre-operational Compliance Report.	
A9	The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	**Compliant**	Section 5 of the CEMP provides details of Competence, training and awareness checking and training via inductions, toolbox talks and daily pre-start meetings. Induction records sighted in this audit.	Construction Environment Management Plans S1, S2 and S3-11 Environmental Induction register and induction presentation	
A10	The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.	**Compliant**	Incidents are reported in the compliance tracking reports and recorded in the online IMPACT system (sighted in this audit). The IMPACT system was reviewed/verified in this audit. The event reporting includes a summary of event, actions, people involved, any investigations and details of damages.	Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Stage 1 Pre-operational Compliance Report. IMPACT (online) LORA event reports	
A11	In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in 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.	**Not triggered**	Auditees responded that there was no dispute that triggered this.		

A12	The Applicant shall notify the Secretary and relevant public authorities of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident. The Applicant shall provide full written details of the incident to the Secretary within seven days of the date on which the incident occurred. Note: • Where an incident also requires reporting to the EPA and/or OEH, the incident report prepared for the purposes of notifying the EPA and/or OEH would meet this requirement.	**Compliant**	CEMP Chapter 7 and Appendix A5 (S3-11) / Appendix A6 (S1-2) provides the procedures, to report incidents and emergencies including potential scenarios, of reporting incidents informing ER and RMS Representative within 24hours. As per the RMS procedure, it is the responsibility of the RMS Regional Environment Manager to complete the process of notifying EPA and other authorities. Reference is provided to Clause 101 of POEO Gen Regs where verbal notification to relevant authorities followed by provision of written report within seven days. Incident reporting is undertaken as per the compliance tracking program (condition D27) via Pacific Complete's online incident reporting system IMPACT and summarised in the letter submitting compliance reports. The IMPACT system was reviewed/verified in this audit. As per audit discussions, a verbal advice on incidents with significant off-site impacts is provided within one hour to the ER and RMS Representative, followed by written report in two days and a detailed information submitted in 10 days in line with process in CEMP and compliance tracking program. Evidence of reporting for two incidents noted: 11 Oct 2018 Category 1 Incident has occurred in Portion D of W2B Pacific Highway Upgrade at approximate CH 148300. 22 Nov 2018 Cat 1 incident reported on 23 Nov (changed to Cat 2 on 26 Nov) on failure of hydrocarbon booms causing water pollution and corrective measures taken.	Construction Environment Management Plans S1, S2 and S3-11 Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Stage 1 Pre-operational Compliance Report. Letter submitting compliance reports (e.g. W2B-PC0-0-ZH-LET-00010/11) DPIE Approval of CEMP S3-11 v5 dated 16/3/2017 DPIE approval of Compliance Tracking Program stage 1 IMPACT (online) LORA event reporting system as sighted at Audit discussions on 30/8/2021 W2B-PC0-A-ZH-EML-00003 & W2B-PC0-A-ZH-EML-00004 (Emu Strike at Green Hill Cut- incident 29/3/2021 and reported 01/04/2021; DPIE close out on 21/4/2021) & IMPACT example of incorrect water management incident on 31/3/2021 by Quickway Constructions (corrective action implemented) #35573 provided as W2B-PC0-0-EX-REC-00005. Examples sighted of written notification to DPIE: - 22 November 2018 incident: reported to DPIE on 23 November 2018 at 12:45 - W2B-PC0-0-EX-REC-00011 - 11 October 2018 incident: reported to DPIE on 11 October 2018 at 3:47pm - W2B-PC0-0-EX-REC-00012
A13	The Applicant shall meet the requirements of the Secretary or relevant public authority (as determined by the Secretary) to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition A12, within such period as the Secretary may require.	**Not triggered**	The IMPACT system was reviewed/verified in this audit. The event reporting includes a summary of event, actions, people involved, any investigations and details of damages and action status. During audit discussions, it was confirmed that no specific requirements were issued by DPIE over any incidents reported.	Construction Environment Management Plans S1, S2 and S3-11 Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Stage 1 Pre-operational Compliance Report. Letter submitting compliance reports (e.g. W2B-PC0-0-ZH-LET-00010/11) IMPACT (online) LORA event reporting system as sighted at Audit discussions on 30/8/2021.

Detailed Findings and Recommendations - TABLE D-2

DPE Infrastructure Approval SSI-4963

<table>
<tr><th>Clause</th><th>Requirement</th><th>Compliance</th><th>Audit Finding</th><th>Objective Evidence</th><th>Recommendation</th></tr>
<tr><td colspan="6">Sch. 2 Part B. Environmental Performance</td></tr>
<tr><td colspan="6">BIODIVERSITY</td></tr>
<tr><td>B1</td><td>The clearing of native vegetation shall be minimised with the objective of reducing impacts to any threatened species or EECs where feasible and reasonable, consistent with the following:</td><td>Compliant</td><td>Procedures were in place to ensure clearing limits would be adhered to.
Mitigation measures in table 6-1 of the CFFMP state that any works required outside the construction footprint will be referred to the Environment Manager for advice on further assessment and approval requirements in accordance with Section 3.7 of the CEMP.
Protective fencing (FF8 in Table 6-1) was to mark clearing limits and no-go areas. Clearing limits to be marked in accordance with RMS biodiversity guidelines.
Each of the threatened Species Management Plans also contained pre-clearance procedures detailing habitat / native vegetation exclusion zones.
Procedures and training was incorporated into the CEMP.</td><td>Construction Flora and Fauna Management Plan
Threatened Species MPs
Construction Environment Management Plan
Final Clearing Report (Status of W2B project compliance against MCoA B1 clearing limits Memo - W2B-PC0-0-EX-MEM-00039) dated 12/8/2021</td><td></td></tr>
<tr><td>B1-a</td><td>clearing of native vegetation shall be limited to a total area of 931.7 hectares, within the SSI boundary defined in the document referred to in condition A2(c), subject to condition B1(b);</td><td></td><td>The Biodiversity Offset Strategy notes there would be impacts to 900.39 hectares of native vegetation. As-built calculations (Table 1, Final Clearing Report memo) state that 753 ha was removed.</td><td>Biodiversity Offset Strategy
Final Clearing Report (Status of W2B Project compliance against MCoA B1 clearing limits Memo - W2B-PC0-0-EX-MEM-00039) dated 12/8/2021</td><td></td></tr>
<tr><td>B1-b</td><td>clearing of native vegetation for ancillary facilities specified in the document referred to in condition A2(d) and outside the SSI boundary defined in the document referred to in condition A2(c) shall be limited to 4.75 hectares</td><td></td><td>As-built calculation (Table 1, Final Clearing Report memo) state that 0 ha of native vegetation were removed for the purposes of ancillary facilities.</td><td>Biodiversity Offset Strategy
Final Clearing Report (Status of W2B project compliance against MCoA B1 clearing limits Memo - W2B-PC0-0-EX-MEM-00039) dated 12/8/2021</td><td></td></tr>
<tr><td>B1-c</td><td>clearing of threatened ecological communities shall be limited to the areas specified in Table 6-1 (under the column titled: Revised—direct impact (hectares)) of Appendix J of the document referred to in condition A2(c), subject to condition B1(d);</td><td></td><td>As-built clearing calculations are less (214.74Ha) than the approved clearing area for all TECs (263.9Ha).

<table>
<tr><td>B1(c)</td><td>Clearing of Lowland Rainforest in NSW North Coast and Sydney Basin Bioregions (Endangered, TSC Act)</td><td>4.2</td><td>4.2</td><td>4.2</td></tr>
<tr><td></td><td>Lowland rainforest in Sub-Tropical Australia (Critically Endangered, EPBC Act)</td><td>2.0</td><td>1.96</td><td>1.98</td></tr>
<tr><td></td><td>Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions (Endangered, TSC Act)</td><td>0.2</td><td>0.18</td><td>0.18</td></tr>
<tr><td></td><td>Littoral Rainforest and Coastal Vine Thickets of Eastern Australia (Critically Endangered, EPBC Act)</td><td>0</td><td>0.18</td><td>0.18</td></tr>
<tr><td></td><td>Coastal Cypress Pine Forest of the NSW North Coast Bioregion (Endangered TSC Act)</td><td>3.3</td><td>3.2</td><td>3.02</td></tr>
<tr><td></td><td>Freshwater Wetlands on Coastal Floodplain Forest of the NSW North Coast Bioregion (Endangered, TSC Act)</td><td>5.1</td><td>5.1</td><td>5.08</td></tr>
<tr><td></td><td>Subtropical Coastal Floodplain Forest of the NSW North Coast Bioregion (Endangered, TSC Act)</td><td>93.9</td><td>73.9</td><td>66.86</td></tr>
<tr><td></td><td>Swamp Sclerophyll Forest on Coastal Floodplains of the NSW North Coast, Sydney Basin and South East Corner Bioregions (Endangered, TSC Act)</td><td>112.1</td><td>108.0</td><td>98.29</td></tr>
<tr><td></td><td>Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner Bioregions (Endangered, TSC Act)</td><td>43.1</td><td>39.0</td><td>34.95</td></tr>
</table></td><td>Biodiversity Offset Strategy
Pacific Highway Upgrade Woolgoolga to Ballina Submissions / Preferred Infrastructure Report (Appendix J, Table 6-1 under the column 'revised - direct impact (hectares)).
Final Clearing Report (Status of W2B Project compliance against MCoA B1 clearing limits Memo - W2B-PC0-0-EX-MEM-00039) dated 12/8/2021</td><td></td></tr>
<tr><td>B1-d</td><td>clearing of the Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions shall be limited to a total area of 0.5 hectares; and</td><td></td><td>As-built clearing calculations state impacts to 0.18 ha of this TEC.</td><td>Biodiversity Offset Strategy
Final Clearing Report (Status of W2B Project compliance against MCoA B1 clearing limits Memo - W2B-PC0-0-EX-MEM-00039) dated 12/8/2021</td><td></td></tr>
<tr><td>B1-e</td><td>clearing of Koala (Phascolarctos cinereus) primary and secondary habitat shall be limited to a total area of 375 hectares.</td><td></td><td>As-built clearing calculations state impacts to 303.75 ha of koala primary and secondary habitat</td><td>Biodiversity Offset Strategy
W2B-PC0-0-EX-MEM-00039</td><td></td></tr>
</table>

B2	Where feasible and reasonable, remnant vegetation shall be retained between the SSI boundary and the SSI footprint.	**Compliant**	Mitigation measures in table 6-1 of the CFFMP state that remnant vegetation would be retained where feasible and reasonable. Procedures were described in the CFMP, CEMP and Threatened Species MPs to prevent unnecessary clearing of native vegetation. Advice from the EPA 9/7/2021 indicated ecologist discretion in regards to felling trees on the boundary line, indicating some may have been felled that were not needed to be. Compliance Monitoring Report (October 2016 - March 2017) notes that flora monitoring is conducted weekly to ensure no impacts outside the approved clearing limits are occurring. Works are managed within the SSI boundary and footprint through signage and flagging and delineation to reduce the potential for impacts on flora outside approved clearing limits. Final clearing report includes reference to actions taken to retain remnant vegetation as observed during site audit.	Biodiversity Offset Strategy EPA email communication 9/7/2021 Compliance Report (October 2016 - March 2017) Final Clearing Report (Status of W2B Project compliance against MCoA B1 clearing limits Memo - W2B-PC0-0-EX-MEM-00039) dated 12/8/2021 Site audit observations (e.g. this audit report, Appendix E Photos 19, 21, 33) Clearing concept design map (provided as W2B-PC0-0-EX-MAP-00006)
B3	Native vegetation shall be established in or adjacent to disturbed areas within the SSI boundary to provide habitat for wildlife following the completion of construction in the vicinity of the disturbed area, consistent with the Urban Design and Landscape Plan required under condition D20.	**Compliant**	S5-6 Urban Design plan refers to compensatory green thighed frog pond bear Iluka interchange. Chapter 7 (S5-6) refers to Koala tree species selection and Tables 8.3, 8.8 and 8.9 of the referenced Urban Design Plan list vegetation communities and species lists. Chapter 9 and 14 (S3-4) Urban Design plan refers to emu habitat planting. Checked and confirmed during site audit. Refer to example photos in this audit report Appendix E Photos 18, 25, 27, 34, 35 (Green-Thighed Frog pond, native vegetation planting for Koalas and Emus).	Site audit investigation observation W2B design and landscape plan | Maclean to Devils Pulpit Sections 5 and 6 W2B Glenugie to Maclean Urban Design and Landscape Plan W2B Devils Pulpit to Richmond River Urban Design and Landscape Plan W2B Bridge over Richmond River Urban Design and Landscape Plan W2B Richmond River to Ballina Urban Design and Landscape Plan Koala Revegetation Strategy This audit report Appendix E Photos 18, 25, 27, 34, 35
B4	Light spill from the SSI shall be avoided on Pink Underwing Moth and Atlas Rainforest Ground Beetle habitat, where feasible and reasonable.	**Compliant**	Details of how impacts from light spill will be avoided and minimised are addressed in Sections 6.3.5 and 7.3.1 and summarised in Table 6-1 and Table 7-3 of the Threatened Invertebrate Management Plan. This plan is attached as Appendix F in the Construction Flora and Fauna Management Plan. Invertebrate monitoring reports confirms neither species appears to have been impacted, based on various surveys undertaken. Compliance reports confirm low wattage lights used as per recommendations.	Threatened Invertebrate MP Construction Flora and Fauna MP Compliance Reports: S3-11 Oct16-Mar17 Invertebrate Monitoring Annual Reports 2017 (pre-construction), 2018, 2019, 2020 on project website
B5	Prior to construction, pre clearing surveys and inspections for endangered and threatened species shall be undertaken. The surveys and inspections, and any subsequent relocation of species, shall be undertaken under the guidance of a suitably qualified ecologist and shall be in accordance with the methodology incorporated into the approved Construction Flora and Fauna Management Plan.	**Compliant**	Details of pre-clearing surveys are provided in section 5.4 of the Construction FFMP. Specific guidelines for threatened species are considered under the management plans for these species (Frogs, gliders, Long-nosed Potoroo, koala, invertebrates, bats). The Fauna Handling and Rescue Procedure is provided in Appendix N of the CFFMP stating that records will be kept on fauna mortality, injury, treatment and release sites as standard protocols. Compliance report (April - September 2018) notes that tree stumps and hollows / log salvage has occurred, pre-clearance surveys completed, temporary fencing replaced with permanent fencing, updates of fauna sightings occurred in the project App. Compliance Report (October 2016 - March 2017) notes pre-clearance monitoring undertaken for Potoroo, OPP. Also notes that flora monitoring undertaken to ensure no impacts outside approved clearing limits are occurring. Examples of pre-clearing surveys and inspections	Construction FFMP Threatened Species MP Compliance Tracking Program Compliance Reports (April - September 2018). Compliance Report (Oct2016 - March2017) Pre-clearing assessment reports for chainages 162250-163350, 157150-157700, 159900-163860, culvert D200 Wardell Rd
	All clearing of Koala habitat trees shall be undertaken in the presence of a Koala spotter.		Compliance reports state that ecologists were present during all clearing activities.	Koala MP Construction Flora and Fauna MP Compliance Report (Oct2016 - March2017)

B6	Incidental or unanticipated threatened flora and fauna finds shall be immediately reported and clearing work stopped in the vicinity of the find to allow for an evaluation of an appropriate response in accordance with the Construction Flora and Fauna Management Plan.	Compliant	Construction Flora and Fauna MP - Unexpected Threatened Species Finds Procedure (Appendix O - not reviewed); Threatened Plant protected and ecologists consulted to evaluated appropriate response as per CFFMP. Compliance Monitoring report section 3.3 provides details of instances where the unexpected finds procedure was followed including translocation individuals, avoiding individuals, fencing and adding no-go zones. Example unexpected find process as per incident report for "Singleton Mint Bush" noting it as an unexpected find.	Construction Flora and Fauna MP Compliance Report (Oct2016 - March2017) Incident report [W2B-PC0-B-EF-REC-00001] dated 14/5/2018 reporting the sighting of a Singleton Mint Bush.
B7	High risk construction activities in known Oxleyan Pygmy Perch habitat shall not be undertaken during the Oxleyan Pygmy Perch spawning period, or on days when the relevant Bureau of Meteorology site predicts a 90% chance of 10mm of rain or more, unless otherwise agreed by DPI (Fisheries).	Compliant	The Threatened Fish MP identifies areas of high risk activities in section 6.3.4 as agreed with DPI (Fisheries), and specifies that no high risk activities can occur in these areas during October - April or on days where the BOM predicts 90% chance of 10mm of rain or more. Compliance Report October 2016 - March 2017 states that BOM data was monitored and that two gates (not high risk activity) were installed during October-April period in OPP management area but that all high risk activities occurred prior to end of September.	Threatened Fish MP Fauna Connectivity Strategy (1-2) (3-11) Compliance Report (October 2016 - March 2017)
B8	Temporary bridge or arch structures in known Oxleyan Pygmy Perch habitat shall be used if the crossing is intended to be in place for more than 3 months, unless otherwise agreed by DPI (Fisheries)	Compliant	Section 6.3.7 of the Threatened Fish MP details that temporary bridge or arch structures in known Oxleyan Pygmy Perch habitat shall be used if the crossing is intended to be in place for more than 3 months unless otherwise agreed by DPI (Fisheries). An example of consultation with DPI (Fisheries) sighted regarding bridge 51, followed by Email dated 06/9/2017 from RMS to DPI(Fisheries) with regard to a temporary piped crossing to remain in place into OPP spawning period	Threatened Fish MP Fauna Connectivity Strategy (1-2) (3-11) Email dated 29/8/2017 accepting proposal to complete the bridge 51 by Nov. Letter of endorsement to this proposal from Mathew Birch, Aquatic Science and Management, dated 31/8/2017
B9	Where temporary crossings in known Oxleyan Pygmy Perch habitat are proposed with culverts or pipes, the Applicant shall, in consultation with DPI (Fisheries): (a) determine the size of the culverts or pipes to facilitate fish passage; and (b) identify the minimum size of clean rock to be used to ensure that rock material will not wash into the waterway in periods of high flows. Temporary culvert or pipe crossings shall be removed prior to the start of the Oxleyan Pygmy Perch spawning period, unless otherwise agreed by DPI (Fisheries).	Compliant	Section 6.3.7 of the Threatened Fish MP details that where temporary crossings in known OPP habitat are proposed the size of culvert or pipes will be determined with DPI Fisheries. The Fauna Connectivity Strategy (Sections 1-2) provides detailed drawings of bridge design and documents consultation with DPI (Fisheries) to determine the design of permanent structures facilitating fish passage. Section 4.7 of the Compliance Report (April - September 2018) notes that a warning letter was issued by DPI for failing to comply with this condition. Consultation with DPI (Fishers) sighted regarding review of ESCP for OPP Culverts / CH115300 & 113850 and regarding temporary pipes used to be same or larger than those used in adjacent sites	Threatened Fish MP Fauna Connectivity Strategy (1-2) (3-11) Compliance Report (April - September 2018) Email correspondence between PCo and DPI (Fisheries) regarding review of ESCP for OPP culverts at ch. 113850 and 115300
B10	Subject to conditions B11 and B12, the Applicant shall revise the Connectivity Strategy identified in the documents listed in condition A2(e), based on the outcomes of the Mitigation Framework required by condition D1. Note: • The requirements for the Connectivity Strategy are contained in condition D2.	Compliant	The connectivity strategies for sections 1-2 and 3-11 contain details of the design and consultation processes and take into account the results of targeted surveys.	Connectivity Strategy (S3-11) Connectivity Strategy (S1-2)
B11	As part of detailed design, the Applicant shall further investigate design refinements for fauna crossings and associated exclusionary measures, between station 41.500 and station 80.000 to improve connectivity for the Coastal Emu, and in the proximity of station 96.000 and between station 137.800 and station 159.700 to improve connectivity for the Koala. Any changes to fauna crossings and exclusionary measures shall be included in the Connectivity Strategy required under condition D2.	Compliant	The connectivity strategy (Sections 3-11) March 2019 includes the chainages mentioned for Coastal Emu and Koala and details regarding the structure type and design of crossings, as well as agency consultation. Table 2-1 provides detailed discussion around how this requirement has been addressed, including additional surveys, workshops and updates to TSMP. The Connectivity Strategy includes reference to design review updates.	Connectivity Strategy (S3-11) Connectivity Strategy (S1-2)
B12	Investigations into the location and design of connectivity structures, including but not limited to those identified in the documents listed under conditions A2(c) and A2(e), shall be undertaken during detailed design with the input of a suitably qualified and experienced ecologist. The investigations shall be undertaken in consultation with the EPA, DPI (Fisheries) and DoE and include workshops and on-site ground verification. The results of these investigations shall be detailed in the Connectivity Strategy required under condition D2.	Compliant	The connectivity strategies for sections 1-2 and 3-11 contain details of the design and consultation processes. This has been prepared by qualified and experienced ecologist and includes details of agency consultation and Environment Design workshops (including attendee entities) per details provided in section 1.5, chapter 5 and Appendix B of S3-11 Strategy.	Connectivity Strategy (S3-11) Connectivity Strategy (S1-2)

B13	The Applicant shall minimise riparian vegetation clearing during construction and undertake a targeted rehabilitation program post construction to restore in-stream and riparian habitat to at least the pre-construction condition or better, unless otherwise agreed by DPI (Fisheries). All areas disturbed by the SSI that are in the vicinity of known Oxleyan Pygmy Perch habitat waterways shall be stabilised prior to the Oxleyan Pygmy Perch spawning period, unless otherwise agreed by DPI (Fisheries).	**Compliant**	Section 6.3.10 of the Threatened Fish MP details the goals of habitat restoration in riparian areas. Table 6-2 specifies mitigation goals for OPP to be undertaken during construction including monthly inspections of disturbed areas in OPP waterways, weekly water quality monitoring, biannual fish species surveys, stabilisation of exposed banks, rehabilitation to commence within 1 month of construction. Section 7 outlines operational management measures to restore habitat including a recommended monitoring and maintenance schedule (Table 7-1, Table 7-2), and monitoring actions in Table 7-3 including water quality monitoring quarterly, monitoring of at least 3 'events' in construction and operation period, biannual fish surveys to establish species relative abundance, monthly vegetation monitoring for the first 12 months then every 6 months for years 2 and 3. Compliance Tracking Report (Oct 2019 - March 2020) states that bank stabilisation occurred as agreed by DPI Fisheries. S2 Compliance Tracking Report (May-Oct20) states that Prior to commencement of clearing and during clearing, TfNSW and LLE reviewed clearing in riparian zones and minimised vegetation clearing to the minimum required to construct the Project. S3-11 Water Quality Monitoring Report includes incident summary referring to incidents and corrective action undertaken to minimise impact.	Threatened Fish MP Fauna Connectivity Strategy (S1-2) (S3-11) CEMP Appendix B2 Construction FFMP Compliance Tracking Report Oct2019 - March 2020; S2 Compliance Tracking Report May - Oct 2020 S1-2 Annual Water Quality Monitoring Report 2020 S3-11 Annual Water Quality Monitoring Report (Mar19) for Jun17-Jun18

	NOISE AND VIBRATION				
B14	The SSI shall be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan. Note: • The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the construction Noise Management Level.	**Compliant**	CNVMP section 2.1 Purpose and section 3.1 Relevant legislation and guidelines list the guidelines and standards considered for noise and vibration assessment in the EIS and subsequently CNVMP section 7 provides environmental control measures. Audit discussion with the ER noted no particular complaints regarding noise. Compliance monitoring reports include noise monitoring details with commentary in Appendix B.	CEMP Appendix B3 - CNVMP DPE Approval letter on CNVMP S3-11 dt 3 Dec 2015 DPIE Ref 14/15001 signed by Karen Jones, Director Transport Assessments, as Delegate of the Secretary. Audit discussion with ER on 13/7/21 Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17; Stage 1 pre-operational compliance report dated 18/8/2017	
B15	Construction activities associated with the SSI shall be undertaken during the following standard construction hours: (a) 7:00am to 6:00pm Monday to Friday, inclusive; and (b) 8:00am to 5:00pm Saturday; and (c) at no time on Sunday or public holidays.	**Compliant**	These conditions have been addressed in the approved CNVMP/ App D Out of Hours Work. Extended hours of work have been allowed in strategic locations and discussed with adjacent residents, EPA , the ER and the ERG. Records sighted of OOHW application registers including justification, details of works and status of agreements.	CEMP Appendix B3- CNVMP and Appendix C/D Out of hours work procedure S3-11 Out of Hours Works (OOHW) monthly registers April 2017 - May 2021 / EPL20713 Out of Hours Applications - Section 5 summary of all OOHW applications	
B16	Construction works outside the standard construction hours may be undertaken in the following circumstances: (a) construction works that generate noise that is: (i) no more than 5 dB(A) above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and (ii) no more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC 2009) at other sensitive receivers; or (b) for the delivery of materials required outside the standard construction hours by the NSW Police Force or other authorities for safety reasons; or (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or (d) between 6.00am and 7.00am and 6.00pm and 7.00pm Monday to Friday (except public holidays) in sparsely populated areas (these construction hours may be reviewed and/or revoked by the Secretary in consultation with the EPA in the case of unresolved noise complaints); or (e) low noise impact activities and work between: (i) 6.00am and 7.00am Monday to Friday; and/or (ii) 6.00pm and 7.00pm Monday to Friday; or (f) works approved through an EPL; or (g) works approved by a Construction Environment Management Plan or Construction Noise and Vibration Management Plan for the SSI.	**Non-compliant**	Noted The Out of Hours Work Procedure included in CNVMP refers to this MCoA and addresses the requirements. Section 3 of the procedure provides justification for out of hours work. Section 4 of the procedures details the Out of Hours Works approval process including noise assessment, mitigation measures and consultation. Approval pathway is depicted in Figure 4-1 (S3-11 CNVMP). EPL annual return 2017-2018 noted a non-compliance against EPL20713 L5.1 (Standard construction hours) as Soil binder application was undertaken past the standard construction hours without out of hours works approval in place. At the time, the project was preparing for the Christmas shutdown period. Soil binder was part of the erosion control strategy. Appropriate control action was undertaken. During construction of a pipeline crossing for a residents access track, works were not completed by the standard construction hours at 6pm. This was due to late delivery of backfill material and resident access safety concern. EPL Annual Return notes that Appropriate Action was taken. As per audit discussions, the reported OOHW Incidents as in EPL Annual Return references were not for emergency works. As per CEMP incident management procedure and as detailed in Annual Return documentation Lessons Learned / Collective Insight completed during construction phase to prevent recurrence. No harm and no complaints associated with these events. Self identified and reported to EPA in accordance with CEMP and EPL by Pacific Complete	CEMP Appendix B3- CNVMP and Appendix C (S1 and S3-11) / D (S2) Out of hours work procedure POEO public records for EPL20713 Audit discussions 30/8/2021	**NC1** **Several incidents are noted in the EPL Annual Return referenced against EPL condition L5.1 that breaches the OOHW without approvals. It is noted that Appropriate Action was undertaken in each instance and no further action was required by authorities. No corrective action is required.**

B17	Construction activities which cannot be undertaken during the standard construction hours for technical or other justifiable reasons (Out of Hours work) may be permitted outside the standard construction hours with the approval of the Environmental Representative. Out of Hours work shall be undertaken in accordance with an approved Construction Environment Management Plan or Construction Noise and Vibration Management Plan for the SSI, where that plan provides a process for the consideration of Out of Hours work. This consideration includes: (a) process for obtaining the Environmental Representative's approval for Out of Hours work; (b) details of the nature and need for activities to be conducted during the varied construction hours; (c) justifies the varied construction hours in accordance with the Interim Construction Noise Guideline (DECC, 2009); (d) provides evidence that consultation with potentially affected receivers and notification of the relevant council has been undertaken, that the issues raised have been addressed and all feasible and reasonable mitigation measures have been put in place; and (e) provides evidence of consultation with the EPA on the proposed variation in standard construction hours.	**Compliant**	Noted The Out of Hours Work Procedure included in CNVMP refers to this MCoA and addresses the requirements. Section 3 of the procedure provides justification for out of hours work. Section 4 of the procedures details the Out of Hours Works approval process including noise assessment, mitigation measures and consultation. Reference is also given to RMS Specification G36 – environmental protection. The OOHW register includes summary of nature and need of activities/justification and other details as required. Sample OOHW application sighted (BGC Contracting, dated 4/11/2019 for works during 4/11/2019 - 31/2/2020 - a non-existent date) at Bridge A33 over Lee's Drain between CH73350-73400 includes details as required per this MCoA and refers to notification to sensitive receivers, EPL checklist states EPA endorsement (not verified) and consultation/approval with Clarence Valley Council. EPL checklist noetes consultation with EPA, RMS, DPE and Council. However, Evidence of approval from ER and consultation with EPA not sighted.	CEMP Appendix B3- CNVMP and Appendix C/D Out of hours work procedure S3-11 Out of Hours Works (OOHW) monthly registers April 2017 - May 2021 / EPL20713 BGC Contracting OOHW application provided as W2B-BGC-A-EX-PER-00011 Eg approval OOHW Procedure: - OOHW approval Mar20-007 (EPA consultation Appendix F and ER consulation Appendix G) [provided as W2B-PC0-0-EX-PER-00001] - OOHW approval Jan20-007 (EPA consultation Appendix F and ER constulation Appendix G) [provided as W2B-PC0-0-EX-PER-00002]
B18	Construction activities resulting in impulsive or tonal noise emission (such as rock breaking, rock hammering, pile driving) shall only be undertaken: (a) between the hours of 8:00am to 5:00pm Monday to Friday; (b) between the hours of 8:00am to 1:00pm Saturday; and (c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block. For the purposes of this condition 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition. The works subject to this condition may be undertaken in sparsely populated areas within the standard construction hours.	**Compliant**	This requirement is addressed in the CNVMP - Environmental Control Measures provides responsibility and reference to 'Good Practice'. Compliance Tracking Reports Appendix B includes noise and vibration monitoring results. Reference is also given to RMS Specification G36 – environmental protection. Example EWMS incorporating mitigation measures for high noise activities stipulated in B18/B19 for Harwood Bridge Land and Marine piling attached (i) Piling on Land (Item 9 stipulates working hours as per this condition) and (ii) Marine Piling (Item 11).	CEMP Appendix B3- CNVMP Audit discussion with ER on 13/7/21 Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17 and Apr-Sep20; Stage 1 pre-operational compliance report dated 18/8/2017 EWMS for Bridge over Clarence River at Harwood, piling on land EWMS for Bridge over Clarence River at Harwood, marine piling
B19	The Applicant shall, where feasible and reasonable, limit high noise impact activities and work to the mid-morning and mid-afternoon periods, except in sparsely populated areas.	**Compliant**	There are environmental control measures included in CNVMP and noise monitoring results included in Compliance Tracking Report Appendix. Reference is also given to RMS Specification G36 – environmental protection. S2 Compliance Tracking Report states that no high-noise impact activities were undertaken and refers to management plan and environmental controls. Work control implementation is sighted in provided example EWMS for piling activities at Bridge over Clarence River at Hardwood.	CEMP Appendix B3- CNVMP Audit discussion with ER on 13/7/21 Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17 and Apr-Sep20; Stage 1 pre-operational compliance report dated 18/8/2017 EWMS for Bridge over Clarence River at Harwood, piling on land EWMS for Bridge over Clarence River at Harwood, marine piling
B20	The SSI shall be constructed with the aim of achieving the following construction vibration goals: (a) for structural damage to heritage structures, the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration – Part 3 Effects of vibration on structures; (b) for damage to other buildings and/or structures, the vibration limits set out in the British Standard BS 7385-1:1990 – Evaluation and measurement of vibration in buildings—Guide for measurement of vibration and evaluation of their effects on buildings (and referenced in Australian Standard 2187.2 – 2006 Explosives – Storage and use – Use of explosives); and (c) for human exposure, the acceptable vibration values set out in Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006).	**Compliant**	There are environmental control measures included in CNVMP and blasting monitoring results included in Compliance Tracking Report Appendix. S2 Compliance Tracking Report states adherence to this condition. Vibration monitoring reports sighted prepared to address concerns of residents as noted regarding noise and vibration at their property and presents details of vibration and noise monitoring undertaken at site, noting the vibration levels were below the adopted threshold at one location and above threshold for perception at another location though low relative to conservative structural damage criterion. Both examples sighted related to residence buildings and not heritage structures.	CEMP Appendix B3- CNVMP Audit discussion with ER on 13/7/21 Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17 and Apr-Sep20; Stage 1 pre-operational compliance report dated 18/8/2017 SLR Vibration Monitoring Report (2/33 Scullin St, Townsend dated 19/6/2019 - provided as W2B-SLR-0-EN-RPT-00022) SLR Vibration Monitoring Report (826 Pacific Highway, Ulmarra dated 10/10/2018 - provided as W2B-SLR-0-EN-RPT-00027)
B21	Blasting associated with the SSI shall only be undertaken during the following hours: (a) 9:00am to 5:00pm, Monday to Friday, inclusive; (b) 9:00am to 1:00pm on Saturday; and (c) at no time on Sunday or public holidays. Blasting outside the above hours and in accordance with the standard construction hours where: (i) no sensitive receivers in sparsely populated areas would be impacted by blasting; or (ii) an agreement has been made with receivers within 200 metres of the blast zone to permit blasting in accordance with the standard construction hours.	**Compliant**	This requirement is addressed in the CNVMPs with control measures. As per the sighted compliance tracking reports, all blasts were within the timeframe. Audit discussions confirmed that all blasting undertaken on W2B project within the hours stipulated in MCoA B21, as noted in EPL annual returns.	CEMP Appendix B3- CNVMP CNVMP S1 and S3-11 Appendix B - Blast management procedure CNVMP S1 section 4.9, S2 section 5.4, S3-11 section 5.8 Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17 and Apr-Sep20; Stage 1 pre-operational compliance report dated 18/8/2017 EPL annual returns (sampled) via POEO public register Audit discussions 30/8/2021

	This condition does not apply in the event of a direction from the NSW Police Force or other relevant authority for safety or emergency reasons to avoid loss of life, property loss and/or to prevent environmental harm.		Noted PC stated that there have been Nil directions from public authorities with respect to blasting operations at W2B.	Audit discussions 30/8/2021	
B22	The Applicant shall ensure that Airblast overpressure generated by blasting associated with the SSI shall not exceed the criteria specified in Table 1 when measured at the most affected residence or other sensitive receiver.	**Non-compliant**	This requirement is addressed in the CNVMPs. EPL L4.1 non-compliance per annual return Jan2016-Jan2017: Air Blast overpressure limits exceeded during the first blast in this cutting due to weaker than expected ground conditions. Vibration limits were not exceeded. To prevent future recurrence bench height, blast volume have been reduced. As per S2 Compliance Tracking Report sighted, blasts on 7/5/2020 and 15/4/2020 triggered monitoring equipment's at the nearest sensitive receiver however notes the data to be compliant with Table 1 limits. As per S3-11 Oct-Mar 2017 Compliance Tracking Report, there were no air blast overpressure exceedances recorded. Auditee stated that: during the project there were more than 150 blasts including a small number of exceedances of the criteria. There were no complaints or impacts to the community associated with these works. These were reported in the compliance tracking reports. The matters were reported to relevant regulatory authorities including EPA at the time of the event and recorded in the project's EPL annual return. Corrective actions were undertaken by the contractor undertaking these works	CEMP Appendix B3- CNVMP CNVMP S1 and S3-11 Appendix B - Blast management procedure. CNVMP S1 section 4.9/6.3, S2 section 5.4/7.3, S3-11 section 5.8/6.5 Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17 and Apr-Sep20; Stage 1 pre-operational compliance report dated 18/8/2017 POEO public register - EPL non compliance summary. Audit discussions with PCo/TfNSW 30/8/2021	**NC2** **Airblast overpressure limits in Condition B22 were exceeded on a small number of occasions throughout the project.** **No further corrective action is required as all blasting associated with the project is complete.**

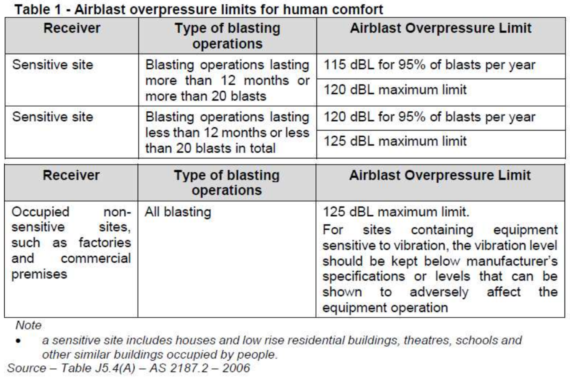


Table 1 - Airblast overpressure limits for human comfort

Receiver	Type of blasting operations	Airblast Overpressure Limit
Sensitive site	Blasting operations lasting more than 12 months or more than 20 blasts	115 dBL for 95% of blasts per year
		120 dBL maximum limit
Sensitive site	Blasting operations lasting less than 12 months or less than 20 blasts in total	120 dBL for 95% of blasts per year
		125 dBL maximum limit

Receiver	Type of blasting operations	Airblast Overpressure Limit
Occupied non-sensitive sites, such as factories and commercial premises	All blasting	125 dBL maximum limit. For sites containing equipment sensitive to vibration, the vibration level should be kept below manufacturer's specifications or levels that can be shown to adversely affect the equipment operation

Note

- *a sensitive site includes houses and low rise residential buildings, theatres, schools and other similar buildings occupied by people.*

Source – Table J5.4(A) – AS 2187.2 – 2006

B23

The Applicant shall ensure that Ground vibration generated by blasting associated with the SSI shall not exceed the criteria specified in Table 2 and Table 3 when measured at the most affected residence or other sensitive receiver.

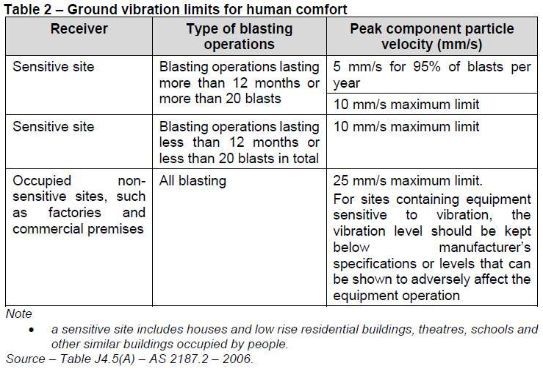


Table 2 – Ground vibration limits for human comfort

Receiver	Type of blasting operations	Peak component particle velocity (mm/s)
Sensitive site	Blasting operations lasting more than 12 months or more than 20 blasts	5 mm/s for 95% of blasts per year
		10 mm/s maximum limit
Sensitive site	Blasting operations lasting less than 12 months or less than 20 blasts in total	10 mm/s maximum limit
Occupied non-sensitive sites, such as factories and commercial premises	All blasting	25 mm/s maximum limit. For sites containing equipment sensitive to vibration, the vibration level should be kept below manufacturer's specifications or levels that can be shown to adversely affect the equipment operation

Note

- *a sensitive site includes houses and low rise residential buildings, theatres, schools and other similar buildings occupied by people.*

Source – Table J4.5(A) – AS 2187.2 – 2006.

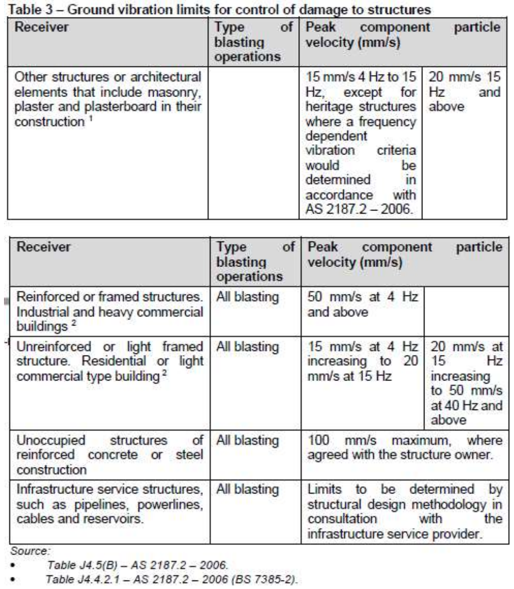


Table 3 – Ground vibration limits for control of damage to structures

Receiver	Type of blasting operations	Peak component particle velocity (mm/s)	
Other structures or architectural elements that include masonry, plaster and plasterboard in their construction ^{1}		15 mm/s 4 Hz to 15 Hz, except for heritage structures where a frequency dependent vibration criteria would be determined in accordance with AS 2187.2 – 2006.	20 mm/s 15 Hz and above

Receiver	Type of blasting operations	Peak component particle velocity (mm/s)	
Reinforced or framed structures. Industrial and heavy commercial buildings ^{2}	All blasting	50 mm/s at 4 Hz and above	
Unreinforced or light framed structure. Residential or light commercial type building ^{2}	All blasting	15 mm/s at 4 Hz increasing to 20 mm/s at 15 Hz	20 mm/s at 15 Hz increasing to 50 mm/s at 40 Hz and above
Unoccupied structures of reinforced concrete or steel construction	All blasting	100 mm/s maximum, where agreed with the structure owner.	
Infrastructure service structures, such as pipelines, powerlines, cables and reservoirs.	All blasting	Limits to be determined by structural design methodology in consultation with the infrastructure service provider.	

Source:

- *Table J4.5(B) – AS 2187.2 – 2006.*
- *Table J4.4.2.1 – AS 2187.2 – 2006 (BS 7385-2).*

Compliant

This requirement is addressed in the CNVMPs. Blast monitoring results are included in Compliance Tracking Report Appendix B.

The sighted S2 Compliance Tracking Report Appendix A states that all blast monitoring completed during the reporting period (all blasts) has exceeded criteria. Audit discussions clarified that this was a typing error. There were two blasts that triggered air blast overpressure on 15/4/2020 and 7/5/2020 both reported as being within criteria.

The S3-11 report refers to Section 5.2 of the previous 6 monthly construction compliance report (October 2016 to March 2017), where there were no notable peak particle velocity (PPV) vibrations recorded during this reporting period.

CEMP Appendix B3- CNVMP

CNVMP S1 and S3-11 Appendix B - Blast management procedure

CNVMP S1 section 4.9/6.3, S2 section 5.4/7.3, S3-11 section 5.8/6.5

Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17; Stage 1 pre-operational compliance report dated 18/8/2017

B24	The blasting criteria specified in conditions B22 and/or B23 may be increased where the Applicant has obtained the written agreement of the relevant landowner to increase the criteria. In obtaining the agreement the Applicant shall make available to the landowner: (a) details of the proposed blasting program and justification for the proposed increase to blasting criteria including alternatives considered (where relevant); (b) the environmental impacts of the increased blast limits on the surrounding environment and most affected residences or other sensitive receivers including, but not limited to noise, vibration and air quality and any risk to surrounding utilities, services or other structures; and (c) the blast management and mitigation measures, and the procedures to be implemented to monitor blasting impacts. The Applicant shall provide a copy of the written agreement to the Secretary and the EPA, including details of the consultation undertaken (with clear identification of proposed blast limits and potential property impacts) prior to commencing blasting at the increased limits. Unless otherwise agreed by the Secretary, the following exclusions apply to the application of this condition: (a) Any agreements reached may be terminated by the landowner at any time should concerns about the increased blasting limits be unresolved. Should an agreement be terminated by a landowner, the Applicant shall not exceed the criteria specified in conditions B22 and/or B23 for future blasting at that receiver. (b) The blasting limit agreed to under any agreement for an occupied residential building can at no time exceed a maximum Peak Particle Velocity vibration level of 25 mm/s or maximum Airblast Overpressure level of 125 dBL.	**Compliant**	CVNMP includes environmental control measures to address this condition if required. S3-11 compliance report Oct16-Mar17 noted that some agreements have been reached as part of Wave 3 works. Example signed agreement for works at Tyndale (signed by various residents on various dates in Nov 2016) sighted - stating no objection to increased blast limits not exceeding a maximum Peak Particle Velocity ground vibration level of 25 mm/s or maximum Air blast Overpressure level of 125 dBL.	CEMP Appendix B3- CNVMP CNVMP S1 and S3-11 Appendix B - Blast management procedure CNVMP S1 section 4.9/6.3, S2 section 5.4/7.3, S3-11 section 5.8/6.5 CEMP Appendix B6 - Air quality management plan Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17; Stage 1 pre-operational compliance report dated 18/8/2017 Tyndale Blasting - Proposal to increase Tyndale Blasting Vibration Limits; Community Agreements W2B-PC0-A-EN-AGR-00001; Notification to DPIE and EPA (email dated 7/12/2016 provided as W2B-PC0-A-EN-EML-00001) of proposed increase & the community agreements; and Tyndale Blasting Notification (W2B-PC0-A-ZJ-NTC-00025).
B25	Wherever feasible and reasonable, piling activities shall be undertaken using quieter construction methods, such as bored piles or vibrated piles rather than impact or percussion piling methods.	**Compliant**	Noted Environmental control measures in the CNVMP include this. S2 works did not involve any piling. S1 Compliance report states that Only bored piles were used on the project including the use of polymer which removes the need for any driving or vibrating piles. As per S3-11 (Apr-Sep18) impact piling was employed along with driven/bored piling. Respite periods were implemented for all impact piling and vibration monitoring noted that background vibration was higher than piling activity (S3-11 Apr-Sep18 report section 3.5). Piling carried out at the Bridge over the Clarence River at Harwood within the report period (April - October 2018) used bored piling methods. Percussive piling is used in sparsely populated areas. PCo stated that the total number of piles for W2B bridges (excluding Clarence and Richmond Major D&C packages) was 1154. The ratio of bored (714 = 62%) vs driven piles (440= 38%) indicates majority of piles were bored. Wherever geotechnical conditions permitted bored piles where utilised in bridge foundation design. For Richmond bridge (design drawings sighted), Bored piles were utilised at Pier 24, Pier 25 and Abutment B. There was one sensitive receiver reasonably close to Abutment B, approx. 200m away. Elsewhere Steel driven piles were used with a concrete plug.	CEMP Appendix B3 - CNVMP Compliance Tracking Reports: S2 May-Oct 2020; S3-11 Oct16-Mar17, Apr-Sep18, Apr-Sep20; S1 May17-Feb18. Stage 1 pre-operational compliance report dated 18/8/2017 Audit discussions 30/8/2021 Bridge over Richmond River at Broadwater at 179.04km north of Coffs Harbour IFC design drawings, provided as W2B-LLE-F01-SB-SHS-00001 Extract listing various bridges and road portion noting pile type and number of piles, provided as W2B-PC0-0-EX-REC-00007
B26	Prior to the use of the dynamic compaction construction method, the Applicant shall undertake an assessment of vibration generated by dynamic compaction on nearby sensitive receivers. Feasible and reasonable mitigation measures shall be implemented to minimise vibration impacts.	**Compliant**	Environmental control measures in the CNVMP note this, including typical plant vibration levels (ground vibration and human comfort assessment levels). RMS G36 specification annexure E sighted, that provides guidance for distances for various construction activity for building condition assessment. Dilapidation report register and sample reports (pre- and post- construction assessment by contractor as per AS4349.1) sighted. Harwood Bridge Vibratory Monitoring Field Record sheets for monitoring performed at locations including 16 River Street (Church) and residence on Petticoat Lane (during impact piling) sighted.	CEMP Appendix B3 - CNVMP Section 6.5 – Construction vibration and blasting assessment Register extract of dilapidation report register indicating residences assessed and TeamBinder report identification; Vibration monitoring report example dated 9/6/2019 at Townsend and 10/10/2018 at Ulmarra to address resident concerns; Dilapidation/condition survey report examples for site at 36 Jubilee St Maclean (pre-construction dated 18/12/2017 and post-construction 12/10/2020) provided as W2B-BGC-A-ZJ-RPT-00045 and W2B-BGC-A-ZJ-RPT-00157. Harwood Bridge Vibration Monitoring Record sheets (W2B-AFV-E-EX-REC-00006)

B27	During construction, affected educational institutions shall be consulted and reasonable steps taken to ensure that noise generating construction works in the vicinity of affected buildings are not timetabled during examination periods where practicable, unless other reasonable arrangements to the affected institutions are made at no cost to the affected institution.	**Compliant**	S1 CNVMP notes there are educational facilities in the study area. Evidence sighted as extracts from Consultation Manager on consultation on various construction activities and OOHW.	CEMP Appendix B3 - CNVMP Consultation Manager extracts for consultation with School at Harwood regarding works planned.
	OPERATIONAL NOISE			
B28	The SSI shall be designed and operated with the objective of not exceeding the road noise criteria outlined in the NSW Road Noise Policy (DECCW, 2011).	**Compliant**	All documentation has been prepared with consideration of the NSW Road Noise Policy and associated Transport requirements and guidelines.	Woolgoolga to Glenugie (Section 1-2) - Operational noise compliance report (Feb 2019), Woolgoolga to Ballina upgrade (Glenugie to Pimlico) Operational Noise Review REPORT Apr 2018, Woolgoolga to Glenugie Pacific Highway upgrade Operational noise compliance report February 2019, Woolgoolga to Ballina Pacific Highway Upgrade Glenugie to Pimlico Operational noise compliance review 13 April 2021.
B29	Where feasible and reasonable, operational noise mitigation measures shall be implemented at the start of construction (or at other times during construction) to minimise construction noise impacts.	**Compliant**	CNVMP includes operational noise mitigation measures to be implemented. As per site observation and per assessment against conditions D10-11, this condition is deemed to have been complied with.	S1-2 Noise Management Report Oct 2015, S1-2 Operational noise compliance report (Feb 2019), S3-11 Operational Noise Review REPORT Apr 2018; site audit observations

SOIL, WATER QUALITY AND HYDROLOGY

B30	WATER QUALITY Except as may be expressly provided by an EPL, the Applicant shall comply with section 120 of the Protection of the Environment Operations Act 1997.	**Compliant**	Pollution of water non compliance report in the Annual Return for EPL 207313 Condition L1 and O5 in the EPL Annual Return for Jan17-Jan18. O5: There were five instances where design capacity of the 65 sediment basins were not restored following cessation of rainfall within 5 days. L1: A previously unknown watermain on Yamba Rd was damaged resulting in water overtopping site controls with some turbid water entering Clarence River to the north. EPA action report that appropriate action taken by licensee. The EPA report did not raise a non-compliance with section 120 of POEO Act.	POEO Public Records - EPL annual return 29 Jan 2017 - 28 Jan 2018 submitted 4/4/2018. Submission of Report to EPA provided as W2B-PC0-E-EX-RPT-00001 dated 7/11/2017 with regard to Yamba Road incident.
	HYDROLOGY AND FLOODING			
B31	The hydrological and flooding impacts resulting from the SSI are to be assessed during detailed design against the 'Design Objectives for Flood Management' described in Section 2.1 of the EIS Working Paper – Hydrology and Flooding. This shall include assessment against the 'Flood Management Objectives' and the 'Other Flood Impact Considerations' as well as the other requirements of this section of the EIS. The hydrology assessment shall include the refinement of or development of new flood models (where required) for the 14 catchments investigated during the EIS. These models shall be operated for the same design floods considered in the EIS, as well as the 2000 year ARI and the probable maximum flood (PMF) design events.	**Compliant**	Chapters 4 and 5 of Hydrological Mitigation Report generally provides assessment of flooding impacts. The reports include an overview of flood modelling history with reference to models developed for the EIS phase. Figure 4.1 presents staging of regional flood model development from pre-EIS phase to Detailed Design phase including update to models, flood impact mitigation options testing, verification of models etc for the various local catchments. Design events that the models were run for include 2000 year ARI and PMF.	Hydrological Mitigation Reports (W2B-PC0-0-DF-RPT-00005/6)
B32	For the Corindi, Shark Creek and Farlows Flat areas, flooding and hydrological impacts resulting from existing highway infrastructure shall be assessed. As part of this assessment, flood models shall assess the impacts of recent highway upgrades in this area. Where the existing highway in these areas has resulted in adverse flooding and/or hydrological impacts, opportunities to reduce the quantum of these impacts shall be considered during the detailed design of the SSI, where feasible and reasonable.	**Compliant**	Hydrological Mitigation Report sighted on project website document library that includes assessment of these areas. The flood impact assessment states that the project will improve flood immunity of various sections of existing highway regional floodplain from 2 to 15 ARI event to between 20 and 100 ARI event.	Hydrological Mitigation Reports (W2B-PC0-0-DF-RPT-00005/6)
B33	Where the objectives and considerations referred to in condition B31 cannot be complied with, the Applicant shall: a) achieve compliance through modified embankment or drainage design. This might include new or duplicated drainage structures designed to minimise afflux and other impacts to waterways that traverse the road alignment, to the greatest extent practicable; or b) achieve an acceptable level of mitigation of impacts through alternative design measures (e.g. raised access tracks) in consultation with the affected land-owner; or c) reach agreement with affected landowners on impacts to property.	**Compliant**	Section 6 of Hydrological Mitigation Report states that numerous design innovations and value engineering options were tested in the flood model. Mitigation option testing was also carried out to remove or reduce the remaining areas of flood impact, and to test options for improved cross drainage configurations suggested by local landowners. PCo stated that the project team is currently (at the time of this audit) finalising updated versions of the Hydrological Mitigation Reports to capture the finalised details of any areas that are considered to be a departure of the flood management objectives. Table 6.2 of the HMR (excerpt provided from updated report) sighted that includes description of how the project team liaised with the affected stakeholder to reach an agreement at these locations as noted.	Hydrological Mitigation Reports (W2B-PC0-0-DF-RPT-00005/6) Table 6.2 of updated report: Schedule of departures from flood management objectives on private land and associated mitigation measures.
	CONSTRUCTION SOIL AND WATER MANAGEMENT			
B34	Soil and water management measures consistent with Managing Urban Stormwater - Soils and Construction Vols 1 and 2, 4th Edition (Landcom, 2004) and Managing Urban Stormwater Soil and Construction Vols 2A and 2D Main Road Construction (Department of Environment and Climate Change, 2008) 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.	**Compliant**	The CSWMP as approved is sighted - this includes environmental control measures with reference to the Landcom and DECC documents. As per the S2 six monthly compliance tracking report sighted, the works were completed as per the approved ESCPs. A fortnightly inspection by the project's Soil Conversationist undertaken to identify any additional controls, rectifications or modifications required.	CEMP Appendix B4 - Soil and Water Management Plan Six Monthly Compliance Tracking Reports Agency and ER consultation, EPL public registry on EPL 20713
B35	Where available, and of appropriate chemical and biological quality, stormwater, recycled water or other water sources shall be used, where feasible and reasonable, in preference to potable water for construction activities, including concrete mixing and dust control.	**Compliant**	Compliance tracking reports state that stormwater re-use has been maximised during construction. Sediment basins had been designed with additional water holding capacity. Dust control is included in CAQMP.	CEMP Appendix B4 - Soil and Water Management Plan; B6-Air Quality Management Plan Six Monthly Compliance Tracking Reports Agency and ER consultation, EPL public registry on EPL 20713

B36	All surface water and groundwater shall be adequately treated as far as is practicable, prior to entering the stormwater system to protect the receiving water source quality.	**Compliant**	EPL Annual Returns are noted to include non-compliances with Penalty Notice related to water management issued on two offences on 23/7/2020 one of which relates to Condition B36. Pollution of water non compliance report in the Annual Return for EPL 207313 Condition L1 in the EPL Annual Return for Jan17-Jan18. A previously unknown watermain on Yamba Rd was damaged resulting in water overtopping site controls with some turbid water entering Clarence River to the north. EPA action report that appropriate action taken by licensee and no further action was required.	CEMP Appendix B4 - Soil and Water Management Plan Six Monthly Compliance Tracking Reports Agency and ER consultation, EPL public registry on EPL 20713
	LAND CONTAMINATION			
B37	Prior to the commencement of site preparation and excavation activities, or as otherwise agreed by the Secretary, in areas identified as having a moderate to high risk of contamination, a site audit shall be carried out by a suitably accredited contaminated site auditor. A Site Audit Report is to be prepared by the site auditor detailing the outcomes of Phase 2 contamination investigations within these areas. The Site Audit Report shall detail, where relevant, whether the land is suitable (for the intended land use) or can be made suitable through remediation. 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, materials and groundwater shall be identified in the Site Audit Report and incorporated into the Construction Environmental Management Plan. Where the investigations identify that the site is suitable for the intended operations and that a remediation strategy is required, the Site Audit Report shall include a remediation strategy for addressing the site contamination, and how the environmental and human health risks will be managed during the disturbance, remediation and/or removal of contaminated soil or groundwater, and be incorporated into the Construction Environmental Management Plan. Where remediation is required, a Site Audit Statement(s) shall be prepared verifying that the site has been remediated to a standard consistent with the intended land use. Note • Terms used in this condition have the same meaning as in the Contaminated Land	**Compliant**	As per the S2 (WC2G) compliance tracking report, there was no areas of moderate to high risk of contamination identified. S3-11 CLMP section 4 identifies previous investigations (EIS assessments) and areas of potential contamination. S1 and S3-11 CLMPs refer to Site Audit Report undertaken as per requirement of this MCoA. The site audit reports were sighted in this audit. Review of remediation and validation works report sighted. Intimation to EPA and EPA's letter stating that the Wardell site (Nancy's Cattle Dip) does not warrant regulation under the CLM Act.	S2 (WC2G) six monthly and pre-operational compliance tracking report May-Oct 2020. S1 and S3-11 CEMPs' Appendix B8 - Contaminated Land Management Plans Site Audit Report & Site Audit Statement / 1508-1703 / Former United Service Station Harwood / Ref. 16070 / June 2018 by Cavvanba Consulting. Site Audit Report & Site Audit Statement / 1508-1901 Nancys Cattle Dip (Wardell) August 2019 by Cavvanba Consulting, Nancy's Dip Validation Report_18062019 (by GHD) provided as W2B-GHD-D-EX-RPT-00007-A EPA letter to RMS – Assessment of Nancys Cattle Dip provided as W2B-PC0-D-EX-LET-00006
	WATERCOURSE CROSSINGS			
B38	Watercourse crossings shall be designed and constructed in consultation with the DPI (Fisheries), EPA, NOW and DoE, and where feasible and reasonable, be consistent with the Guidelines for Controlled Activities Watercourse Crossings (Department of Water and Energy, February 2008), Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge, 2003), Policy and Guidelines for Fish Friendly Waterway Crossings (NSW Fisheries, February 2004), and Policy and Guidelines for Fish Habitat Conservation and Management (DPI Fisheries, 2013). Where multiple cell culverts are proposed for crossings of fish habitat streams, at least one cell shall be provided for fish passage, with an invert or bed level that mimics watercourse flows.	**Compliant**	The Fauna Connectivity Strategy (Sections 3-11) provides details of final connectivity structures in section 8. Table 8-1 details each connectivity structure at each chainage, including watercourse crossings, and specifies changes, justifications made in consultation with relevant agencies. Section 8-2 lists all final connectivity structures per target species. Designs of fauna crossing structures and details of agency consultation are provided in Appendices B and C. The Fauna Connectivity Strategy (Sections 1 -2) states that there is no OPP habitat in these sections and bridges will be used. All multiple cell culverts inspected during site inspection had a bed level similar to the upstream or downstream bed level.	Threatened Fish MP Fauna Connectivity Strategy (1-2) (3-11) Site Inspection observation by auditor and technical specialist.

B39	All crossings of known Giant Barred Frog habitat or waterways with the confirmed presence of the species shall be designed and constructed with bridges. Should the Applicant construct a crossing structure other than a bridge, the Applicant shall demonstrate maintained connectivity for the Giant Barred Frog upstream and downstream of that crossing for a monitoring period of three consecutive years, or such other period agreed by the Secretary in consultation with the EPA. Demonstration of maintained habitat connectivity shall:	**Compliant**	The Fauna Connectivity Strategy (Sections 3-11) states that Giant Barred Frog does not occur in sections 3 - 11 of the project. The Fauna Connectivity Strategy (Sections 1 - 2) includes details of crossing structures in section 4.3.8 that would maintain connectivity including bridges and culverts. Both the connectivity strategy and Appendix C of the Threatened Frog MP state that habitat is present downstream of the alignment only in the sections where incidental, dedicated and combined culverts are located (Dirty Creek and Boney Creek). Lack of records and less suitable habitat indicates frogs unlikely to be present upstream and therefore maintaining connectivity is less important. Operational monitoring has been completed for GBF for three years. Connectivity at the bridge locations has been confirmed over consecutive years at Corindi Creek and Halfway Creek. Continued absence of frogs recorded upstream at Boney Creek and Dirty Creek consistent with baseline surveys. At Boney Creek culvert in Section 1, a BGF was found as an unexpected find. At this location, an existing culvert has to be extended under the alignment and therefore a bridge is not feasible. All crossings of GBF habitat are considered to have been constructed with Bridges. Where bridges were not used, it was because the habitat was not considered to have been bisected, as frogs were only recorded on one side of the alignment. Monitoring demonstrates connectivity for three consecutive years.	Fauna connectivity Strategy (1-2) (3-11) Threatened Frog MP Threatened Frog Monitoring Annual Report (2017-2018, 2018-2019, 2019-2020)
B39-a	be based on baseline data that confirms the presence, nature and distribution of Giant Barred Frog population using a survey methodology that has been endorsed by the EPA, and detailed in the Mitigation Framework required in condition D1, and an assessment of the connectivity of the crossing site prior to commencement; or, if adequate baseline data is not provided to the satisfaction of the Secretary, be based on the assumption of occurrence of a population on either side of the crossing site; and	**Compliant**	The Fauna Connectivity Strategy (Sections 1 - 2) outlines baseline surveys completed and likely habitat for the Giant Barred Frog and determines that all crossing structures are likely to allow connectivity. The threatened Frog MP details baseline surveys completed for this species in section 2 and outlines population monitoring to be completed up to three years post construction. The annual reports (Table 5-1) indicate population surveys conducted.	Fauna connectivity Strategy (1-2) (3-11) Threatened Frog MP Threatened Frog Monitoring Annual Report (2017-2018, 2018-2019, 2019-2020)
B39-b	be based on evidence that the Giant Barred Frog has remained present upstream and downstream of the crossing site for the monitoring period, with periodic monitoring to occur at least biannually. Should the results of any instance of periodic monitoring record an absence of the Giant Barred Frog, the Applicant shall be required to demonstrate that this change is not as a result of the SSI within one month of the completion of that instance of periodic monitoring, to the satisfaction of the Secretary. Should the Secretary not be satisfied that the change is not a result of the SSI, the SSI will be deemed as the cause of the impact and the Applicant shall offset the loss of the habitat in accordance with this approval.	**Not triggered**	Not triggered as where culverts were used, it was not considered that they were for maintaining connectivity given population only on one side.	Fauna connectivity Strategy (1-2) (3-11) Threatened Frog MP Threatened Frog Monitoring Annual Report (2017-2018, 2018-2019, 2019-2020)
B40	Unless otherwise agreed by DPI (Fisheries), all crossings of Class 1 watercourses in known Oxleyan Pygmy Perch habitat shall be designed and constructed with a bridge or arch structure and, where feasible and reasonable, no supporting structures shall be installed within affected waterways.	**Compliant**	The fauna connectivity Strategy (stages 3-11) indicates in Table 8-10 that bridges will be constructed in all OPP habitat and Appendix B and C provides design details and consultation with DPI (Fisheries). Site audit observations confirmed compliance to this condition (e.g. This audit report Appendix E Photos 13 and 14).	The fauna connectivity Strategy (stages 1-2, 3-11) Threatened Fish MP ver 3.0 July 2015 Site Audit observation
B41	Where an Oxleyan Pygmy Perch habitat waterway is realigned or its stream profile is changed, or an in-stream structure is installed in the waterway (both permanent and temporary construction structures), the Applicant shall ensure that the final design of that waterway does not result in water velocities exceeding 0.4 metres per second under normal flow conditions. The Applicant shall determine normal flow conditions to the satisfaction of DPI (Fisheries) through baseline monitoring of known Oxleyan Pygmy Perch habitat waterways.	**Compliant**	Observed to be compliant as per site audit. All crossings are now bridges, there should be no change to 'normal' flow conditions. As per the S3-11 Compliance Tracking Report sighted, realignment of waterway BC52 was designed and constructed to the satisfaction of DPI Fisheries. Monitoring of the realigned waterway indicated velocities of 0.1 metres per second during normal flow conditions.	Threatened Fish MP ver 3.0 July 2015 Site audit observations S3-11 Compliance Tracking Report Oct16-Mar17, Apr-Sep20 S2 Compliance Tracking Report May-Oct20; C-82-SB-51 Twin Bridges over Unnamed Watercourse 1 at 167.0km North of Coffs Harbour – Design Report F67 dated 17/2/2017; C-82-SB-07 Twin Bridges over MacDonald's Creek at 169.1km North of Coffs Harbour – Design Report dated 10/2/2017

B42	The Applicant shall ensure that the SSI does not increase the afflux of waterways with known Oxleyan Pygmy Perch habitat by more than the relevant flood management objective in the documents referred to in condition A2 for flood events up to the 1 in 100 year event.	**Compliant**	PCo stated that where known OPP habitat, afflux levels have been assessed as part of the flood modelling. Afflux is compliant upstream of these structures as stated in the design reports sighted. As per the report, the bridge has been designed to provide at least Q20 ARI flood immunity and will be partially submerged in a Q100 ARI event. Flooding issues have been considered and modelled (12D & TUFLOW) as part of the associated temporary drainage works package. Drainage has been designed to make sure the afflux outside the project boundary is within the specified tolerance (regardless of the presence of OPP habitat).	Threatened Fish MP ver 3.0 July 2015 Audit discussions 30/8/2021 S3-11 Compliance Tracking Report Oct16-Mar17, Apr-Sep20 S2 Compliance Tracking Report May-Oct20; C-82-SB-51 Twin Bridges over Unnamed Watercourse 1 at 167.0km North of Coffs Harbour – Design Report F67 dated 17/2/2017; C-82-SB-07 Twin Bridges over MacDonald’s Creek at 169.1km North of Coffs Harbour – Design Report dated 10/2/2017
B43	The Applicant shall investigate the removal of the proposed embankment at station 145.2 and its replacement with an extension of the Richmond River bridge. The investigation shall consider issues around hydrology and flooding (including meeting the flooding objectives for bridges), constructability, cost, funding arrangements and visual impacts. The investigation shall include consideration of other relevant environmental impacts (noise, heritage, biodiversity, traffic etc.) and consider any alternative options. A copy of the investigation shall be submitted to the Secretary prior to the commencement of any bridge approach or embankment works in the vicinity.	**Compliant**	Site inspection observation by auditor and technical specialist confirmed bridge construction as per reference design. Section 1.7 of Hydrological Mitigation Report. Flood Technical Note sighted, which notes an investigation on proposed detailed design of the bridge without embankment providing an improvement and reduced impacts - DPE approval thereof also sighted.	Site audit observation Hydrological Mitigation Report Apr2017 (W2B-PC0-0-DF-RPT-00006) Flooding Technical Note (W2B-LLE-F-DF-MEM-00003) Rev2 dated 22/5/2017 DPE Letter dated 15/9/2017 signed by Michael Young - review of the Flooding Technical Note.

HERITAGE

	ABORIGINAL HERITAGE			
B44-a	Prior to the commencement of construction affecting PAD site WWC Dirty Creek 1 and ancillary facilities at Section 4, Site 1; Section 4, Site 3; Section 7, Site 1; Section 10, Site 1a; and Section 11, Site 1a , the Applicant shall: (a) undertake field investigation, and where required, an archaeological investigation of the site(s) using a methodology generally consistent with testing undertaken for the Environmental Impact Statement, and prepared in consultation with the EPA (Aboriginal heritage) and the Registered Aboriginal Parties; and	Compliant	S1 HMP refers to Woolgoolga to Illuka Rd Arch Methodology and Aboriginal Heritage Compliance Report (RPS, 2014). PCo stated that section 4 site 3 was not used. Report on results of field investigation sighted for Section 4 site 1 and Section 11 site 1a. Aboriginal heritage clearance letters received as of 9/7/2018 sighted - Site 11 (dated 3/3/2016) and site 4-1 (dated 17/8/2016). For site 4-1, a total of 43 test pits were excavated in the project area between 13 April and 23 April 2016. Evidence of recommendation and consultation is sighted within the letters. Details of aboriginal consultation is provided in the Archaeology Methodology and Aboriginal Heritage Compliance Report chapter 4 and Appendix I. Evidence of the archaeological investigation report submission to RAP, EPA and DPIE sighted in example archaeological reports.	S3-11/S1/S2 CEMP Appendix B5 -Construction Heritage Management Plan(s) Audit discussions 30/8/2021 Section 4 Site 1 - Ancillary Site 4-1, Lot 14 DP805843 at Tyndale, NSW. Report on the Results of Test Excavation. Site Clearance letter - AF 4-1 - Page # 256 of W2B-PC0-0-EH-REF-00001 Section 10 Site 1a, Section 11 Site 1a - Ancillary Site 11-1a, McAndrews Lane, Pimlico Report on Results of Test Excavation Site Clearance letter AF 11-1a - Page 237 of W2B-PC0-0-EH-REF-00001 Archaeology Methodology and Aboriginal Heritage Compliance Reports provided as W2B-RPS-0-EH-RPT-00001 / W2B1DR-ENV-PREC-000156 RPS Archaeological Investigation of WWC Dirty Creek 1C (submitted to DPIE & OEH on 18 December 2014, approved 28/4/15) - Aboriginal Salvage - Section 1 to 5 - Clearance letters - 120532 WWC Dirty Creek 1C - 08 October 2014 - W2BP1DR-ENV-PREC-000152 DPIE Approval letter dated 28 April 2015...W2B-PC0-0-EH-LET-00008 Report by RPS Ancillary site 11-1a McAndrews Lane - appendix report on results of test excavation (submitted to DPIE and Registered Aboriginal Parties on 1/6/15, approved on 20/7/15) - appendix of the Ancillary Facility Checklist / McAndrews Lane / A2d Ref Section 11 Site 1a. W2B-PC0-D-EX-ASS-00005 Submission to DPIE - W2B-PC0-0-UX-LET-00010
B44-b	prepare a report on the results of the archaeological investigation, including recommendations (such as further archaeological work) in consultation with the EPA and to the satisfaction of the Secretary, and shall include, but not necessarily be limited to: (i) consideration of measures to avoid or minimise disturbance to Aboriginal objects where objects of moderate to high significance are found to be present; (ii) recommendations for further investigations under condition B45 where impacts cannot be avoided; and (iii) details of management and mitigation measures to ensure there are no additional impacts due to pre-construction and construction activities; and			
B44-c	submit the report to the Registered Aboriginal Parties, the EPA (Aboriginal heritage) and the Secretary.			
B45	Prior to the commencement of construction activities affecting Aboriginal sites WWC39, WWC46, Tyndale 2 site, IR2W4, Site 11, E2/2, WWC37, Dubaljeen site (New Italy 1), The Gap Road 1, WX21 Site 8, Site 1, Site 2, Site 3 and Site 4 and sites recommended by condition B44 for further investigation, the Applicant shall: (a) develop a detailed salvage strategy, prepared in consultation with the EPA (Aboriginal heritage) and the Registered Aboriginal Parties. The salvage strategy shall be prepared to the satisfaction of the Secretary; and (b) undertake any further archaeological excavation works recommended by the results of the detailed salvage strategy. Within twelve months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall prepare a report containing the findings of the excavations, including artefact analysis and Aboriginal Site Impacts Recording Forms (ASIR), and the identification of final storage location for all Aboriginal objects recovered (testing and salvage), in consultation with the Registered Aboriginal Parties, the EPA (Aboriginal heritage) and to the satisfaction of the Secretary. The report shall be submitted to the Registered Aboriginal Parties, the EPA (Aboriginal heritage) and the Secretary. Note: • Where archaeological testing has occurred as part of the environmental assessment and the results are included in the documents listed in condition A2, the sites tested shall be included in the final report prepared under condition B45.	Compliant	The S1 and S3-11 CHMPs refer to the Salvage Strategy as a previously approved document. This is not sighted in this audit. CHMP section 7 details aboriginal heritage management and mitigation measures. Appendix C of the S3-11 CHMP presents Archaeological Salvage Status register. Section 6.5 of the Archaeological Methodology and Aboriginal Heritage Compliance Report section 6.5 details the Salvage Excavation Methodology and section 6.6 details post excavation methodology including storage of artefacts. Evidence of consultation is sighted within the letters. Details of aboriginal consultation is provided in the Archaeology Methodology and Aboriginal Heritage Compliance Report chapter 4 and Appendix I. Evidence of submission of the report to RAPs, EPA and DPIE sighted and minutes of meetings sighted.	S3-11/S1/S2 CEMP Appendix B5 -Construction Heritage Management Plan(s) Audit discussions 30/8/2021 Section 4 Site 1 - Ancillary Site 4-1, Lot 14 DP805843 at Tyndale, NSW. Report on the Results of Test Excavation. Site Clearance letter - AF 4-1 - Page # 256 of W2B-PC0-0-EH-REF-00001;Section 10 Site 1a Section 11 Site 1a - Ancillary Site 11-1a, McAndrews Lane, Pimlico Report on Results of Test Excavation Site Clearance letter AF 11-1a - Page 237 of W2B-PC0-0-EH-REF-00001 Archaeology Methodology and Aboriginal Heritage Compliance Report, W2B-RPS-0-EH-RPT-00001 Letter: TfNSW to DPIE - request review of strategy 9/7/2014 - W2B-PC0-0-EH-LET-00009 Letter: TfNSW to OEH - request review of strategy 9/7/2014 - W2B-PC0-0-EH-LET-00010 Report: Woolgoolga to Iluka Road Methodology and Compliance Report RPS 08/08/2014 - W2BP1DR-ENV-PREC-000156 Letter: OEH ACH approval Advice - W2B Draft salvage strategies 31/7/2014 provided as W2B-PC0-0-EH-MEM-00003; Email: RPS to RAPs: Woolgoolga to Wells Crossing and Wells Crossing to Iluka Road Aboriginal Heritage Methodology - REPORT - W2B-RPS-0-EH-RPT-00001; W2B-RPS-0-EH-RPT-00002; Email - W2B-PC0-0-EH-EML-00002 Letter: DPIE to TfNSW: 27/08/2014 W2B Salvage Strategies approval - W2B-PC0-0-EH-LET-00011 Meeting minutes: W2B Jali LALC Briefing Meeting Notes_1/6/2021 - W2B-PC0-0-EH-MOM-00001 Letter DPIE to TfNSW Iluka Road to Ballina Excavation Report 12/3/21 - W2B-PC0-0-EH-LET-00006 Letter TfNSW Response to DPIE March 2021 - W2B-PC0-0

B46	Identified impacts to Aboriginal heritage, shall be **minimised to the greatest extent practicable** through both detailed design and construction, particularly with regard to the Aboriginal sites Gittoes Jali and the Melino site, and the Aboriginal culturally significant places identified as Corindi Massacres (section 1), Burials (section 1), Halfway Creek Ceremonial Site, Birrugan and Mindi spiritual sites (sections 1, 2, 5 and 10), Pillar Valley men's and women's sites, Place H, Place I and Place J. Where impacts are unavoidable, works shall be undertaken in accordance with the strategy outlined in the Construction Heritage Management Plan.	Compliant	Aboriginal cultural heritage impacts are identified in the HMP. Chapter 6 Table 6-1 summarises Aboriginal sites, impacts and management measures. Environmental mitigation and management measures are provided in Chapter 7. S2 compliance report states that aboriginal sites remained protected. S3-11 compliance report states that the Gittoes Jali clearance letter was received prior to construction activities commencing on Lang Hill with management measures for the protection of the site. Bundled Aboriginal Cultural Heritage Site Clearance Letters for all sites sighted. Site clearance documents included, as prepared by Navin Officer Heritage Consultants Pty Ltd, detail the salvage works and outcomes.	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) S3-11 compliance report Apr-Sep20 S2 compliance report May-Oct20 Site Clearance letters (bundled) provided as W2B-PC0-0-EH-REF-00001
B47	The Applicant shall not destroy, modify or otherwise physically affect Aboriginal sites WWC5, WWC7, WWC26, WWC92, WWC115, WWC139, Tyndale 1, Scarred/engraved Tree (section 7), C3/2/2, Saw Pit Creek / New Italy, Gittoes Jali 2, Cooks Hill, Broadwater, Law PAD, Law Scarred Tree, MST 3, C21, Melino Scarred Tree 4, MST 2, MST1, Rudgley Scarred Tree or Saezza 1.	Compliant	Compliance Reports sighted provides an update on management actions undertaken at these sites: WWC5, WWC7, WWC92, WWC115, WWC139, Tyndale 1 – exclusion fencing installed, WWC26- salvage done, fencing installed, Scarred tree in Section 7 - Outside the project corridor. Exclusion fencing to be installed, C3/2/2 - Outside the project corridor, Gittoes Jali 2 – ongoing, Cooks Hill - Outside of the project boundary, Broadwater – ongoing, Law PAD - To be fenced on vacant possession of the adjacent block, MST 3 - Exclusion fencing is to be re-installed on vacant possession of the block, C21 - Exclusion fencing is to be re-installed on vacant possession of the block, Melino Scarred Tree 4 - Exclusion fencing has been installed on vacant possession of the block, MST2 - Exclusion fencing is to be re-installed on vacant possession of the block, MST1 – ongoing, Rudgley scarred tree - Fencing has been established, Saezza 1 - Exclusion fencing installed, awaiting site clearance letter.	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) S3-11 compliance report Apr-Sep20; Aboriginal cultural heritage working paper (Woodburn to Ballina): main report and appendix a, b and c Site Clearance letters (bundled) provided as W2B-PC0-0-EH-REF-00001
	NON-ABORIGINAL HERITAGE			
B48	Prior to the commencement of construction affecting the Convent (12-14 Rivers Street), Harwood (item 21), the Applicant shall carry out further historical research and investigate the options for relocation of the convent building, in consultation with the Department of Planning and Environment and the OEH (Heritage Division), to the satisfaction of the Secretary.	Compliant	As per the six monthly compliance report Oct2016-Mar2017, this investigation was undertaken however had to be demolished in Dec2016 after an unsuccessful tender process to remove and relocate. All mitigations complete, relocation investigated, building demolished with Department Planning & Environment approval and Heritage Council endorsement.	S3-11 Six Monthly Compliance Report Oct 2016 - Mar 2017 section 3.4 Letter from Heritage Council NSW to RMS dated 05/12/2016 (approving demolition of Convent); DPE letter to RMS dated 05/12/2016 (approving demolition works against this condition)

B49	Prior to the commencement of construction in proximity to the following heritage items: 21; 23 (Roder's well and orchard); 26; 28; 29; and 43, the Applicant shall complete all archival recordings, including photographic recording of these heritage items, unless otherwise agreed by the Secretary. The archival recording shall be undertaken by an experienced heritage consultant, in accordance with the Guidelines issued by the Heritage Council of NSW. The areas containing these items shall be clearly identified and/or fenced until the completion of the archival recordings. Within 6 months of completing the archival recording, the Applicant shall submit a report containing the archival and photographic recordings and the historical research, where required, to the Department of Planning and Environment, the Heritage Council of NSW, and the local library and the local Historical Society in the relevant local government area(s).	**Compliant**	S3-11 CHMP section 7 provides environmental mitigation and management measures and section 6.3 summarises non-aboriginal heritage sites, impacts and management. Based on available evidence, archival recordings were undertaken by experienced consultant as required. Item 26 - Maloney Property - evidence sighted - The archival photographic recording was undertaken by Rebecca Andrews (Project Archaeologist, Jacobs) and Dr Karen Murphy (Senior Historical Heritage Consultant, Jacobs) on 28/6/2015 and reported following Heritage Council NSW guidelines. Similar evidence not sighted for below items however it is deemed to be available in similar fashion: Item 21 - Convent Harwood Item 23 - New Italy Settlement Landscape (including Historic New Italy Village Area) – Roder's Stone-lined well & Orchard Item 28 - Byrne Property Item 29 - 'Stonehenge' Property Item 43 - Drainage Channels Evidence of submitting the archival report to DPE, Heritage Council and local library/historical society sighted: Non-Aboriginal Historical Heritage Archival Photographic Records of Submission of Archival Photography Letters on Heritage Items 21, 23, 26, 28, 29, 36 & 43 dated 29/9/2016 by Jacobs Technical Leader Historical Heritage, submitted to: Ballina Library, Casino Library, Clarence Valley Library, DPIE, Heritage Council of NSW, MacLean District Historical Society, John Barnes NIMI & Richmond River Historical Society).	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) Item 26- Archival Photographic Record prepared by Jacobs dated 22/6/2015 provided as W2B-JCB-C-EH-RPT-00004 Desktop study summary report by Jacobs dated 20/3/2015 provided as W2B-JCB-0-EH-RPT-00002 detailing Mitigation and management measures by heritage items 21, 23, 26, 28, 29 and 43 Consolidated Non-Aboriginal cultural heritage clearance letters received as of 23/2/2018 provided as W2B-PC0-0-EH-REF-00002 Consolidated letters of submission of archival photographic records to various agencies provided as W2B-PC0-0-EH-LET-00003.
B50	Prior to construction affecting the following heritage items: 7; 23 (Roder's well and orchard) and 28, the Applicant shall carry out further historical and physical archaeological investigations of these heritage items, in consultation with the Department of Planning and Environment and the OEH (Heritage Division), to the satisfaction of the Secretary. These investigations shall: (a) include archaeological investigations and excavation in accordance with the Heritage Council's Archaeological Assessments Guideline (1996) using a methodology prepared, in consultation with the OEH (Heritage Division), and to the satisfaction of the Secretary. The archaeological investigation shall be undertaken by an archaeological heritage consultant, whose appointment has been endorsed by the Secretary. The nomination for the Excavation Director shall demonstrate ability to comply with the Heritage Council's Criteria for the Assessment of Excavation Directors (July 2011); (b) provide for the detailed analysis of any heritage items discovered during the investigations; (c) include management options for these heritage items (including options for relocation and display); and (d) if the findings of the investigations are significant, provide for the preparation and implementation of a heritage interpretation plan.	**Compliant**	Archaeological excavation report for Item 7 and desktop study summary report for all sites sighted. DPE approval letter sighted, for non-aboriginal archaeological exvacation methodology for items 7 and 28, pending further review of item 23 from Heritage branch. The DPE letter also endorsed nomination of Dr Iain Stuart as Excavation Director. Reports or approval thereof, for item 23 further sighted.	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) Item 7 - Service Station Complex (Section 2) - Halfway Creek Archaeological Excavation Report by Jacobs, dated 22/9/2016 provided as W2B-PC0-2-EH-RPT-00001 Historical Heritage Preconstruction Services Desktop Study Summary Report by Jacobs, dated 20 March 2015, provided as W2B-JCB-0-EH-RPT-00002 Letter from DPE to RMS dated 6/7/2015 provided as W2B-PC0-0-EH-LET-00012 Letter from DPIE dated 17/7/15 which provides approval of methodology for Item 23 - W2B-PC0-0-EH-LET-00013
	Within 12 months of completing the above work, unless otherwise agreed by the Secretary, the Applicant shall prepare a report containing the findings of the excavations, including artefact analysis, and the identification of a final repository for finds, prepared in consultation with the OEH (Heritage Division) and to the satisfaction of the Secretary. The report shall be submitted to the Department of Planning and Environment, the Heritage Council of NSW, and the local library and the local Historical Society in the relevant local government area(s). Note: • Where archaeological testing has occurred as part of the environmental impact assessment for the SSI and the results are included in the documents listed in condition A2, the sites tested shall still form part of the methodology and final report prepared for the non-Aboriginal archaeological investigation program.	**Compliant**	S3-11 CHMP section 7 provides environmental mitigation and management measures and section 6.3 summarises non-aboriginal heritage sites, impacts and management. S2 CHMP section 5.4 summarises non-aboriginal heritage sites, impacts and mitigation. Summary report containing findings of excavations, artefact analysis and identification of finds, as desktop study summary report, sighted. Submission to various stakeholders sighted as assessed for condition B49.	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) Item 26- Archival Photographic Record prepared by Jacobs dated 22/6/2015 provided as W2B-JCB-C-EH-RPT-00004 Desktop study summary report by Jacobs dated 20/3/2015 provided as W2B-JCB-0-EH-RPT-00002 detailing Mitigation and management measures by heritage items 21, 23, 26, 28, 29 and 43 Consolidated Non-Aboriginal cultural heritage clearance letters received as of 23/2/2018 provided as W2B-PC0-0-EH-REF-00002

B51	The Applicant shall not destroy, modify or otherwise physically affect the heritage items listed in Table 5-1, Historic (non-Aboriginal) Heritage Assessment Working Paper and Table 3-38, Submissions/Preferred Infrastructure Report (RMS, November 2013).	**Compliant**	Noted. CHMP S3-11 Table 6.3, CHMP S1 Table 1-2 (section 8.3) and CHMP S2 table 4-3 identifies the heritage items as relevant to each section as per their Significance. Draft compilation of environmental completion checklists sighted to include various sites listed against EIS predicted impact, actual impact and nil residual risk for operation. The checklists refer to individual reports for each site, some of which as sighted in this audit:	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) Consolidated Non-Aboriginal cultural heritage clearance letters received as of 23/2/2018 provided as W2B-PC0-0-EH-REF-00002 draft Environmental Completion Checklist MCoA B51 & Attachments provided as W2B-PC0-0-EH-CHL-00004 Asbestos containing materials audit - Item 29 dated 25/5/2016 Building condition inspection report - Item 29 dated 30/8/2016 As built drawing of fencing, New Italy - Item 23 (drawing screenshot only, no title blocks) Photo of steel plates installed over tram tracks (Petticoat Lane, Harwood) - Item 17 Statement of Heritage Impact - Item 34 - 3 Jubilee St Townsend, prepared by RPS dated 18/12/2017 Report of At House Noise Treatment - Item 11 Residence, Tyndale dated 01/11/2018
	HERITAGE - GENERAL			
B52	Identified impacts to heritage sites shall be minimised where feasible and reasonable through both detailed design and construction, particularly with regard to the historic site known as the North Coast Railway Branch Tramway, Glenugie. Where impacts are unavoidable, works shall be undertaken in accordance with the actions to manage heritage construction impacts required by condition D26(d) and under the guidance of an appropriately qualified heritage specialist.	**Compliant**	Section CHMP identifies the Tramway as a heritage site directly or indirectly impacted and provides management measures. Compliance tracking report (S2) states management and mitigation measures were implemented. PCo stated that only 350m of the North Coast Railway Branch Tramway will be impacted by the W2B project. The impacted section is situated on the east side of the Pacific Highway and extends north-east to Franklins Road, Glenugie. There is no evidence of any tracks or sleepers remaining along the embankment. From examination of the cross-section created by the cutting for the vehicle access track, the embankment is of earthen construction with no stone, timber or other inclusions visible. Email advising completion of archival recording and investigation, by appropriately qualified heritage specialist, sighted. Section 2.3 and B.3 (Item 36) detail the North Coast Railway Branch Tramway and specific archival photographic record report by Jacobs dated 29/6/2015 sighted.	S2 CEMP Appendix B5 - Construction Heritage Management Plan Compliance Tracking Reports for various timeframes S2 Email confirmation dated 22/5/2015 from Dr Karen Murphy, Jacobs, that archival recording for item 36, North Coast Railway Branch Tramway including photographing the embankments and GPS points. Jacobs Desktop Study Summary Report provided as W2B-JCB-0-EH-RPT-00002 Item 36 North Coast Railway Branch Tramway Archival Photographic Record by Jacobs provided as W2B-JCB-2-EH-RPT-00001
B53	This approval does not allow the Applicant to destroy, modify or otherwise physically affect human remains as part of the State Significant Infrastructure, except in accordance with an Unexpected Human Remains Procedure that has been approved by the Secretary.	**Not triggered**	Noted PCo Confirmed no human remains found during W2B construction activities. Several investigations undertaken during construction on precautionary principle and in accordance with Heritage Management Plan. Example investigation process and result sighted.	S1, S2 and S3-11 CEMP Appendix B5 - Construction Heritage Management Plan Compliance Tracking Reports for various timeframes S1, S2, S3-11 Email communication dated 02/03/2020 provided as W2B-PC0-A-EH-EML-00002 with attached photographs of disarticulated bones found in S3 of the project site.
B53A	An Unexpected Human Remains Procedure shall be prepared and implemented to guide the relocation of recovered human remains. The Unexpected Human Remains Procedure shall: a) be prepared in consultation with the RAPs; and b) meet the requirements of the OEH in relation to the National Parks and Wildlife Act 1974 and Guidelines for Management of Human Skeletal Remains (NSW Heritage Office, 1998b), and NSW Health in relation to the NSW Health Policy Directive – Exhumation of human remains (December, 2013).	**Compliant**	The processes to follow for human remain find is included in heritage management and mitigation measures contained within the CHMPs. Appended RMS Standard Management Procedure for Unexpected Heritage Items (March 2015) refer to human skeletal remains. Based on available information, no human remains were found thus the procedure did not have to be implemented.	S1, S2 and S3-11 CEMP Appendix B5 - Construction Heritage Management Plan Compliance Tracking Reports for various timeframes S1, S2, S3-11 Email communication dated 02/03/2020 provided as W2B-PC0-A-EH-EML-00002 with attached photographs of disarticulated bones found in S3 of the project site.
B54	The Applicant shall not destroy, modify or otherwise physically affect any heritage items outside the SSI footprint, unless otherwise agreed by the Secretary in accordance with condition B54A.	**Not triggered**	Noted	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) Compliance Tracking Reports for various timeframes S1, S2, S3-11

B54A	The Applicant may undertake archaeological investigations at sites outside the SSI boundary where the following works associated with the construction of the highway are proposed: i. ancillary sites that do not meet the criterion set out in condition B73; or ii. utilities or services, or iii. access and service roads and driveways; or iv. or similar works required for the project that are located within 5 metres of the SSI boundary (with the exception of drainage works in flood prone areas where such activities can be investigated within 20 metres of the SSI boundary). These investigations are permitted where this is required to assess the potential Aboriginal and non-Aboriginal archaeological impacts of the ancillary facility or other works on previously unidentified heritage sites, provided: (a) any archaeological investigations undertaken under this condition shall be consistent with the requirements in condition B44 for Aboriginal heritage and condition B50 for non-Aboriginal heritage and with the Construction Heritage Management Plan or a methodology prepared to the satisfaction of the Secretary in consultation with OEH; and (b) the results of any relevant archaeological investigations undertaken under this condition shall be consistent with the reporting requirements of condition B45 for Aboriginal heritage and condition B50 for non-Aboriginal heritage, and for ancillary sites, be described in the assessment of the ancillary facility required under conditions B74 and B75.	**Not triggered**	Noted. Based on available information, this has not been triggered.	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s) CEMP Appendix B9 - Ancillary Facility Management Plan Appendix B3 provides Major ancillary facilities assessment template including this condition.
B55	The measures to protect heritage sites near or adjacent to the SSI during construction shall be detailed in the Construction Heritage Management Plan.	**Compliant**	CHMPs include heritage management and mitigation measures for protecting heritage sites near or adjacent to the SSI footprint.	S3-11/S1/S2 CEMP Appendix B5 - Construction Heritage Management Plan(s)
		TRANSPORT AND ACCESS		
B56	The SSI shall be designed with the objective of minimising adverse changes to existing access arrangements and services for other transport modes and, where feasible and reasonable, facilitate an improved level of access and service to other transport modes comparable to or better than the existing situation.	**Compliant**	Noted. This condition is addressed in the approved CTAMP.	CEMP Appendix B1 - Construction Traffic and Access Management Plan.
B57	Safe pedestrian and cyclist access through or around 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 signposted.	**Compliant**	Noted. This condition is addressed in the approved CTAMP 4.7.6. Evidence sighted as extract from Consultation Manager on intimation regarding demolition at old Jubilee St overpass bridge.	CEMP Appendix B1 - Construction Traffic and Access Management Plan. Consultation Manager extract dated 21/07/2020
B58	Construction vehicles (including staff vehicles) associated with the SSI shall be managed to: (a) minimise parking or queuing on public roads; (b) minimise idling and queuing in local residential streets where practicable; (c) minimise the use of local roads (through residential streets and town centres) to gain access to construction sites and compounds; and (d) adhere to the nominated haulage routes identified in the Construction Traffic Management Plan.	**Compliant**	Noted. This condition is addressed in the CTAMP section 4.6.5 and occurred in the past and not verified in this audit. S2 compliance tracking report states that No parking on local roads is required, queuing is minimal due to low traffic loads. No issues with the use of local roads have been identified during the reporting period, spoil haulage routes remain on the designated haul route - Pacific Highway. S3-11 Compliance tracking report (Apr-Sep20) states that Construction sites provide ample parking to minimise parking on local roads. Access to work areas are via access gates, sufficient space for queuing is provided where feasible to prevent queuing on public roads.	CEMP Appendix B1 - Construction Traffic and Access Management Plan. Compliance tracking reports (various timeframes) for S1, S2, S3-11

B59	In relation to new or modified local road, parking, pedestrian and cycle infrastructure, the SSI shall, where feasible and reasonable, be designed: (a) in consultation with the relevant council; (b) take into consideration existing and future demand, road safety and traffic network impacts; (c) to meet relevant design, engineering and safety guidelines, including Austroads Guide to Traffic Engineering Practice; and (d) be certified by an appropriately qualified person that has considered the above matters.	**Compliant**	Noted. This condition is addressed in the approved CTAMP. PCo stated the process followed as: The Professional Service Contractors produced the detailed design documentation which followed a strict Quality Assurance process in line with ISO 9001. Certification for each design document was provided by the PSCs (by the project manager or other suitably qualified person) confirming compliance with the requirements of the contract (and hence the MCoA B59 as referenced in the fundamental objectives). Pacific Complete then reviewed and certified by Quality and Verification manager. An example of the certification is sighted, signed by Mike Thackray on 20/12/2016 on IFC design documentation by Arup Cardno JV - alignment and earthworks S9, CH137100-145023. Evidence of monthly meetings involving relevant council sighted.	CEMP Appendix B1 - Construction Traffic and Access Management Plan. Email from Colm Magee, PCo (& James Hartley) clarifying the design review process, Clause 1.3 Fundamental Obligations of PSCs. Design certification signed by Mike Thackray on 20/12/2016 on IFC design documentation by Arup Cardno JV - alignment and earthworks S9, CH137100-145023 with internal QA signed on 09/12/2016 and listing documents in the package. Minutes of monthly meeting dated 1/6/2017 - Pacific Complete, Richmond Valley Council, Lendlease and RMS, provided as W2B-PC0-C-ZJ-MOM-00001
PROPERTY AND LANDUSE				
B60	The Applicant shall ensure that the SSI is designed to minimise land take impacts to surrounding properties (including agricultural properties) as far as feasible and reasonable, in consultation with the affected landowners.	**Compliant**	Compliance tracking reports state that this was considered during the design and construction phases. Evidence of property owner signing off on design drawing sighted.	Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Drawing set signed by property owner on 28/11/2016 for design documentation for Devils Pulpit to Broadwater property adjustments provided as W2B-PC0-C-EX-DRG-00001.
B61	Where the viability of existing agricultural operations are identified to be impacted by the land requirements of the SSI, the Applicant shall, at the request of these landowners, employ a suitably qualified and experienced independent agricultural expert, whose appointment has been endorsed by the Secretary, to assist in identifying alternative farming opportunities for the land, including purchase of other residual land to enable existing agricultural activities to continue.	**Compliant**	S2 Compliance tracking reports state that this had been considered and addressed by design changes or compensation during construction phase - not verified in this audit. S3-11 Compliance tracking reports state that no impacts to existing agricultural operations were identified.	Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; audit observations
B62	Unencumbered access to private property shall be maintained during construction unless otherwise agreed with the landowner in advance. A landowner's access that is physically affected by the SSI shall be reinstated to at least an equivalent standard, in consultation with the landowner.	**Compliant**	Compliance tracking reports refer to RMS Specification G10 to address this requirement and report that access to private properties was maintained.	CEMP Appendix B1 Construction Traffic and Access Management Plan, Section 4.7.3 Property Access Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16;
B63	The Applicant shall, in consultation with relevant landowners, construct the SSI in a manner that minimises intrusion and disruption to agricultural operations/activities in surrounding properties (e.g. stock access, access to farm dams, etc.), unless otherwise agreed by the landowner.	**Compliant**	As per sighted compliance tracking reports, Landowners have been consulted regarding work potentially disruptive to agricultural operations / activities. This includes potential use of cane pads within the project boundary and realignment of fences through agricultural land. The project has assisted landowners with property access for cattle movement and prioritised the installation of the permanent boundary fence and gates for landowner cattle movements. Property owner acceptance of design documentation for property access sighted. Specific examples of agricultural landowner consultation including property access agreement signed 13/12/2017 sighted.	CEMP Appendix B1 Construction Traffic and Access Management Plan, Section 4.7.3 Property Access Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Stage 1 Pre-operational Compliance Report. Drawing set signed by property owner on 28/11/2016 for design documentation for Devils Pulpit to Broadwater property adjustments provided as W2B-PC0-C-EX-DRG-00001. Record of meeting and property access agreement provided as W2B-PC0-0-EX-REC-00008
B64	Any damage caused to property as a result of the SSI shall be rectified or the landowner compensated, within a reasonable timeframe, with the costs borne by the Applicant. This condition is not intended to limit any claims that the landowner may have against the Applicant.	**Compliant**	Compliance tracking reports refer to RMS Specification G36. There were no complaints noted in this regard.	CEMP Appendix B1 Construction Traffic and Access Management Plan, Section 4.7.3 Property Access Compliance tracking reports
B65	FORESTRY IMPACTS Where the SSI traverses a state forest, the Applicant shall, in consultation with the NSW Forestry Corporation, ensure that construction does not unduly disrupt existing forestry activities, access for firefighting and access for other activities within state forests, unless otherwise agreed by the NSW Forestry Corporation.	**Compliant**	Noted. This condition is addressed in CTAMP and compliance tracking reports refer to consultation with NSW Forestry during construction phase. Executed Deed of Agreement Early Access and letter of consultation sighted.	CEMP Appendix B1 Construction Traffic and Access Management Plan, Section 4.7.3 Property Access and Section 4.7.8 State Forest Road Network NSW Forestry Deed of Agreement Early Access Glenugie to Ballina Project provided as W2B-PC0-0-ZH-AGR-00002 executed (no date) Early Access Agreement with Forestry Corporation NSW | Letter provided as W2B-PC0-0-ZH-LET-00004 dated 10/2/2016
AIR QUALITY				

B66	The SSI shall be constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust and tracking of material onto public roads. 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 Applicant shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease.	Compliant	Addressed in the CAQMP - section 7 includes Air quality management and mitigation measures. Compliance tracking reports sighted refer to use of water carts for dust suppression, temporary stabilisation of ground and regular inspections. Audit discussion with ER noted no air quality issues during construction.	S1/S2/S3-11 CEMP Appendix B6 - Construction Air Quality Management Plan Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Complaints register Audit discussion with ER (13/7/21)	
HAZARDS AND RISK					
B67	Dangerous goods, as defined by the Australian Dangerous Goods Code, shall be stored and handled strictly in accordance with: (a) all relevant Australian Standards; (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume, within the bund; and (c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997). In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.	Compliant	No non-compliances were noted with regards to materials defined as Dangerous Goods.	CEMP S1/S2 Appendix B7 - Waste and Energy Management Plan CEMP S3-11 Appendix B7 Construction Waste, Resource and Energy Management Plan CEMP Appendix B4 - Soil and Water Management Plan POEO public register An example photo of a bund used around effluent tanks at Iluka Ancillary Facility sighted.	
WASTE MANAGEMENT					
B68	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 or waste exemption under the Protection of the Environment Operations Act 1997, if such a licence is required in relation to that waste.	Compliant	As per documentation sighted, compliance reporting and based on discussion with ER, this requirement is noted to have been complied with during construction. Compliance reports state that no waste from outside the project had been received.	CEMP S1/S2 Appendix B7 - Waste and Energy Management Plan CEMP S3-11 Appendix B7 Construction Waste, Resource and Energy Management Plan, Chapter 6 Environmental Mitigation and Management Measures EPL20173 Audit discussion with ER (13/7/21) Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Stage 1 Pre-operational Compliance Report.	
B69	The reuse and/or recycling of waste materials generated on site shall be maximised as far as practicable, to minimise the need for treatment or disposal of those materials off site.	Compliant	As per documentation sighted, compliance reporting and based on discussion with ER, this requirement is noted to have been complied with during construction. Waste rock, concrete and asphalt material, and small quantities of spoil from the Glenugie Upgrade have been reused on Stage 1 projects. Material re-use onsite during the reporting period includes the use of vegetation mulch in ERSED controls, the use of site won verge and SMZ material and the use of composted mulch sourced from W2B Section 3 in landscaping works.	CEMP S1/S2 Appendix B7 - Waste and Energy Management Plan CEMP S3-11 Appendix B7 Construction Waste, Resource and Energy Management Plan, Chapter 6 Environmental Mitigation and Management Measures	
B70	All liquid and/or non-liquid waste generated on the site shall be assessed and classified in accordance with Waste Classification Guidelines (Department of Environment, Climate Change and Water, 2009).	Non-compliant	EPL Annual Return for 2018-2019 noted a non-compliance against L3 as: Topsoil (1,000m3), classified as Excavated Natural Material (ENM) was transported offsite prior to ENM testing being completed; relevant action was taken. Auditee responded that all ENM had been tested and verified in accordance with the requirements. While the material may not be classified as 'non-liquid waste generated on site', the fact remains that the once instance was noted in EPL Annual Return raising a non-compliance by EPA that material was transported without following the waste classification guidelines. This is noted to be a past phase requirement (construction).	CEMP S1/S2 Appendix B7 - Waste and Energy Management Plan CEMP S3-11 Appendix B7 Construction Waste, Resource and Energy Management Plan, Chapter 6 Environmental Mitigation and Management Measures POEO public register - EPL Annual Return 2018-2019	NC3 **ENM was transported offsite prior to testing and classification being completed. This was reported as a non-compliance in the relevant annual return. No further corrective action is required as works have concluded on the project.**
B71	All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.	Compliant	Two Contractor examples of Waste Registers sighted that list various waste materials, transporting contractor and receiving facility, load etc.	PKG 203 | SWC | Waste Management Register provided as W2B-SWC-A-EX-REG-00100; LLE | D | Waste Management Register provided as W2B-LLE-D-EX-REG-00002	
UTILITIES AND SERVICES					
B72	Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the SSI shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Applicant.	Compliant	As per compliance tracking reports, service relocation as required was undertaken during detailed design and construction phase and as per community consultation records, there is no disruption noted.	Compliance tracking reports: S2 May-Oct20; S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; Stage 1 Pre-operational Compliance Report.	
ANCILLARY FACILITIES					

B73	The sites for ancillary facilities that are associated with the construction of the SSI and that have not been identified and assessed in the documents listed in condition A2 shall: (a) be located more than 50 metres from a waterway (100 metres for a State Environmental Planning Policy No. 14 wetland or known Oxleyan Pygmy Perch habitat waterway); (b) not impact on connectivity structures or vegetation leading to a connectivity structure; (c) be located within or adjacent to the SSI boundary; (d) have ready access to the road network; (e) be located in areas of low ecological significance and require no clearing of native vegetation; (f) be located more than 50 metres from threatened species and endangered ecological communities and their habitats; (g) be located on relatively level land; (h) be separated from the nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant) and comply with construction noise management levels at sensitive receivers; (i) be above the 20 year ARI flood level unless a contingency plan to manage flooding is prepared and implemented; (j) have minor impacts on flood storage and not result in obstruction of floodplain flow or blockage of culverts and drains; (k) not unreasonably affect the land use of adjacent properties; (l) operate in accordance with the construction hours set out in conditions B15 and B16; (m) provide sufficient area for the storage of material to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours; and (n) be located in areas of low heritage conservation significance (including areas	**Compliant**	Site Audit observations found that the Ancillary facility sites have now been rehabilitated. This condition was specifically relevant during construction phase. Each facility is assessed individually against criteria within MCoA B73 in the AFMP. AFMP section 5 describes environmental management measures and requirements for ancillary facilities. AFMP appendices A1 and A2 lists the ancillary facility sites and assessment against the Department of Planning and Infrastructure standard conditions locational criteria. Appendix B2 of AFMP includes Ancillary facility checklist template for assessing monitoring, review and amendments; and Appendix B3 provides Major ancillary facilities assessment template including Section 3.1 of the Appendix B3 listing relevant MCoAs for checking. Discussions with ER indicated that there were no issues noted regarding management of ancillary facility sites.	Site audit observation S2 (Halfway Ck to Glenugie) CEMP refers to S3-11 CEMP Appendix B9 Ancillary Facilities Management Plan Rev5 May2017 (W2B-PC0-0-ZH-PLN-00004-09) Audit discussions (13/7/21) with ER Major ancillary facility assessment - Avenue Road S3 - assessment report of Jul 2016 - W2B-PC0-A-EX-ASS-00004 Ancillary facility assessment - section 6 site 5 report un-dated W2B-PC0-B-EX-ASS-00001
	The Applicant shall undertake an assessment of the facility against the above criteria in consultation with the relevant public authority(s) and the **relevant council**. The assessment shall be approved by the Environmental Representative and included in the Ancillary Facilities Management Plan required under condition D21.		Evidence of consultation with relevant public authorities and Council included in the assessment report chapter 8. Approval of assessment by ER included.	Major ancillary facility assessment - Avenue Road S3 - assessment report of Jul 2016 - W2B-PC0-A-EX-ASS-00004 Ancillary facility assessment - section 6 site 5 report un-dated W2B-PC0-B-EX-ASS-00001

B74	Ancillary facilities that have not been previously identified and assessed in the documents listed in condition A2, and do not meet the criteria set out under condition B73, shall be approved by the Environmental Representative prior to its establishment. In obtaining this approval, the Applicant shall consult with the relevant public authority(s) and the relevant council, and demonstrate to the satisfaction of the Environmental Representative, how the potential environmental impacts can be mitigated and managed to acceptable standards. The outcomes of the assessment shall be **documented in a report** and include, but not necessarily be limited to: (a) details on the site location and access arrangements; (b) a description of the activities to be undertaken; (c) outcomes of the assessment of the site against the locational criteria set out in condition B73; (d) an assessment of the environmental impacts on the site and the surrounding environment, including, but not limited to noise, vibration, air quality, traffic and access during site establishment and operation, flora and fauna, heritage, erosion and sedimentation, water quality and light spill; (e) details of the mitigation, monitoring and management procedures specific to the ancillary facility that would be implemented to minimise environmental impacts; and (f) demonstrated overall consistency with the approved SSI (including impacts identified in the documents listed in condition A2).	**Compliant**	Site Audit observations found that the Ancillary facility sites have now been rehabilitated. This condition was specifically relevant during construction phase. Each facility is assessed individually against criteria within MCoA B73 in the AFMP. AFMP section 5 describes environmental management measures and requirements for ancillary facilities. AFMP appendices A1 and A2 lists the ancillary facility sites and assessment against the Department of Planning and Infrastructure standard conditions locational criteria. Appendix B2 of AFMP includes Ancillary facility checklist template for assessing monitoring, review and amendments; and Appendix B3 provides Major ancillary facilities assessment template including Section 3.1 of the Appendix B3 listing relevant MCoAs for checking. Ancillary facilities assessment report included in AFMP and additional assessment sighted.	Site audit observation S2 (Halfway Ck to Glenugie) CEMP refers to S3-11 CEMP Appendix B9 Ancillary Facilities Management Plan Rev5 May2017 (W2B-PC0-0-ZH-PLN-00004-09) Audit discussions (13/7/21) with ER Major ancillary facility assessment - Avenue Road S3 - assessment report of Jul 2016 - W2B-PC0-A-EX-ASS-00004 Ancillary facility assessment - section 6 site 5 report un-dated W2B-PC0-B-EX-ASS-00001
B75	Notwithstanding condition B74, ancillary facilities that have not been previously identified and assessed in the documents listed in condition A2 and result in additional impacts to biodiversity, heritage, flooding and noise beyond those approved for the SSI, shall be approved by the Secretary prior to their establishment. In order to obtain this approval, the Applicant shall undertake an assessment of the ancillary facility in accordance with condition B74 and forward a copy of the assessment report to the Secretary, as part of the approval submission, at least one month prior to the establishment of the facility.	**Not triggered**	Ancillary facility assessment reports are included in AFMP.	S2 (Halfway Ck to Glenugie) CEMP refers to S3-11 CEMP Appendix B9 Ancillary Facilities Management Plan Rev5 May2017 (W2B-PC0-0-ZH-PLN-00004-09) Audit discussions (13/7/21) with ER Major ancillary facility assessment - Avenue Road S3 - assessment report of Jul 2016 - W2B-PC0-A-EX-ASS-00004 Ancillary facility assessment - section 6 site 5 report un-dated W2B-PC0-B-EX-ASS-00002
B76	The land on which ancillary facilities are located shall be rehabilitated to at least their pre-construction condition or better, unless otherwise agreed by the landowner.	**Compliant**	Site Audit observations found that the Ancillary facility sites have now been rehabilitated. All Ancillary Facility rehabilitation actions included in Six Monthly Compliance Reports.	Site audit observation S3-11 Compliance Tracking Report Oct16-Mar17, Apr-Sep20 S2 Compliance Tracking Report May-Oct20
B77	Where changes are made to the boundary or use of an ancillary facility, including facilities identified in the documents listed in condition A2, the Applicant shall assess the facility against the criteria set out in condition B73. If the ancillary facility site: (a) does not meet the criteria set out under condition B73 the Applicant shall seek the approval of the Environmental Representative in accordance with condition B74; or (b) results in impacts to biodiversity, heritage, flooding and noise beyond those approved for the SSI, the Applicant shall seek the approval of the Secretary in accordance with condition B75. The relevant approval shall be obtained prior to the establishment of the ancillary facility.	**Compliant**	Ancillary facility assessment reports are included in AFMP. All Ancillary Facility rehabilitation actions included in Six Monthly Compliance Reports.	S2 (Halfway Ck to Glenugie) CEMP refers to S3-11 CEMP Appendix B9 Ancillary Facilities Management Plan Rev5 May2017 (W2B-PC0-0-ZH-PLN-00004-09) Audit discussions (13/7/21) with ER Major ancillary facility assessment - Avenue Road S3 - assessment report of Jul 2016 - W2B-PC0-A-EX-ASS-00004 Ancillary facility assessment - section 6 site 5 report un-dated W2B-PC0-B-EX-ASS-00002. S3-11 Compliance Tracking Report Oct16-Mar17, Apr-Sep20 S2 Compliance Tracking Report May-Oct20
B78	(CLAUSE DELETED)			

BORROW SITES				
B79	The Applicant shall ensure that material extracted from the borrow sites established for the SSI, is only used for the construction of the SSI subject to this approval, and no other sections of the Pacific Highway or other works.	**Compliant**	Major Consistency Assessment for Causleys Batter Redesign section 2.2 refers to materials excavated from C4-7. Other example sighted refer to Tyndale site contractor SEE Civil waste register and civil lot register. PCo auditees mentioned that there are no detailed spoil records/registers available. Evidence sighted on Contractual Specifications that require all material from Borrow Sites to be used on the W2B project and specific written approval and release of Contractual Hold Points prior to any off site disposal of material (including VENM from Borrow Sites) - extracts of: 1. GC21 Head Contract requirements which include requirements to comply with MCoA 2. R44 Earthworks Specification: which includes requirements with respect to Borrow Sites and Spoil Approvals from Principal 3. G36 Environmental Protection: Hold Point 4.11 which requires Principal Approval prior to any off site disposal of waste (including VENM from Borrow Sites) PCo confirmed that no approvals for Offsite Disposal of material from any Borrow Sites were provided to any W2B Contractor and that no borrow site material was used outside of the W2B project.	S3-11 CEMP Appendix 10 provides five Borrow Site Management Plans: B10.1 Tyndale Borrow Site B10.2 Lang Hill Borrow Site Rev5 Nov2016 B10.3 Lumleys Hill Borrow Site B10.4 Gibson Borrow Site B10.5 Jali Borrow Site DPE Approval of Jali and Gibson, Lumleys Hill, Lang Hill, Tyndale Borrow Sites (Letters provided as W2B-PC0-0-ZH-LET-00023/24/09/07 respectively) W2B upgrade Haulage Strategy for Richmond River to Pimlico (S10-11 - W2B-PC0-D-EX-RPT-00007 available on project website document library) Audit discussions 30/8/2021 Major Consistency Assessment - Causleys Batter Redesign section 4 wave 3 report W2B-PC0-A-EX-ASS-00036 (May 2017)
CONSTRUCTION ACTIVITIES				
B80	The Applicant shall ensure that all plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	**Compliant**	Email from PCo safety manager stated that subcontractor records are not kept. Evidence of checks on subcontractors and vehicle registers sighted.	CPB subcontractor registers for plant and equipment Mar 2019 IMPACT register for CPB FSR Plant and Equipment (29/9/2020) Plant and equipment QCP dated 18/11/20, 30/11/20, 21/01/21, 21/07/21
OPERATIONAL PERFORMANCE				
B81	The Applicant shall ensure that during the operation of the SSI, water quality risks to the Woodburn Borefield drinking water catchment are minimised to the satisfaction of Rous Water.	**Compliant**	Water Quality Monitoring Program has been developed and implemented for the project - the program was submitted to DPE in March 2015 and was approved in May 2015. The letter of approval from DPE reminded RMS of annual water quality reporting requirements. The Water Quality Monitoring Program document includes various sections addressing the requirements under this CoA. Six monthly compliance tracking report section 5.1 refers to Annual Monitoring Report, which refers to potential incidents and assesses water quality risks to the Woodburn borefield. Consultation with Rous Water noted.	Surface water and groundwater monitoring protocol sighted on project website. Water Quality Monitoring Program, Sections 3-11, prepared by GeoLink first issue dated 4/5/15 final update 26/6/19, provided as W2B-RMS-0-ES-PLN-00040-8.0 DPE Letter Ref 14/11502 dated 8.5.15 provided as W2BP1DR-ENV-DEV-000085, approving W2B Water Quality Monitoring Program, signed by Karen Jones, Director Infrastructure Projects as delegate of the Secretary. Compliance tracking reports: S3-11 Apr-Sep20, Oct17-Mar18, Apr-Sep16; . Annual Water quality monitoring report S3-11 Jun17-Jun18, dated Mar2019 Minutes of Meeting between Rous Water and Pacific Complete, 30/6/2016 (W2B-CP0-C-AX-MOM-00511); Environmental Work Method Statement - Refuelling Activities within the Rous Water Woodburn Borefields - Woodburn Sands Aquifer (W2B-CPB-C-ZH-WMS-00017)

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
	Sch. 2 Part C. COMMUNITY INFORMATION AND REPORTING				
	COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT				
C1	Prior to the commencement of construction or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Community Communication Strategy to the satisfaction of the Secretary. The Strategy shall provide mechanisms to facilitate communication between the Applicant (and its contractor(s)), the Environmental Representative (see condition D22), the relevant council and community stakeholders (particularly adjoining landowners) on the construction environmental management of the SSI.	Compliant	As per the Compliance Tracking report, an overarching W2B Communication and Stakeholder Engagement Strategy had been prepared and approved via DPE Approval letter dated 13 May 2015 and condition Closed as of March 2017 report. The Communication and Stakeholder Engagement Strategy document has been sighted in this audit.	W2B Communication and Stakeholder Engagement Strategy Ver4 dated 12 May 2015 (via project website https://www.pacifichighway.nsw.gov.au/sites/default/files/media/documents/2018/Woolgoolga%20to%20Ballina%20upgrade%20Communications%20and%20Stakeholder%20Engagement%20STRATEGY.pdf) W2B Stakeholder and Community Liaison Plan (provided as W2B-PC0-0-ZJ-PLN-00001) Six Monthly Compliance Tracking Reports.	
	The Strategy shall include, but not be limited to: (a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners; (b) procedures and mechanisms for the regular distribution of information to community stakeholders on construction progress and matters associated with environmental management; (c) the formation of community-based focus groups for key environmental management issues for the SSI. The Strategy shall provide detail on the structure, scope, objectives and frequency of the community-based focus groups; (d) procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Applicant and/or Environmental Representative in relation to the environmental management and delivery of the SSI; (e) procedures and mechanisms through which the Applicant can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the SSI; and (f) procedures and mechanisms that would be implemented to resolve issues/ disputes that may arise between parties on the matters relating to environmental management and the delivery of the SSI. This may include the use of an appropriately qualified and experienced independent mediator.		(a) Section 3.1 of the Strategy document refers to Community contacts database - Consultation Manager - used to record contact with stakeholders identified within each section of the upgrade and others interested in the project. Table 3-2 lists suburbs included in each section of the upgrade. (b) Table 3-3 lists stakeholder identification and analysis including adjoining landowners and notes mechanisms for distribution of progress and information. This is detailed in sections 4 and 5 of the Strategy. (c) Section 5.3.5 of the Strategy and Appendix B of the Liaison Plan detail development of Community focus groups. (d) The Strategy overall provides mechanisms for receiving information and providing feedback. (e) Overall communication action plan is detailed in section 6 of the Strategy (f) Complaints management system, in line with AS 4269 Complaints Handling, is detailed in section 7 of the Strategy and Appendix C: Complaints handling and escalation procedure.	W2B Stakeholder and Community Liaison Plan (W2B-PC0-0-ZJ-PLN-00001 Rev E) W2B Communication and Stakeholder Engagement Strategy Ver4 dated 12 May 2015	

	Issues that shall be addressed through the Community Communication Strategy include (but are not necessarily limited to): (i) traffic management (including property access, pedestrian access); (ii) heritage matters; (iii) landscaping and urban design matters; (iv) construction staging, hours and activities; (v) noise and vibration mitigation and management; (vi) air quality and dust; (vii) water quality, hydrology and flooding matters; and (viii) biodiversity matters. The Applicant shall maintain and implement the Strategy throughout construction of the SSI.		Section 4 of the Communication and Stakeholder Engagement Strategy detail the engagement processes for these issues. Compliance Table in the Stakeholder and Community Liaison Plan section 1.4 refer to sections within the SCLP that do not exist (such as section 3.2 and 7.6). The plan overall provides processes for Communication and stakeholder engagement. Appendix A of the SCLP addresses specific environmental matters. Inconsistencies in the SCLP are noted however no recommendation is raised due to project's operational status. Extracts of Consultation Manager is included in six monthly compliance tracking reports. Evidence sighted regarding consultation with stakeholders for traffic management as example.	W2B Stakeholder and Community Liaison Plan (W2B-PC0-0-ZJ-PLN-00001 Rev E) W2B Communication and Stakeholder Engagement Strategy Ver4 dated 12 May 2015 CEMP S3-11 and Appendices B1 Traffic and Access Management Plan, B5 Heritage Management Plan, B3 Noise and Vibration Management Plan, B6 Air Quality Management Plan, B4 Soil and Water MP, B2 Flora and Fauna MP. W2B-PC0-0-UC-EML-00001 email provided as evidence of Consultation Manager use / implementation - attachment indicating consultation regarding traffic management for pedestrian access and busway access on 21/7/2020 Notice newsletters regarding work on shared paths ar Maclean (Dec 2019) and temporary traffic changes between Maclean and Yamba Interchange (Sept 2019)
C2	COMPLAINTS AND ENQUIRIES PROCEDURE Prior to the commencement of pre-construction and construction, or as otherwise agreed by the Secretary, the Applicant shall ensure that the following are available for community enquiries and complaints for the duration of construction: (a) a 24 hour telephone number(s) on which complaints and enquiries about the SSI may be registered; (b) a postal address to which written complaints and enquires may be sent; (c) an email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system for complaints unable to be resolved. The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.	**Compliant**	The Stakeholder and Community Liaison Plan includes Communication and stakeholder engagement tools (Appendix B) and Complaints handling and escalation procedure (Appendix C). Appendix B includes a 24-hour 1800 number, email address manned by Communications and Stakeholder Engagement Team (1800 778 900 and W2B@pacificcomplete.com.au), Community notifications postal address (76 Victorial St, Grafton) etc. as relevant during pre-construction and construction phases. The project's website contains different (current - operational phase) contact information (1800 653 092 and pacific.highway@rms.nsw.gov.au). The Communication and Stakeholder Engagement Strategy section 7 details Complaints Management System.	W2B Stakeholder and Community Liaison Plan (W2B-PC0-0-ZJ-PLN-00001 Rev E) W2B Communication and Stakeholder Engagement Strategy Ver4 dated 12 May 2015
C3	Prior to the commencement of pre-construction and construction, or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Construction Complaints Management System consistent with AS 4269: Complaints Handling and maintain the System for the duration of construction and up to 12 months following completion of the SSI.	**Compliant**	Complaints management system, in line with AS 4269 Complaints Handling, is detailed in section 7 of the Strategy. Evidence of implementation sighted as screenshot of complaint management entry dated 10 Feb 2021 regarding a traffic change signage complaint received from a local resident at Woombah, noting action to be taken and contact complainant to close out.	W2B Communication and Stakeholder Engagement Strategy Ver4 dated 12 May 2015
	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.	**Compliant**	Compliance Tracking Report section 6 refers to Community engagement and complaints management and summarises community complaints. Example - Oct 16 - Mar 17 tracking report refers to a total of 220 complaints received of which 64 related to environmental aspects or issues (noise and vibration, flooding, dust, property damage etc). The complaints are listed in Appendix C. Example WC2G pre-operational report section 4 stated no complaints were received.	W2B Communication and Stakeholder Engagement Strategy Ver4 dated 12 May 2015 W2B Stakeholder and Community Liaison Plan (provided as W2B-PC0-0-ZJ-PLN-00001) W2B (S3-11) Six Monthly Compliance Tracking Report Oct 16 to Mar 17. WC2G six monthly and pre-operational compliance tracking report May-Oct20

C4	PROVISION OF ELECTRONIC INFORMATION Prior to the commencement of pre-construction and construction, or as otherwise agreed by the Secretary, the Applicant shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the SSI, for the duration of construction and for 12 months following completion of the SSI. The Applicant shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to: (a) information on the current implementation status of the SSI; (b) a copy of the documents listed in condition A2, and any documentation supporting modifications to this approval that may be granted from time to time; (c) a copy of this approval and any future modification to this approval; (d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the SSI; (e) a copy of each current strategy, plan, program or other document required under this approval; (f) the outcomes of compliance tracking in accordance with condition D27 of this approval; and (g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.	**Compliant**	Website specific to the project was maintained during construction phase and is being maintained during current (operational) phase including: (a) current status of the project (b) document library including project documentation (c) copy of CoA (d) Environmental Impact Statement Dec 2012, EPL and Water Licence (e) environment and project plans (f) environmental monitoring and compliance reports (g) project contacts (1800 778 900 and project email address) It is noted that this condition refers to provision of electronic information prior to the commencement of pre-construction and construction and for 12 months following completion. This was not able to be verified due to the timing of the audit and the current project phase.	W2B (S3-11) Six Monthly Compliance Tracking Report Oct 16 to Mar 17. WC2G six monthly and pre-operational compliance tracking report May-Oct20. During construction phase, web site addressing all active project stages maintained: updated.http://www.rms.nsw.gov.au/projects/northern-nsw/woolgoolga-to-ballina/index.html Current / operational phase: www.pacifichighway.nsw.gov.au/ Document Library: W2B 2012 Federal Decision W2B Mod6 Consolidated Approval EPL 20713 DPI Water Licence DPIE Major Projects Determination on DPIE Planning portal

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
	Sch. 2 Part D. ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING				
	BIODIVERSITY				
D1	MITIGATION FRAMEWORK The Applicant shall develop a framework for finalising mitigation measures for threatened species. This Mitigation Framework shall be developed by a suitably qualified and experienced ecologist in consultation with DPI (Fisheries), EPA and DoE, and submitted to the satisfaction of the Secretary prior to commencement of detailed design of the relevant stage, unless otherwise agreed by the Secretary. The Mitigation Framework shall detail the process for finalising the biodiversity strategies, plans and programs required under this approval. The Mitigation Framework shall include:	Compliant	Mitigation Framework sighted, Appendix A provides evidence of consultation with agencies. The Framework has been developed by a team of qualified and experienced ecologists (as per section 1.3 of the Framework document). The overall document and Appendix B in particular provides process for finalising the strategies, plans and programs relevant to threatened species.	Biodiversity Mitigation Framework Apr 2015 prepared by Amec Foster Wheeler (provided as W2B-RMS-0-EX-RPT-00001); DPE letter Ref 14/15001 dated 8/5/2015, provided as W2BP1DR-ENV-DEV-000044, signed by Karen Jones, Director Infrastructure Projects as delegate of the Secretary, approving Mitigation Framework issued in Mar 2015.	
	(a) a description of the methodology of all proposed pre-construction species and habitat surveys, including surveys undertaken in the 2013-2014 spring and summer seasons and as otherwise required under this project approval, and with reference where relevant to compliance with relevant NSW and Commonwealth field survey methods and guidelines; (b) a summary of potential changes to the avoidance, mitigation and/or offset measures specified in the documents listed in condition A2, as justified by the results of surveys described in condition D1(a); (c) a summary of the potential avoidance, mitigation and/or offset measures for all species for which the proposed level of impact or mitigation required differs from that assessed in the documents listed in condition A2, including evidence that those measures would achieve the same or an improved biodiversity outcome; (d) provision for updating the relevant Threatened Species Management Plans required under condition D8; and (e) a schedule for submission of all biodiversity strategies, plans and programs required under this approval in accordance with the requirements for submission in the conditions below.	Compliant	Mitigation Framework sighted to address this requirement: a) chapter 4 details the survey methodologies and notes the relevant guidelines, Table 4-1 includes the threatened species and ecological community surveys undertaken since EIS and SPIR approval b) chapter 5 discusses changes to avoidance and mitigation measures c) chapter 5 d) chapter 6 provides process for updating TSMPs e) Appendix B includes schedules for submissions	Biodiversity Mitigation Framework Apr 2015	
D2	The Applicant shall prepare and implement a Connectivity Strategy, to be submitted and approved by the Secretary prior to the commencement of construction. The strategy shall describe the rationale for, and final design and location of, fauna connectivity structures for the SSI and shall demonstrate the effectiveness of connectivity measures for the species targeted for the crossing. The Strategy shall be developed from the draft Connectivity Strategy in the documents listed in condition A2 in consultation with the EPA, DPI (Fisheries) and DoE, to the Satisfaction of the Secretary.	Compliant	Connectivity Strategy had been developed and approved as per sighted evidence. Agency consultation details are provided in section 1.5 and Appendix B (fauna connectivity workshop). Connectivity Strategy has been assessed against conditions B10-11-12.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2); Letters of submission of the Strategy to DPE dated 14/12/2016 (S3-11) and DPE approval letter signed by Kane Winwood dated 27/04/2017 and DoEE approval letter signed by Kat Miller dated 16/05/2017.	
	The Strategy shall include: (a) details of all crossings for terrestrial and aquatic fauna, including but not limited to land bridges, bridge, arch and culvert crossings, and crossings for arboreal fauna;		Target species are detailed in Section 5, connectivity structures are described in Section 6. Appendices list all structures as relevant.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)	
	(b) justification for the location and design, and spacing of the connectivity structures, with reference to relevant State and Commonwealth threatened species guidelines and the results of on-ground surveys as required by D2(d);		Details of pre-construction surveys that informed the location, design and spacing are provided in section 5 of the Connectivity Strategy (3-11). Details of the final structures proposed for each species, their number and spacing are provided in section 8 of the Connectivity Strategy (3-11).	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)	
	(c) demonstration of the effectiveness of the connectivity structures (including exclusionary fencing) in terms of location, design and number of connectivity structures to mitigate impacts to the relevant threatened species, and that the crossings: (i) maintain or improve connectivity and movement pathways; (ii) reduce the risk of mortality for threatened species; (iii) are located at locations, at sufficient frequency along the alignment, based on the ecological requirements of the targeted species, including but not limited to home range size, movement patterns, and habitat use;		The effectiveness of the crossings (overview of connectivity structures) are discussed in chapter 6 and for the final connectivity structures and each species, location of fauna fences are discussed in chapter 8. Maintenance and monitoring, reporting etc are discussed in chapter 10.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)	
	(d) the results of surveys undertaken to determine the habitat, species movement patterns, distribution of species to confirm the design and location;		The connectivity strategy (3-11) provides details of pre-construction surveys in section 5.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)	
	(e) consideration of connectivity under the existing highway, service roads and local roads (servicing over 100 vehicles per day);		Table 2-1 of the Connectivity Strategy (3-11) provides details on how this has been considered and provides examples as to where connectivity on local roads has been included. The Koala MP is also cited, with additional connectivity for Koalas being considered and implemented in some local road sections. Some connectivity structures including local roads are summarised in chapter 8. Connectivity structures were observed to be implemented and project website includes evidence of them being used by wildlife including Koala furniture and culvert underpasses.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2) Site inspection observations.	
	(f) commitment that pathways to connectivity structures are not to be impeded by ancillary facilities, rest areas or service roads, or local roads (servicing over 100 vehicles per day) that are realigned as part of the SSI or experience an increase in traffic volumes during operation of the SSI;		Table 2-1 of the Connectivity Strategy (3-11) makes this commitment.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)	

(g) commitment to implement the landscaping of vegetation leading to connectivity structures;		Section 7.4 details this commitment including reference to separate Urban Design and Landscape Plans (x4) and revegetation strategies in each threatened species MP.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2) Urban Design Landscape Plan
(h) a fencing strategy, describing the location, design and length of fencing, which must extend beyond the edges of habitat for threatened species;		Fencing strategy detailed in section 7 of the Connectivity Strategy (3-11)	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)
(i) the maintenance of connectivity measures and fencing for the life of the impact of the action, including the timing and frequency;		Chapter 9 of the strategy includes Adaptive Management - states that if potential changes are identified to the structures listed in the fauna register (Appendix E), those changes will be reviewed. Chapter 10 details monitoring and maintenance.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)
(j) an assessment of the flooding risk for proposed structures, and measures to confirm and provide for flood immunity of those structures in light of this assessment. The agreement of the EPA on flood immunity levels shall be obtained prior to the commencement of construction of the relevant stage;		Section 7.5 of the fauna connectivity strategy provides an assessment of the flood risk and details measures for flood immunity. Evidence of consultation with EPA and other agencies provided in Appendix B. Approval granted by DPE for connectivity strategy.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2) Approval Letter from DPE for connectivity strategy (sections 3-11) Agency consultation comments from DPIE and EPA
(k) commitment that all bridges in identified wildlife corridors, or adjacent to threatened species habitat, or are likely to provide connectivity for threatened species based on surveys undertaken in accordance with the Mitigation Framework required in condition D1, shall provide a minimum three metre wide dry passage from toe of the scour protection to the top of the bank, with natural substrate and refuge features. Where this criteria cannot be achieved and with the agreement of the EPA, consideration shall be given to the use of suitable materials in, and the final form of, the scour protection to provide for the safe and effective passage of fauna;		Commitment provided in Table 2-1 of the Connectivity Strategy (3-11). Details of bridge design in section 6.3 and summary of all bridges in Appendix E and F. EPA provided commentary on a specific area around connectivity (Banana Road) and comments were addressed. Safe passage for fauna was observed and allowed for - By and large natural substrate isn't achievable (because of scour), so smaller rock has been installed to be more comfortable for ground fauna. These were observed to be being used.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2) Site inspection observations.
(l) detailed consideration of the effects of connectivity structures on the maintenance or improvement of population viability and gene flow; and		Detailed discussion in section 8 for each target species. Reference given to further detail in threatened species MP.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)
(m) incorporate the outcomes of the Mitigation Framework required under condition D1.		Table 2-1 states that outcomes of the Mitigation Framework required under condition D1 have been incorporated into the strategy.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)
Unless connectivity measures can be demonstrated to be effective at successfully mitigating the barrier and fragmentation impact to relevant species, in accordance with the requirements of the construction flora and fauna management plan required under condition D26(e), and threatened species management plans required under conditions D8 and D9, the residual impact to connectivity shall be offset.	**Not triggered**	The connectivity strategy describes how the connectivity measures proposed will be effective in successfully mitigating the barrier and fragmentation impact to relevant species and provides monitoring and performance objectives and evaluation of connectivity structures in section 9. Threatened species monitoring reports have shown evidence of use by most threatened species (Koala, Coastal Emu, microbats, frogs, Phascogale, Rufous Bettong, fish). It is noted that Quolls were largely excluded from monitoring due to sparse distribution, but that one record of a quoll using a fauna crossing was recorded. Site inspection confirmed that connectivity structures are functional for purpose. However, the 2019 threatened mammal monitoring report states that in the case of Long-nosed Potoroo thresholds for corrective action have been exceeded at some sites, with connectivity being cited as a potential reason (particularly Site 6, the monitoring report notes on pg. 14 that "the main concern with this site is habitat connectivity, severed from the adjacent Wardell sandplain since clearing for the Upgrade occurred in 2017". The corrective action of "continued monitoring" is noted. PCo/TfNSW (Martin Mulhearn, Mark Woods) responded that all recordings are noted in the annual monitoring reports - nothing triggered the requirement for additional offset at the time of audit. PCo/TfNSW (Simon Wilson) stated that the determination of effectiveness will be determined at the end of the operational connectivity monitoring program.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2) Threatened Species Management Plans Construction Flora and Fauna MP Koala monitoring reports Coastal Emu monitoring reports Threatened mammal monitoring report 2019 Glider monitoring report 2019 Audit discussions 30/8/2021 (Martin Mulhearn, Mark Woods, Toni Hawkins)

	Where the location and/or design of connectivity structures has changed from that identified in the documents listed under conditions A2(c) and A2(e), the Strategy shall demonstrate how the new location and/or design would result in an improved biodiversity outcome. The Strategy shall clearly identify how the connectivity structures will work in conjunction with other biodiversity measures, such as complementary fauna exclusion fencing measures and the regeneration/replanting of native vegetation, to be implemented for the SSI.	**Compliant**	Changes have been identified in Appendix E of the Connectivity Strategy (3-11) and justifications provided. The Connectivity Strategy, in particular Chapters 6, 7 and 8 demonstrate the effectiveness of each structure and mitigation measure.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)
	The Applicant shall demonstrate to the satisfaction of the Secretary how public authority comments on the Strategy have been addressed. The Strategy may be submitted in stages to suit the staging of the SSI.	**Compliant**	Section 1.5 and Appendix B of the Connectivity Strategy (3-11) describes the agency consultation process. Agency consultation information is provided in Appendix B. Approval of the strategy was granted by DPI and Commonwealth indicating the conditions were adequately addressed.	DPE Approval Letter 27/4/2017 EPBC Approval Letter 16/5/2017 Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2)
D3	BIODIVERSITY OFFSET STRATEGY The Applicant shall prepare and implement a Biodiversity Offset Strategy to outline how the ecological values lost as a result of the SSI will be offset in perpetuity. The Strategy shall be developed from the draft Biodiversity Offset Strategy in the documents listed in condition A2, in consultation with the EPA, DPI (Fisheries) and DoE, to the satisfaction of the Secretary. Unless otherwise agreed to by the EPA, DPI (Fisheries) and DoE, offsets shall be provided on a like-for-like basis and at a minimum ratio of 4:1 for native vegetation (including salt marsh) impacted by the SSI or as required by the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (Commonwealth of Australia 2012) and Offsets Assessment Guide (Commonwealth of Australia 2012), whichever is the greater.	**Compliant**	The Strategy identifies available options for offsetting the biodiversity impacts of the project including options for securing biodiversity values in perpetuity. Chapter 4 describes measures to manage biodiversity impacts. Section 5.2 details the policy requirements. A total of 23 threatened fauna species (TSC Act and EPBC Act) were identified as requiring species credits. Consultation noted in section 1.4 and provided in Appendix B. Biodiversity Offset Plan section 5.3 notes these conditions will be met. Section 4.4 of Biodiversity offset package provides offset details of offset properties and section 4.8 indicates timeline for completion by 2018. Biobanking agreements / biodiversity stewardship agreements have not been verified in this audit.	Biodiversity Offset Strategy (Dec 15, as available in the project website document library) and approval letters from DOE and DPE (provided as W2B-RMS-0-EX-LET-00003 dated 7 Jan 2016 and 00004 dated 6 Jan 2016 respectively) Biodiversity Offset Package Dec 2017 - W2B-PC0-0-EX-RPT-00137
D3-a	The Strategy shall include, but not necessarily be limited to: (a) the objectives and outcomes that would be sought through a biodiversity offset package, including to achieve a neutral or net beneficial outcome for all threatened species and endangered ecological communities likely to be impacted directly or indirectly during both the construction and operation of the SSI;		Sections 1.2, 1.3 and 2.3.3 of the Biodiversity Offset Strategy states the purpose, objectives and intended outcomes of the Biodiversity Offset Framework to achieve a neutral or net beneficial biodiversity outcome for all threatened species and endangered ecological communities likely to be impacted directly or indirectly during construction and operation of the project.	Biodiversity Offset Strategy (Dec 15, as available in the project website document library) and approval letters from DOE and DPE (provided as W2B-RMS-0-EX-LET-00003 dated 7 Jan 2016 and 00004 dated 6 Jan 2016 respectively) Biodiversity Offset Package Dec 2017 - W2B-PC0-0-EX-RPT-00138
D3-b	(b) confirmation of the vegetation type/habitat (in hectares) to be cleared and their condition, and the size of offsets required (in hectares);		Sections 3 and 5 of the Biodiversity Offset Strategy identify the impacts, ecological communities and offset requirements.	Biodiversity Offset Strategy
D3-c	(c) details of the available offset measures that have been selected to compensate for the loss of existing native vegetation (including mangroves, salt marsh and riparian vegetation), threatened and vulnerable species and Endangered Ecological Communities and their habitats, and identification of potential offset sites;		Section 6 discusses procurement of offset sites but does not provide a detailed list. Rather, citation is made to the Biodiversity Offset Package and Biodiversity Offset Status Report 2. It is noted that the Offset strategy was approved despite these not being listed in this report specifically. Given that the Biodiversity Offset Status Report 3 provides a list of the proposed offset sites, it is clear that the intent of this condition has been addressed.	Biodiversity Offset Strategy Biodiversity Offset Status Report 2 Biodiversity Offset Status Report 3
D3-d	(d) consideration of contingency measures for offsets to address potential changes to impacted areas as a result of detailed design changes;		Section 7.4 of the Biodiversity Offset Strategy discusses management of changes in biodiversity impacts.	Biodiversity Offset Strategy
D3-e	(e) a process for addressing and incorporating offset measures arising from changes in biodiversity impacts (where these changes are generally consistent with the biodiversity impacts identified for the SSI in documents listed under condition A2), including: (i) changes to the SSI footprint due to detailed design;		Section 7.4 of the Biodiversity Offset Strategy discusses management of changes in biodiversity impacts	Biodiversity Offset Strategy
	(ii) changes to predicted impacts as a result of changes to mitigation measures;			
	(iii) the identification of additional species/habitat through pre-clearance surveys and construction; and			
	(iv) additional impact associated with the establishment of ancillary facilities;			
D3-f	(f) the decision-making framework that would be used to select the final suite of offset measures to achieve the objectives and outcomes established within the Strategy, including the ranking of offset measures; and		Section 7 of the Biodiversity Offset Strategy overall addresses implementation of biodiversity offsets. Section 5.2.2 refers to a decision making framework developed for the selection of offsets, provided in section 5.4.	Biodiversity Offset Strategy
D3-g	(g) options for securing and management of biodiversity offsets in perpetuity.		Section 1.3 Objectives identifies in-perpetuity protection and Section 6 and 7 of the Biodiversity Offset Strategy detail biodiversity offset investigations and implementation.	Biodiversity Offset Strategy

	The Applicant may elect to satisfy the requirements of this condition by identifying a suitable offset strategy which addresses impacts from multiple Pacific Highway Upgrade projects within the North Coast bioregion. Any such strategy, including an agreement made with EPA and DoE, shall be approved by the Secretary within a timeframe agreed to by the Secretary.	**Not triggered**	TfNSW confirmed, at the audit discussions, that the W2B Biodiversity Offset Strategy is a standalone document and has not been developed to address multiple Pacific Highway upgrade projects.	Biodiversity Offset Strategy Evidence of consultation with agencies Communication from the Secretary Letters from DPE and DoE approving the Strategy Audit discussions on 30/8/2021 (Martin Mulhearn, Mark Woods)
	The Biodiversity Offset Strategy shall be submitted to, and approved by, the Secretary prior to the commencement of construction work that would result in the disturbance of the relevant existing ecological communities, threatened species, or their habitat, unless otherwise agreed by the Secretary.	**Compliant**	Approval from the Secretary noted prior to commencement of major construction. The timeframes and supporting documents for submission to agencies is as follows: TfNSW submitted extension of time request in April 2015 to DP&E and DoEE which was approved. This approval and variation required: •the submission of the BOS (D3) and BOSR (D4) for approval no later than 3 months after commencement of Stage 1 works. •approval of the BOS (D3) and BOSR (D4) before Stage 2 works could proceed. Stage 1 commenced on 19 May 2015 – noted in EPBC Annual Report. The W2B project submitted the Biodiversity Offset Strategy and Biodiversity Offset Status Report in August 2015. Both documents were submitted and approved in January 2016. Stage 2 commenced 8 April 2016 – noted in EPBC Annual Report	Biodiversity Offset Strategy (Dec 15, as available in the project website document library) and approval letters from DOE and DPE (provided as W2B-RMS-0-EX-LET-00003 dated 7 Jan 2016 and 00004 dated 6 Jan 2016 respectively) Evidence of consultation with agencies Communication from the Secretary Letters from DPE and DoE approving the Strategy Audit discussions on 30/8/2021 (Martin Mulhearn, Mark Woods)
D4	Prior to the commencement of construction work that would result in the disturbance of the relevant existing ecological communities, threatened species, or their habitat, unless otherwise agreed by the Secretary, the Applicant shall submit for the approval of the Secretary, the offset sites for the species listed under condition D4(a). The selection of the offset sites should be undertaken in consultation with the EPA, DPI (Fisheries) and DoE.	**Compliant**	Consultation details provided in section 1.3, 1.4 and Appendix D. The Offset Status Report addresses this requirement. As per S1 compliance tracking report, the approval was within 3 months of commencement of sections 1 and 2 and approval of the Biodiversity Offset Status Report prior to commencement of Stage 2 works.	Threatened Biodiversity Offset Status Report: Offset Status Report for MNES (update 3) Compliance Tracking Reports: S1 May 2-17 - Feb 2018
D4-a	Submission of the offset sites for approval shall be accompanied by: (a) details of offset sites to compensate the impacts on: (i) Koala populations in Coolgardie/Bagotville, Broadwater and Woombah/Iluka; (ii) Moonee Quassia (Quassia sp. Moonee Creek); (iii) Sandstone Rough–Barked Apple (Angophora robur); (iv) Singleton Mint Bush (Prostanthera cineolifera); and (v) Lowland Rainforest in Sub-tropical Australia;		Offset site details to meet 100% offsets are provided for each species in the Offset Status Report. As per S1 Compliance Tracking Report, in June 2017 an addendum to the Biodiversity Offset Status Report was developed to add a new site for the Broadwater koala population.	Threatened Biodiversity Offset Status Report: Offset Status Report for MNES (update 3) Compliance Tracking Reports: S1 May 2-17 - Feb 2018
D4-b	(b) a map that defines the locations and boundaries of the sites;		The Offset Status Report and Biodiversity Offset Package address this requirement.	Offset Status Report Jun2016 (W2B-RMS-0-EX-RPT-00004) Biodiversity Offset Package
D4-c	(c) demonstration, through ground truthing survey or an alternative method(s), the adequacy of the site(s), in terms of habitat suitability and presence of the relevant species, to offset the impacts of the SSI;		The Offset Status Report addresses this requirement.	Offset Status Report for MNES (update 3)
D4-d	(d) consideration of how the offsets achieve the outcomes required by the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy to the satisfaction of DoE; and		The Offset Status Report addresses this requirement.	Offset Status Report for MNES (update 3)
D4-e	(e) details of how the offset sites would be secured and managed in perpetuity.		The Offset Status Report addresses this requirement.	Offset Status Report for MNES (update 3)
D5	The Applicant shall prepare and implement (following approval) a Biodiversity Offset Package, within twenty-four months of approval of the Biodiversity Offset Strategy, or as otherwise agreed by the Secretary.		PCo prepared and implemented a Biodiversity Offset Package (December 2017) within 24 months of the approval of the Biodiversity Offset Strategy (January 2016).	Biodiversity Offset Strategy (Dec 15, as available in the project website document library) and approval letters from DOE and DPE (provided as W2B-RMS-0-EX-LET-00003 dated 7 Jan 2016 and 00004 dated 6 Jan 2016 respectively); Biodiversity Offset Package (W2B-PC0-0-EX-RPT-00137) dated Dec 2017
D5-a	The package shall detail how the ecological values lost as a result of the SSI will be offset. The Biodiversity Offset Package shall be prepared in consultation with the EPA, DPI (Fisheries) and DoE, for the approval of the Secretary, and shall (unless otherwise agreed by the Secretary) include, but not necessarily be limited to: (a) the identification of the extent and types of habitat that would be lost or degraded as a result of the final design of the SSI;		As per chapter 5 of the BOP, the BOS specified 34 biometric vegetation types that were impacted by the project. Through further vegetation assessments, an additional 5 biometric vegetation types are also required to be offset. The biometric vegetation types recorded on each offset site are detailed in Sections 4 and 5, along with the total offset area provided for each community. Evidence of consultation provided between EPA and DoE.	Biodiversity Offset Package (W2B-PC0-0-EX-RPT-00137) dated Dec 2017 Submission of Biodiversity Offset Package 2017 to DPIE - 15/12/2017 Re-submission of Biodiversity Offset Package 2020 to DoEE and DPIE - 29/05/2020 DPIE review comments - 22/02/2018 and 02/07/2020 DoEE review comments - 27/11/2018 EPA review comments - 24/01/2018 and 26/06/2020 DAWE review comments - 27/04/2021

D5-b	(b) the objectives and biodiversity outcomes to be achieved;		CEMP Chapter 7 and Appendix A5 (S3-11) / Appendix A6 (S1-2) provides the procedures, to report incidents and emergencies including potential scenarios, of reporting incidents informing ER and RMS Representative within 24hours. As per the RMS procedure, it is the responsibility of the RMS Regional Environment Manager to complete the process of notifying EPA and other authorities. Reference is provided to Clause 101 of POEO Gen Regs where verbal notification to relevant authorities followed by provision of written report within seven days. Incident reporting is undertaken as per the compliance tracking program (condition D27) via Pacific Complete's online incident reporting system IMPACT and summarised in the letter submitting compliance reports. The IMPACT system was reviewed/verified in this audit. As per audit discussions, a verbal advice on incidents with significant off-site impacts is provided within one hour to the ER and RMS Representative, followed by written report in two days and a detailed information submitted in 10 days in line with process in CEMP and compliance tracking program. Evidence of reporting for two incidents noted: 11 Oct 2018 Category 1 Incident has occurred in Portion D of W2B Pacific Highway Upgrade at approximate CH 148300. 22 Nov 2018 Cat 1 incident reported on 23 Nov (changed to Cat 2 on 26 Nov) on failure of hydrocarbon booms causing water pollution and corrective measures taken.	Biodiversity Offset Package
D5-c	(c) details of the final suite of the biodiversity offset measures selected and secured in accordance with the Biodiversity Offset Strategy including the identification of all offset sites, including, offset attributes, shapefiles, textual descriptions and maps that clearly define the location, boundaries of the offset areas;		Section 4 of BOP	Biodiversity Offset Package
D5-d	(d) an assessment demonstrating how the offset area(s) achieve the outcomes required by the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy and user guide to the written satisfaction of DoE;		Section 5 of BOP	Biodiversity Offset Package
D5-e	(e) the management and monitoring requirements for compensatory habitat works and other biodiversity offset measures proposed to ensure the outcomes of the package are achieved, including: (i) the monitoring of the condition of species and ecological communities at offset locations; (ii) the methodology for the monitoring program(s), including the number and location of offset monitoring sites, and the sampling frequency at these sites; (iii) provisions for the annual reporting of the monitoring results for a set period of time as determined in consultation with the EPA, DPI (Fisheries) and DoE; and (iv) the monitoring and reporting on the effectiveness of these measures, and progress against the performance and completion criteria;	**Compliant**	Section 4.6 and 4.7 of BOP	Biodiversity Offset Package
D5-f	(f) the results of targeted field surveys within the offset sites (undertaken at any ecologically appropriate time of the year) to assess and describe habitat suitability, presence/absence of threatened species and ecological communities and an assessment of the baseline population;		Section 4.4 and Appendix C of BOP	Biodiversity Offset Package
D5-g	(g) a description of the current quality (prior to any management activities) of the offset area(s);		Section 4.4. and Appendix C of BOP	Biodiversity Offset Package
D5-h	(h) targeted management actions, regeneration and/or revegetation strategies to be undertaken on the offset area(s) to improve the ecological quality of these areas for the relevant species and communities;		Section 4.6 and Appendix C of BOP	Biodiversity Offset Package
D5-i	(i) clear performance objectives for management actions that will enable maintenance and enhancement of habitat within the offset area, as well as contribute to the better protection of individuals and/or populations of the relevant species;		Section 4.6 and Appendix C of BOP	Biodiversity Offset Package
D5-j	(j) performance and completion criteria for evaluating the management of the offset area, including contingency actions, criteria for triggering contingency actions and a commitment to the implementation of these actions in the event that performance objectives are not met; a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;		Section 4.6 and Appendix C of BOP	Biodiversity Offset Package
D5-k	(k) timing and responsibilities for the implementation of the provisions of the Biodiversity Offset Package and achieving performance objectives;		Section 4.8 of BOP	Biodiversity Offset Package
D5-l	(l) details of who would be responsible for monitoring, reviewing, and implementing the Biodiversity Offset Package; and		Section 4.7 of BOP	Biodiversity Offset Package
D5-m	(m) a description of funding arrangements or agreements including work programs and responsible entities.		Section 4.5 and 5 of BOP	Biodiversity Offset Package

	The Biodiversity Offset Package shall include details of the offset sites approved under condition D4, and timeframe for the delivery of the offset sites. Where monitoring required under conditions D8 and/or D9 indicates that biodiversity outcomes are not being achieved, remedial actions. as approved by the Secretary, shall be undertaken to ensure that the objectives of the Biodiversity Offset Package are achieved. The requirements of the Biodiversity Offset Package shall be implemented by the responsible parties according to the timeframes set out in the Biodiversity Offset Package, unless otherwise agreed by the Secretary. Note: • If an offset site proposed as a part of the Biodiversity Offset Strategy or Biodiversity Offset Package is already required to be protected as a result of a separate approval, only the management actions which can be demonstrated to be additional to those required for the separate approval, can be considered as an offset for this project in accordance with the EPBC Act Environmental Offsets Policy 2012 (or subsequent published revisions).		The BOP includes details required as per this condition.	Biodiversity Offset Package
D6	Prior to the commencement of construction of the relevant stage that would result in the disturbance of native vegetation (or as otherwise agreed by the Secretary), the Applicant shall prepare and implement a Nest Box Plan to provide replacement hollows for displaced fauna. The Plan shall be prepared in consultation with the EPA and to the satisfaction of the Secretary. The Plan shall be prepared by a suitably qualified and experienced ecologist and detail the number and type of nest boxes to be installed, which shall be justified based on the number and type of hollows removed (based on pre clearing surveys), the density of hollows in the area to be cleared and in adjacent areas, and the availability of adjacent food resources. The Plan shall also provide details of maintenance protocols for the nest boxes installed including Responsibilities, timing and duration.	Compliant	Multiple plans prepared for different sections all have relevant approval letters prior to commencement of construction. Sighted Nest Box Plans had been prepared by suitably qualified and experienced ecologist (e.g. S6 Plan prepared by Associate Director AECOM, S7 Plan prepared by BIOSIS) EPA consultation evidenced by email (e.g. email from Craig Harre, EPA, dated 2/12/2014 and approval email dated 12/12/2014)	Nest Box Plan approved (DPE approval 17/2/2015). Nest Box Management Plans for sections have been developed & approved by DPE: S 1 & 2: approved 16/1/15 S 3: approved 23/2/15 S 4 & 5: approved 16/1/15 S 6 (Sept 2014): approved 23/2/15 S 7 (Dec 2014): approved 23/2/15 S 8 & 9: approved 16/1/15 S 10 & 11 (Oct 2014): approved 16/1/15 EPA Consultation & Endorsement of Nest Box Plans - Sections 1 to 11 (W2B-PC0-0-EF-REC-00005)
D7	TRANSLOCATION STRATEGY The Applicant shall prepare and implement a Flora Translocation Strategy to determine the feasibility and potential efficacy of translocation measures (as identified in the threatened species management plans required under condition D8), prior to the commencement of construction work that would result in the disturbance of threatened flora species for which translocation is proposed. The Strategy shall be prepared by a suitably qualified and experienced ecologist, in consultation with the EPA and DoE, and to the satisfaction of the Secretary. The Strategy shall include: (a) a feasibility assessment of timeframe and staging requirements, availability of expertise, risk effectiveness analysis and availability/suitability of translocation sites;	Compliant	Documentation sighted on Flora Translocation Strategy as approved. Strategy S3-11 version 3 (Feb 20) Section 1.3 details the Strategy authors as suitably qualified and experienced. Section 1.4 provides details of consultation with EPA, DPIE and DoE and updates in version 3. The original strategy was prepared and approved prior to major construction works.	Biodiversity Offset Plan Flora translocation strategy sections 3-11 v3 Feb20 Flora Translocation Strategy sections 1-2 Approval Letter DPIE 9/6/15 Approval Letter DPIE 2/2/16 Revised Strategy Approval Letter DPIE 1/5/20 Submission of revised Flora Translocation Strategy & TfNSW response to DPIE's Comments and Queries (W2B-RMS-0-EF-LET-00020)
	(b) detail of species specific information on the proposed methods of, and discussion of results of past recorded responses to, translocations;		Strategy section 5 and appendices address this requirement.	
	(c) a framework for the translocation process applicable to each affected species; and		Strategy appendices address this requirement.	
	(d) consideration of appropriate compensatory habitat in the Biodiversity Offsets Package required under condition D5 where translocation is not reasonable or feasible.		One species, Angophora robur was considered not feasible for translocation. The Biodiversity Offset Plan identified this species would require 410ha offset. Two further species, Maundia triglochinoides and Cyperus aquatilis were considered not feasible for translocation but that compensatory habitat management would be conducted.	
D8	THREATENED SPECIES MANAGEMENT PLAN The Applicant shall prepare and implement Threatened Species Management Plans to detail how impacts of the SSI will be minimised and managed specifically for each species identified as significantly impacted in the documents listed in condition A2 or in accordance with condition D1. The Plans shall be developed from the draft Threatened Species Management Plans included in the documents listed in condition A2(c) (subject to condition D9), in consultation with EPA, DPI (Fisheries) and DoE, and to the satisfaction of the Secretary,	Compliant	All threatened species management plans have been reviewed and follow a similar structure that addresses the requirements of D8. It is noted that all plans have undergone detailed consultation and review and been approved by relevant agencies. DPIE approval for Threatened Mammal Plan approved 7/5/2015, prior to major construction commencement. EPBC approval for this plan dated 25/10/2015. The plans include Survey methodologies (chapter 3), Impacts and management approach (ch.4), mitigation goals and corrective actions are included in pre-construction management (ch.5), construction and operational management (ch.6-7), monitoring and reporting (ch.8). Section 8.4 refers to road mortality monitoring. All these plans provide specific monitoring and management measures that should continue to be implemented. It is noted that the 2019 Frog Monitoring report states that compensatory ponds for Wallum Sedge Frog have not been built. The mitigation measures for this species have not been implemented as per the approved MP. Email communication between EPA, Ben Lewis (ecologist) and PC was sighted stating that WSF ponds would not be built. No confirmation was sighted in this audit from EPA on this approach. PCo/TfNSW mentioned at Audit discussions that No response	Threatened Flora Management Plan Rainforest Communities and Threatened Rainforest Plants MP Threatened Mammal MP Threatened Invertebrates MP Threatened Frog MP Threatened Fish MP Coastal Emu MP Koala MP (including reveg strategy) Ballina Koala Plan (commonwealth approval 7) Threatened Gliders MP Threatened Bats MP Letter correspondences submitting (RMS), commenting and approving (DPE) the plans; Threatened Frog Monitoring Annual Report 2019-20 Email dated 27/8/2020 from Simon Wilson (PCo) to EPA citing ecological advice from Lewis Ecological Surveys regarding frog compensatory ponds W2B-PC0-C-EF-EML-00009 Audit discussions (Mark Woods, Martin Mulhearn, responses by Simon Wilson)
	and shall include but not necessarily be limited to: (a) demonstration that adequate surveys have been undertaken to assess the impacts of the SSI with reference to the Mitigation Framework developed under condition D1, including baseline data collected from surveys, undertaken by a suitably qualified and experienced ecologist on threatened species and ecological communities within all habitat areas to be cleared of vegetation for the SSI, that are likely to contain these species and that are likely to be adversely impacted by the SSI (as determined by a suitably qualified expert). The data shall address the densities, distribution, habitat use and movement patterns of these species;			
	(b) identification of potential impacts on each species; (c) details of and demonstrated effectiveness of the proposed avoidance and mitigation and management measures to be implemented for each threatened species including measures to at least maintain habitat values of habitat areas compared to baseline data and maintain connectivity for the relevant species;			

	(d) an adaptive monitoring program to assess the use of the mitigation measures identified in conditions B10 and D2. The monitoring program shall nominate appropriate and justified monitoring periods, performance parameters and criteria against which effectiveness of the mitigation measures will be measured and include operational road kill and fauna crossing surveys to assess the use of fauna crossings and exclusion fencing implemented as part of the SSI; (e) monitoring methodology for threatened flora and fauna adjacent to the SSI footprint, (f) goals and performance indicators to measure the success of mitigation measures, which shall be specific, measurable, achievable, realistic and timely (SMART), and be compared against baseline data; (g) methodology for the ongoing monitoring of road kill, the species densities, distribution, habitat use and movement patterns, and the use of fauna crossings during construction and operation of the SSI, including the proposed timing, and duration of that monitoring; (h) provision for the assessment of monitoring data to identify changes to habitat usage and whether this can be attributed to the SSI; (i) details of contingency measures that would be implemented in the event of changes to habitat usage patterns, entities, distribution, and movement patterns attributable to the construction or operation of the SSI, based on adequate baseline data; (j) mechanisms for the monitoring, review and amendment of these plans; (k) provision for ongoing monitoring during operation of the SSI (for operation/ongoing impacts) until such time as the use and effectiveness of mitigation measures can be demonstrated to have been achieved over a minimum of three successive monitoring periods, unless otherwise agreed by the Secretary in consultation with the EPA, DPI (Fisheries) and DoE; and (l) provision for annual reporting of monitoring results to the Secretary and the EPA, DPI (Fisheries) and DoE, or as otherwise agreed by those agencies. In developing the Plans, the Applicant shall demonstrate to the satisfaction of the Secretary and DoE, how the public authorities and expert reviewer recommendations provided for each draft plan in the documents listed in condition A2(c) have been addressed, including detailed justification of any variance from the recommendations of the expert reviewer of the management plans, including analysis of potential risk to the threatened species. The Plans must be submitted and approved by the Secretary prior to commencement of construction of the relevant stages of the action, and implemented prior to commencement of construction of the relevant stages, unless otherwise agreed by the Secretary.		was received from EPA and noted that no ponds were on the design and therefore not deleted. Impacts on WSF habitat was managed to be avoided during the detailed design. Section 5.4 of the Compliance Report states that several pre-construction monitoring reports were submitted including Invertebrate Monitoring Pre-construction Annual Report 2017, Coastal Emu Monitoring Pre-Construction Annual Report 2016 Each management plan provides details of baseline surveys. Ongoing annual monitoring reports for all threatened biota make comparisons with baseline data.	
D9	As part of the Threatened Species Management Plans required under condition D8, the Applicant shall prepare and implement a Koala Management Plan to demonstrate the ongoing survival of the Koala populations at Coolgardie/Bagotville, Broadwater and Woombah/Iluka. The Plan shall be prepared by a suitably qualified and experienced species expert and shall include, but not necessarily be limited to: (a) results of detailed surveys to determine: (i) the population status of the Coolgardie/Bagotville, Broadwater and Woombah/Iluka Koala populations; (ii) habitat use and movement patterns of Koala populations within five kilometres of the proposed upgrade, or such area as determined by the independent ecologist; and (iii) habitat areas likely to be fragmented by the SSI; including the results of SPOT assessment and radio tracking. The results and adequacy of surveys shall be verified by an independent suitably qualified and experienced ecologist with appropriate qualifications and experience in Koala and road ecology. Where appropriate, the Applicant may vary the required area of survey specified under condition D9(a)(ii) to the satisfaction of the independent ecologist;	**Compliant**	Koala MP sighted. It has been assessed to comply with requirements of condition D8. Details and qualifications of authors, experts and reviewers are given in section 2.4 and has been prepared by suitably qualified and experienced expert. Independent Review by niche environment and heritage included in Appendix G. Survey effort was increased following the advice of the expert review. Koala activity and crossing structures are detailed in section 8.4.	Koala Management Plan v5 Jun2019 S1-11 (W2B-RMS-0-EF-PLN-00048) Koala Phased Resource reduction email communication Koala EWMS email communication
D9-b	(b) a detailed assessment of the impacts to the Koala populations based on the survey results required by condition D9(a), including population impacts and the identification of habitat likely to be fragmented and/or isolated as a result of the SSI;	**Compliant**	The Koala MP details the results of the Population Viability Analysis conducted, and provides a detailed assessment of habitat and impacts to koala.	Koala Management Plan v5 Jun2019 S1-11 (W2B-RMS-0-EF-PLN-00048)
D9-c	(c) a detailed description, including the location and design, of all proposed avoidance and mitigation measures;	**Compliant**	Chapter 4 of Koala MP describes potential impacts and management including detailed design considerations and mitigation/monitoring measures.	Koala Management Plan v5 Jun2019 S1-11 (W2B-RMS-0-EF-PLN-00048)
D9-d	(d) justification that the location and design of mitigation measures: (i) have been designed with the objective of no Koala road kill from the commencement of construction of the SSI. In the event that a Koala is injured or killed during construction or operation, this shall be reported on the Applicant's website within 24 hours of this occurring, and the record shall remain available for a period of at least five years, unless otherwise agreed by the Secretary;	**Compliant**	The Koala Annual Monitoring Report Year 1 notes one koala mortality and the Year 2 report notes 2 fatalities - Auditees clarified that the Updates and Announcements section of the project website - Koalas include a report of mortalities and other incidents.	Koala Management Plan Koala Annual Monitoring Report Year 1 Koala Annual Monitoring Report Year 2 Koala Annual Monitoring Report Year 3 DPE MCoA Approval Letter S1-11 4/8/2016 Environmental Work Method Statement (EWMS) W2B Pacific Highway Upgrade (Section 10) Phased Resource Reduction for Koalas, Section 10 Email dated 4/6/2018 from Simon Williams (RMS) to DPIE and EPA submitting Phased Resource Reduction report, Koala Health Assessment and OBR Connectivity Review W2B-PC0-C-EF-EML-00051

(ii) include permanent fencing of the entire SSI for the length of the distribution of the Coolgardie/Bagotville, Broadwater and Woombah/Iluka populations and for two kilometres beyond the distribution of the Coolgardie/Bagotville, Broadwater and Woombah/Iluka population, following the highway or to the nearest natural barrier to Koala movement (e.g. river), after baseline surveys are complete in accordance with condition D9(a) and prior to operation;	**Compliant**	The Koala MP makes provision for fencing installation as per this condition. It is noted that the issue of the fencing was discussed with EPA and DPI as per agency consultation in Appendix E of the Koala MP. RMS confirmed in this consultation that fencing would be installed prior to operation. Approval from the Secretary of the Koala MP indicates that this condition was adequately addressed. Installed examples of koala structures and fencing were observed during site audit visit with select photographs included in Appendix E of this audit report.	Koala Management Plan Site audit observations
(iii) result in the complete, safe crossing of fauna crossings by the Koala. Fauna crossings shall be provided at a sufficient frequency to ensure that habitat connectivity is maintained or improved from pre-construction conditions, as determined by the independent ecologist and agreed by EPA;	**Compliant**	The Koala MP details consultation in the development of koala fauna crossing structures. The Koala Annual Monitoring Report 2019-2020 demonstrates that successful crossings by Koalas have been made demonstrating connectivity has been maintained.	Koala Management Plan Connectivity Plan Koala Annual Monitoring Report 2019-2020 DPE MCoA Approval Letter S1-11 4/8/2016 EPBC Approval Letter
(iv) provide sufficient opportunities for species dispersal and re-colonisation as determined by the independent ecologist and EPA;	**Compliant**	The Koala MP details in Appendix E significant consultation and revisions of the plan with relevant agencies. Approval letters show that the Koala MP was to the satisfaction of the Secretary. Appendices include various independent ecologist reviews.	Koala Management Plan Connectivity Plan Koala Annual Monitoring Report 2019-2020 DPE MCoA Approval Letter S1-11 4/8/2016
(v) are in areas that, and are at a sufficient frequency to, achieve (i) - (iv), based on site specific information contained in the survey results required by condition D9(a) and the ecological requirements of the Koala, including but not limited to home range size, local movement patterns and habitat use, in accordance with the advice of the independent ecologist and EPA;	**Compliant**	The Koala MP details in Appendix E significant consultation and revisions of the plan with relevant agencies. Approval letters show that the Koala MP was to the satisfaction of the Secretary. Appendices include various independent ecologist reviews.	Koala Management Plan Connectivity Plan Koala Annual Monitoring Report 2019-2020 DPE MCoA Approval Letter S1-11 4/8/2016
(vi) all koala underpass structures shall have a minimum height and width of 2.4 metres and a maximum length of 40 metres, or a minimum height and width of 3 metres and a maximum length of 50 metres. The underpass/culvert entrance shall be located at ground level, and no higher in the fill. Structures that provide passage over the road shall have a minimum width of 30 metres and shall be treated with contiguous habitat features;	**Compliant**	The Targeted Koala Structures follow the required dimensions. It is noted that the MP and connectivity strategy were approved. Koala MP list several culverts that do not comply with these dimensions and exceeds the maximum length stated in the approval condition. it is noted that these structures are not within these population areas or “Targeted Koala Structures” in table 6-2 on the Koala Management Plan that are of other dimensions such as chainage 7280 culvert is 1 x 3 x 3 x 80 m; chainage 10340 is 2 x 2.1 x 0.9 x 69 m; 10750 is 2 x 3 x 3 x 62m; 11710 is 1 x 3 x 3 x 57m etc In the connectivity strategy similarly, 37339 RCBC (culvert) is 56.35m x 2.4 x 2.4.	Koala Management Plan Connectivity Strategy Site Observations
(vii) provide passage for Koalas under or over the existing highway (where the existing highway forms part of the SSI) and service roads or local roads (servicing over 100 vehicles per day);	**Compliant**	The Koala MP details in Appendix E significant consultation and revisions of the plan with relevant agencies. Approval letters show that the Koala MP was to the satisfaction of the Secretary. The Connectivity Plan details all crossing structures, including passage over and under roads as described.	Koala Management Plan Connectivity Plan Koala Annual Monitoring Report 2019-2020 DPE MCoA Approval Letter S1-11 4/8/2016
(viii) effectively minimise the risk of predation from dogs in both dedicated and combined crossings;	**Compliant**	The Koala MP specifies a no domestic dog policy during construction. For operation, a predator control plan was proposed committing RMS to a dog control program with lead agency Local Land Services. Monitoring of predatory animal activity is proposed as part of the crossing structure monitoring program. The Koala Annual Monitoring Report 2019 - 2020 notes that dog and fox crossings increased between year 1 and 2 by 70% though no evidence of predation was recorded. Dog tracks were also recorded in the Wardell Road culvert where cameras detected koala crossings. The report states that the predator control program operating since the start of the monitoring program has resulted in the removal of 22 wild dogs and foxes which should reduce predation risk.	Koala Management Plan Ballina Koala Plan Koala Annual Monitoring Report 2019 - 2020
(ix) provide dry passage for dedicated fauna crossings and for combined fauna crossings to the satisfaction of EPA and DoE, at a flood immunity level determined in accordance with condition D2(c)(j); (x) provide habitat linkages to crossing structures from adjacent Koala habitat; and (xi) ensures that pathways to connectivity structures are not impeded by ancillary facilities, rest areas, service roads or local roads;	**Compliant**	Section 6.3.9 of the Koala MP describes the fauna crossing structures and the fauna furniture to be installed to allow for dry passage. Section 6.3.10 describes habitat revegetation and landscape design to create linkages. Section 6.3.12 states that ancillary facility sites have been located on cleared land or sites of low ecological value. The Fauna Connectivity Strategy in section 7.5 discusses the design of fauna crossing structures related to flood risk. Both plans note extensive agency consultation during their preparation. It is considered that these conditions were met to the satisfaction of the EPA and DoE.	Koala Management Plan Fauna Connectivity Plan DPIE Approval Letter (W2B-PC0-0-EX-LET-00003 - Koala MP: dated 4/2/2016) EPBC Approval Letter (W2B-PC0-0-EX-LET-00002 - Koala MP: dated 29/2/2016)

D9-e	(e) if the mitigation measures discussed in condition D9(d) cannot be demonstrated to be effective to the satisfaction of the Secretary, in consultation with EPA and DoE, provision for the Plan to be revised to include the design and construction of a minimum of one dedicated underpass or land bridge every 500 metres. Underpass structures shall have a minimum height and width of three metres and a maximum length of 50 metres;	**Not triggered**	Appendix E (agency review) in the Koala MP notes that RMS does not propose to include additional structures every 500 m in response to DPI comments. DPI later approved the Koala MP. It is considered that the Koala MP was therefore to the satisfaction of the Secretary.	Koala Management Plan DPE MCoA Approval Letter S1-11 4/8/2016
D9-f	(f) provision for the installation and vegetation planting of fauna overpasses prior to the commencement of construction;	**Not triggered**	No fauna overpasses were installed in the form of land bridges (noting that glider pole locations did not require revegetation). This condition is pre-construction.	
D9-g	(g) a revegetation strategy to be implemented to increase connectivity adjacent to the SSI and leading to crossing locations, and the provision of vegetation planting on land bridges, to ensure the establishment of the vegetation prior to the commencement of construction;	**Compliant**	The Koala MP provides a revegetation strategy for Section 10 of the Project (Niche 2015) but there is no specification this is to be implemented prior to construction. The condition requires revegetation for connectivity prior to the commencement of construction, however the revegetation strategy summarises revegetation for construction phase. Table 6-3 of the Koala MP notes that revegetation activities should occur at fauna crossings and areas disturbed by construction - this is in the construction mitigation goals not to be achieved pre-construction. Table 8-1 summarises the implementation of the MP and states that revegetation would occur in the construction phase, not the pre-construction phase. PCo/TfNSW stated that no land bridges were constructed.	Koala MP Revegetation strategy for Section 10 (Niche 2015) Audit discussions 30/8/2021 and responses (Martin Mulhearn, Mark Woods, Simon Wilson)
D9-h	(h) details of the proposed monitoring methodology to ensure the effectiveness of the mitigation measures and the ongoing survival of the Coolgardie/Bagotville, Broadwater and Woombah/Iluka Koala populations. Monitoring shall: (i) include goals that demonstrate the mitigation measures are effective, including clear objectives, milestones, performance measures, corrective actions, and thresholds for corrective actions, and timeframes for completion; (ii) occur until such time as the mitigation measures are demonstrated to be effective for three consecutive monitoring periods, or as agreed by the Secretary, to the satisfaction of the independent ecologist and OEH; and (iii) for the purposes of the Coolgardie/Bagotville population, consider the results of the surveys undertaken in the Koala habitat and population assessment: Ballina Shire Council LGA (Biolink Ecological Consultants Pty Ltd, November 2013) in determining the baseline population;	**Compliant**	Chapter 5-6-7 includes monitoring methods during pre-construction, construction and operational stages including main goals for management, performance thresholds and corrective actions. Chapter 8 of the Koala MP provides a detailed monitoring strategy referring to three years of monitoring, as approved by DPIE to the satisfaction of the Secretary. It noted low ability to detect potential impacts driven by low Koala densities, high spatial variability in the Koala distribution and the short (three year) monitoring period. It is noted that detailed agency consultation in preparation of the monitoring strategy is provided in Appendix D, as well as expert review in Appendix B and C. It is noted that the Koala Monitoring Report 2019-2020 recommends additional predator control at K1 in section 1 which is consistent with the corrective actions described in the monitoring methodology. This suggests that mitigation measures have not been effective for 3 consecutive monitoring periods. The Koala MP states that predator control for year 4 will be determined after the year 3 review. To maintain compliance with this condition feral animal control should continue. The year 3 monitoring report also notes that there is a high level of statistical uncertainty in relation to population estimates and that "more years of data collection would alleviate this problem", despite no obvious change to population size detected in year 3. Monitoring for koala should continue in order to demonstrate with more statistical certainty that mitigation measures have been effective. (iii) The Koala Management Plan refers to this study and it is cited in section 3.3.3 with reference to the Coolgardie / Bagotville population.	Koala Management Plan DPE MCoA Approval Letter S1-11 4/8/2016 Koala Monitoring Reports (years 1-3)
D9-i	(i) where the results of monitoring undertaken in accordance with condition D9(h) suggests that the mitigation measures are ineffective or changes to the population have occurred, the Applicant shall provide the Secretary, within one month of recording the changes, the corrective actions that have been implemented and/or proposed to be implemented, or a procedure for demonstrating that this change is not a result of the SSI. Should the Applicant be unable to demonstrate to the satisfaction of the Secretary that any change to the population is not attributable to the SSI, the SSI shall be deemed as the cause of the impact and the Applicant shall, within one month of these findings, provide, to the satisfaction of the Secretary, in consultation with the EPA and DoE, the proposed corrective actions to address the impacts of the SSI. Any required corrective actions shall include, but not necessarily be limited to: (i) installation of further crossings or modifications to existing crossings and the provision of evidence of the complete, safe crossing of these fauna crossings by the Koala. Any additional crossings shall be provided at a sufficient frequency to ensure that habitat connectivity is maintained or improved from pre-construction conditions, within two years of their installation; and (ii) reassessment of all revegetation areas and frequent reporting and maintenance including addressing failures;	**Compliant**	The Year 2 monitoring report notes corrective actions taken with respect to road mortality and fauna exclusion fencing in section 5.3.3 The results of the Year 3 monitoring report indicate no changes to the population have occurred. It is noted however that the report states there is a high level of statistical uncertainty in relation to population estimates. PCo/TfNSW stated that Years 1 and 2 surveys were done in accordance with the Koala Management Plan by completing diurnal and nocturnal surveys on the same day. To address the independence concerns with this method, year 3 surveys were undertaken on non-consecutive days. TfNSW is currently monitoring the koala population in accordance with the approved Koala Management Plan. The monitoring program was designed such that after 15 years of monitoring, it would allow 70% statistical power to detect a 30% change in the population. TfNSW is currently in year 5 of the program and the remaining years is expected to alleviate statistical uncertainty.	Koala Annual Monitoring Report (Year 1) Koala Annual Monitoring Report (Year 2) Koala Annual Monitoring Report (Year 3) 2019-2020 Koala Management Plan

D9-j	(j) if the measures in condition D9(i) cannot be demonstrated to be successful within one year of their implementation, procedure for the submission of further offsets in accordance with conditions D5 and D6(j), to be provided within one year of these findings. Further offsets may include: (i) the legal protection and conservation management of additional areas of existing habitat that actively regenerated and secured into conservation management; and/or (ii) strategic revegetation of cleared areas to improve connectivity; and/or (iii) development of a supplementary feeding program and/or breeding program; and/or (iv) development of a long term predator control program; and	**Not triggered**	Auditee response confirmed that no further offsets have been required as no changes to the population as per D9(i) were detected	Koala Annual Monitoring Report (Year 1) Koala Annual Monitoring Report (Year 2) Koala Annual Monitoring Report (Year 3) Koala Management Plan
D9-k	(k) evidence of consultation with species experts, EPA and DoE in addressing the requirements of this condition, and demonstration of how comments provided by the species experts, EPA and DoE, as a result of this consultation, have been addressed.	Compliant	Extensive consultation evident in the Koala Management Plan as per Chapter 2 and included in Appendix D (Agency reviews) Appendix B and C (expert reviews), Appendix G (Adequacy Reviews). As per section 2.3.2, the Koala MP has been updated with input from relevant experts and agencies and data to fill knowledge gaps.	Koala Management Plan Audit discussions 30/8/21
	The Koala Management Plan shall be submitted and approved by the Secretary prior to the commencement of construction of the relevant stages of the SSI. The approved Koala Management Plan shall be implemented prior to the commencement of construction of the relevant stages.	Compliant	Approval from the Secretary dated 4/8/2016 sighted, for version 3 of Koala MP. Noted in the Compliance Tracking report details of pre-clearing surveys including the requirements of the Koala MP implemented. Auditee explained that no construction works, as defined in MCoA Schedule 1, had occured prior to relevant stage plan approval. The Koala Management Plan was updated in stages to allow commencement of Construction for particular sections: V2 (sections 1-2) - Approved by DPIE on 6 May 2015 and Commonwealth for Condition 8 on 11 May 2015. V3 (section 1-8 and 11) - Approved by DPIE on 4 Feb 2016 and Commonwealth for Condition 8 on 29 Feb 2016. V4.4 (sections 1-11) - Approved by DPIE for MCoA D8 and D9 on 4 August 2016 and Commonwealth for Condition 8 and 9 on 11 August 2016.	Koala Management Plan DPE MCoA Approval of version 3 Letter S1-8 & 11 4/8/2016 Compliance Tracking Report (S3-11 Apr-Sep2017, October 2016-Mar2017) Koala MP S1-2 DPE approved 6/5/2015 (W2BP1DR-ENV-DEV-000043) and DoE approved 11/5/2015 (W2B-PC0-0-EF-LET-00101) Koala MP Ver3 S1-2 update and S3-8 & 11 DPE approval provided as W2B-PC0-0-EX-LET-00003 dated 04/2/2016 Koala MP S1-10 DoE approval provided as W2B-PC0-0-EX-LET-00002 dated 29/2/2016 Koala MP Ver4.4 S9-10 DoE approval provided as W2B-PC0-0-EX-LET-00010 dated 11/8/2016 and DPE approval provided as W2B-PC0-0-EX-LET-00011 dated 04/8/2016 Koala MP Ver2 S1-2 DPE approval provided as W2BP1DR-ENV-DEV-000043 dated 6/5/2015 and DoE approval provided as W2B-PC0-0-EF-LET-00101 dated 11/5/2015
		NOISE AND VIBRATION		
D10	LAND USE SURVEY D10. Prior to the commencement of construction, the Applicant shall undertake a land use survey to identify areas that are sensitive to construction vibration and construction ground-borne noise impacts. The results of the survey shall be incorporated into the Construction Noise and Vibration Management Plan.	Compliant	Sensitive receivers for all sections of the project site are listed in the CNVMP. The plan notes that the location of sensitive receivers is detailed in the SITEMAP GIS system (not reviewed in this audit).	CEMP Appendix B3 - Construction Noise and Vibration Management Plan (section 3-11) Oct 2015 Rev 3 - section 4.1; S1-2 May 2015
D11	OPERATIONAL NOISE REVIEW The Applicant shall prepare a review of the operational noise mitigation measures proposed to be implemented for the SSI, within six months of commencing construction, unless otherwise agreed by the Secretary. The review shall be prepared in consultation with the EPA, to the satisfaction of the Secretary.	Compliant	Cited in both S1-2 and S3-11 ONMRs. The noise modelling was based on appropriately calibrated noise models, inclusive of additional noise monitoring. The ONMR provides operational noise assessment based on detailed design requirements and reviews operational noise mitigation measures as per EIS.	S1-2 Noise Management Report Oct 2015, S1-2 Operational noise compliance report (Feb 2019), S3-11 Operational Noise Review REPORT Apr 2018
	The review may be submitted in stages to suit the staged construction of the SSI and shall: (a) confirm the operational noise predictions of the SSI based on detailed design. This operational noise assessment shall be based on an appropriately calibrated noise model (which has incorporated additional noise monitoring, where necessary for calibration purposes);	Compliant	Cited in both S1-2 and S3-11 ONMRs. The noise modelling was based on appropriately calibrated noise models, inclusive of additional noise monitoring. The ONMR provides operational noise assessment based on detailed design requirements and reviews operational noise mitigation measures as per EIS.	S1-2 Noise Management Report Oct 2015, S1-2 Operational noise compliance report (Feb 2019), S3-11 Operational Noise Review REPORT Apr 2018
	(b) review the suitability of the operational noise mitigation measures identified in the documents listed in condition A2. The review shall take into account the detailed design of the SSI and, where feasible and reasonable, and where necessary, refine the proposed measures with the objective of meeting the criteria outlined in the NSW Road Noise Policy (Department of Environment, Climate Change and Water, 2011), based on the operational noise performance of the SSI predicted under (a) above; and	Compliant	Cited in both S1-2 and S3-11 ONMRs. The operational noise mitigation measures were revised based on detailed design modelling. Section 3 of ONMR provides operational noise assessment as per detailed design and Section 10 reviews operational noise mitigation measures against EIS noise modelling - Table 10-2 has recommended additional mitigation measures for relevant receivers. The ONMR concluded that majority of identified receivers do not need mitigation, remainder requiring architectural treatment.	S1-2 Noise Management Report Oct 2015, S1-2 Operational noise compliance report (Feb 2019), S3-11 Operational Noise Review REPORT Apr 2018

(c) where necessary, investigate additional feasible and reasonable noise mitigation measures to achieve the criteria outlined in the NSW Road Noise Policy (DECCW, 2011).	**Compliant**	Cited in both S1-2 and S3-11 ONMRs. Additional noise mitigation measures have been considered where modelling indicates exceedances in ONMR sections 8-9.	Woolgoolga to Glenugie (Section 1-2) - Operational noise compliance report (Feb 2019), Woolgoolga to Ballina upgrade (Glenugie to Pimlico) Operational Noise Review REPORT Apr 2018

	SOIL, WATER QUALITY AND HYDROLOGY			
D12	WATER QUALITY MONITORING PROGRAM The Applicant shall prepare and implement a Water Quality Monitoring Program, to monitor the construction and operation impacts of the SSI on surface and groundwater quality and resources and wetlands, prior to construction. The Program shall be prepared in consultation with the OEH, EPA, DPI (Fisheries), NOW, DoE and Rous Water (in relation to the Woodburn borefields), to the satisfaction of the Secretary, and shall include but not necessarily be limited to: (a) identification of surface and groundwater quality monitoring locations (including watercourses, waterbodies and SEPP14 wetlands) which are representative of the potential extent of impacts from the SSI; (b) the results of any groundwater modelling undertaken; (c) identification of works and activities during construction and operation of the SSI, including emergencies and spill events, that have the potential to impact on surface water quality of potentially affected waterways and known Oxleyan Pygmy Perch habitat; (d) development and presentation of parameters and standards against which any changes to water quality will be assessed, having regard to the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (Australian and New Zealand Environment Conservation Council, 2000) or relevant baseline data; (e) representative background monitoring of surface and groundwater quality parameters for a minimum of twelve months (considering seasonality) prior to the commencement of construction, to establish baseline water conditions, unless otherwise agreed by the Secretary; (f) a minimum monitoring period of three years following the completion of construction or until the affected waterways and/or groundwater resources are certified by an independent expert as being rehabilitated to an acceptable condition. The monitoring shall also confirm the Establishment of operational water control measures (such as sedimentation basins and vegetation swales); (g) contingency and ameliorative measures in the event that adverse impacts to water quality are identified; and (h) reporting of the monitoring results to Department of Planning and Environment, OEH, EPA, DPI (Fisheries), NOW, DoE and Rous Water (in relation to the Woodburn borefields).	Compliant	Water Quality Monitoring Program has been developed and implemented for the project - the program was submitted to DPE in March 2015 and was approved in May 2015. The letter of approval from DPE reminded RMS of annual water quality reporting requirements. The Water Quality Monitoring Program document includes various sections addressing the requirements under this CoA. Section 4 includes the water quality sampling for each year of Operational Phase. Section 7.2 of the TFMP outlines the performance criteria of the management strategy during operation regarding maintaining water quality and no negative impacts to OPP. Annual water monitoring reports and six monthly compliance reports indicate compliance to this condition. As per clause D12-f, monitoring is recommended to continue for the required timeframe unless certified by independent expert as being rehabilitated to an acceptable condition.	Surface water and groundwater monitoring protocol sighted on project website. Water Quality Monitoring Program, Sections 3-11, prepared by GeoLink first issue dated 4/5/15 final update 26/6/19, provided as W2B-RMS-0-ES-PLN-00040-8.0 DPE Letter Ref 14/11502 dated 8.5.15 provided as W2BP1DR-ENV-DEV-000085, approving W2B Water Quality Monitoring Program, signed by Karen Jones, Director Infrastructure Projects as delegate of the Secretary. Minutes of Meeting between Rous Water and Pacific Complete, 30/6/2016 (W2B-CP0-C-AX-MOM-00511); Six monthly compliance reports Annual water monitoring report Jan-Dec 2020: Operational phase S1-2 prepared by GeoLink dated Feb 2021. Annual Water quality monitoring report Jun17-Jun18, dated Mar2019 Threatened Fish Management Plan (TFMP)
D13	HYDROLOGICAL MITIGATION REPORT The Applicant shall prepare and implement a Hydrological Mitigation Report for properties where flooding and/or hydrological impacts are predicted to exceed the relevant flood management objective in the documents listed in condition A2 as a result of the SSI. The Report shall be **prepared by a suitably qualified expert** and be based on detailed surveys (e.g. floor levels) and associated assessment of potentially flood affected properties in the Corindi, Clarence and Richmond river floodplains. The Report shall: (a) identify properties in those areas likely to have an increased/exacerbated impact and detail the predicted impact; The types of impacts to be considered include all those examined in the EIS including but not limited to changes in flood levels and velocities, alteration to drainage, reduction in flood evacuation access or capability, impacts on infrastructure, impacts on stock and agriculture, and impacts to the environment; (b) identify mitigation measures to be implemented to address these impacts; (c) identify measures to be implemented to minimise scour and dissipate energy at locations where flood velocities are predicted to increase as a result of the SSI and cause localised soil erosion and/or pasture damage; (d) be developed in consultation with the relevant council, NSW State Emergency Service and directly-affected landowners; (e) identify operational and maintenance responsibilities for items (a) to (c) inclusive; and (f) refer to the assessments described in conditions B31 and B32. The report may be submitted in stages to suit the staged construction of the SSI. Construction shall not commence within those areas likely to have altered flood conditions until such time as works identified in the hydrological mitigation report have been completed, unless otherwise agreed by the Secretary.	Compliant	Report sighted in the project website document library that addresses the requirements: a) Section 5 details flood impact assessment b) Section 6 details flood mitigation measures c) Sections 5.2.2 and 6.4 Scour protection measures d) Sections 2 Consultation, 6.2 Mitigation impacts on private property and 6.3 Mitigation impacts on access (flood access and evacuation) e) Section 6.5 details ongoing maintenance f) Section 5.2 addresses flood impact assessment against flood management objectives The report had been prepared in stages as per construction sections as sighted. The document content (history box, section 1.5) indicates updates being made to address comments from consultation with various agencies. The qualification of the personnel that prepared the report not verified however independent review by qualified specialist is noted.	Hydrological Mitigation Report IA044200-NHY-RP-0001 | 2 09.2166.2109-0150 5 March 2015, Hydrological mitigation report Glenugie to Devils Pulpit, Woolgoolga to Ballina Pacific Highway upgrade Hydrological mitigation report Devils Pulpit to Ballina W2B-PC0-0-DF-RPT-00006 ISBN 987-1-925582-89-5 available in the project website document library April 2017
D14	Based on the mitigation measures identified in condition D13, the Applicant shall prepare and implement a final schedule of feasible and reasonable flood mitigation measures proposed at each directly-affected property in consultation with the landowner. The schedule shall be provided to the relevant landowner(s) prior to the implementation/construction of the mitigation works, unless otherwise agreed by the Secretary. A copy of each schedule of flood mitigation measures shall be provided to the Department of Planning and Environment and the relevant council prior to the implementation/construction of the mitigation measures on the property.	Compliant	Constructed mitigation measure included adjustment to the Maclean Levee. Table 6.2 of the publicly available Hydrological Mitigation Report provides schedule of departures from flood management objectives on private land, and mitigation measure status. Appendices of the report detail future flood maps and flood impact consultation.	Site Audit observations, Hydrological Mitigation Report IA044200-NHY-RP-0001 | 2 09.2166.2109-0150 5 March 2015, Hydrological mitigation report Glenugie to Devils Pulpit, Woolgoolga to Ballina Hydrological mitigation report Devils Pulpit to Ballina April 2017 six monthly compliance tracking report S3-11 Apr-Sep20
D15	The Applicant shall employ a suitably qualified and experienced independent hydrological expert, whose appointment has been endorsed by the Secretary, to deal with all hydrological matters and assist landowners in negotiating feasible and reasonable mitigation measures.	Compliant	Mark Babister / WMAwater had been appointed as an independent hydrological expert; sections 1.6 and 2.5 of the Hydrological Mitigation Report.	Letter from Mark Babister to Pacific Complete included in the hydrological mitigation reports. DPE approval on appointing Mark Babister (WMA Water) as hydrological expert - Ref 14/11502 (submitted as W2B-PCO-0-ZH-LET-0035)

D16	The Applicant shall provide feasible and reasonable assistance to the relevant council and/or NSW State Emergency Service, to prepare any new or necessary update(s) to the relevant plans and documents in relation to flooding, to reflect changes in flooding levels, flows and characteristics as a result of the SSI.	Compliant	Section 6.3 of the Hydrological Mitigation Report refers to how the project will improve flood access and evacuation along the upgraded highway and connecting local roads and states that flood modelling process information, flood predictions and changed floodplain conditions have been provided to NSW SES.	Hydrological Mitigation Report IA044200-NHY-RP-0001 | 2 09.2166.2109-0150 5 March 2015, Hydrological mitigation report Glenugie to Devils Pulpit, Woolgoolga to Ballina Pacific Highway upgrade Hydrological mitigation report Devils Pulpit to Ballina April 2017
TRANSPORT AND ACCESS				
D17	The Applicant shall prepare and implement a Signage Policy to addresses the impact of towns (South Grafton, Ulmarra, Tyndale, Woodburn, Broadwater and Wardell) which are bypassed by the SSI, at least six months prior to operation, unless otherwise agreed by the Secretary. The Policy shall be prepared in consultation with the relevant council and to the **satisfaction of the Secretary**. The Policy shall be consistent with the Guide: Signposting (RTA July 2007), Tourist Signposting guide (RMS and Destination NSW 2012) and provide for signage that: (a) provides information on the range of services available within the bypassed towns of South Grafton. Ulmarra, Tyndale, Woodburn, Broadwater and Wardell; and (b) informs motorists of routes through the bypassed towns that may be taken as an alternative to the highway. The Policy may be submitted in stages to suit the staged construction of the SSI.	Compliant	Road signage observed during site audit to be satisfactory as per signage policy. The Traffic and Access Management Plan, as an appendix to the CEMP, discusses project signage requirements and design requirements. Directional signage consultation report (Sept 2018, RMS) section 1.3 refers to signposting guidelines and authorities and section 2 provides directional signage plan. It includes details of consultation with various parties including council. The report states that the directional signage plan was to be submitted to DPE in late 2018. Specific approval from DPE not sighted in the audit.	CEMP Appendix B1 - Traffic and Access Management Plan (available on project website); Site audit observations. Directional signage consultation report (Sept 2018, RMS) DPE letter on signage policy and business access strategy, dated 26/11/2018 provided as W2B-PC0-0-ZH-LET-00028 approving the directional signage consultation report and associated plans.
D18	The Applicant shall prepare and implement a Business Access Strategy to address changes to access to businesses along the highway, at least six months prior to operation. The Strategy shall be prepared in consultation with the relevant council, business owners and the New Italy Museum and to the satisfaction of the Secretary. Note • The Applicant may incorporate the requirements of this condition into the Signage Policy for the SSI under condition D17.	Compliant	Directional signage consultation report (Sept 2018, RMS) section 1.3 refers to Signage for businesses, including use of services signs to inform motorists of the services available; section 2.5 briefly mentions Signage for businesses (such as service signs). Section 3 of the report provides the consultation approach undertaken. Local access updates are provided on project website.	CEMP Appendix B1 - Traffic and Access Management Plans (available on project website); Directional signage consultation report (Sept 2018, RMS) DPE letter - signage policy and business access strategy, dated 26/11/2018 provided as W2B-PC0-0-ZH-LET-00028 Local Access- Project update Dec 2020
D19	ROAD DILAPIDATION Upon determining the haulage route(s) for construction vehicles associated with the SSI, and prior to construction, an independent and qualified expert shall prepare a Road Dilapidation Report. The Report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to its use by traffic and transport related to the construction of the SSI. The Report shall be submitted to the relevant council for review prior to the commencement of haulage. Following completion of construction, a subsequent Report shall be prepared to assess any damage to the road that may have resulted from the construction of the SSI. Measures undertaken to restore or reinstate roads affected by the SSI shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant council, and at the full expense of the Applicant. Note: • Nothing in this condition restricts the Applicant 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.	Compliant	Sections 4.5.1 (Local Roads), 4.6.1 (Pacific Highway Function and Access) and 5.8.6 (Removal of Temporary Roadways and Detours) of the Traffic and Access MP discuss haulage routes management. Letters to Clarence Valley Council (sections 3-4-5 dated 06/11/2020 and Council counter sign dated 24/11/2020, section 6 dated 14/7/2021 and agreed by council signed 29/7/2021), regarding the handover of existing and constructed local roads referring to earlier submission of road dilapidation reports and rehabilitation of haulage routes. Sections 7, 8 and 9 are yet to be finalised at the time of the audit. Team binder emails indicating submission of Dilapidation reports & videos Portion D S10 & S11 local roads and infrastructure, submission to Ballina Shire Council dated 08/03/2017 and 24/7/2017 sighted. Thirty road pavement dilapidation reports (2016) by Pitt & Sherry sighted.	CEMP Appendix B1 - Traffic and Access Management Plan Letters to Clarence Valley Council: Section 3 W2B-PC0-A-ZD-LET-02257 Section 4 W2B-PC0-A-ZD-LET-02360 Section 5 W2B-PC0-B-ZD-LET-07824 Section 6 W2B-PC0-B-ZD-LET-07843 Teambinder general email records General mail submissions are attached for Portion D, Sections 10 and 11 provided as W2BPC - GEC-W2B-PC0-GEC-040827 and W2BPC - GEC-W2B-RMS-GEC-001585. Road dilapidation reports (30 sighted) samples: W2B-PSO-0-AX-RPT-00008 W2B-PSO-0-AX-RPT-00012 W2B-PSO-0-AX-RPT-00028 W2B-PSO-0-AX-RPT-00041 W2B-PSO-0-AX-RPT-00059 W2B-PSO-0-AX-RPT-00093 W2B-PSO-0-AX-RPT-00101 W2B-PSO-0-AX-RPT-00106 W2B-PSO-0-AX-RPT-00119 W2B-PSO-0-AX-RPT-00158 W2B-PSO-0-AX-RPT-00159 W2B-PSO-0-AX-RPT-00163

	URBAN DESIGN AND LANDSCAPING			
D20	The Applicant shall prepare and implement an Urban Design and Landscape Plan prior to the commencement of permanent built works and/or landscaping, unless otherwise agreed by the Secretary, to present an integrated landscape and design for the SSI. The Plan shall be prepared in accordance with the Roads and Maritime Services urban design and visual guidelines, the design principles outlined in the EIS, and the revegetation principles outlined in the EIS Working Paper—Biodiversity. The Plan shall be prepared by an appropriately qualified expert in consultation with the relevant council and community, to the satisfaction of the Secretary. The Plan shall include, but not necessarily be limited to: (a) identification of design principles and standards based on: (i) local environmental values, (ii) heritage values; (iii) urban design context; (iv) sustainable design and maintenance; (v) community amenity and privacy; (vi) relevant design standards and guidelines; and (vii) the urban design objectives outlined in Section 4.2 of the EIS Working Paper—Urban Design Landscape Character and Visual Impact ; (b) the location of existing vegetation and proposed landscaping (including use of indigenous and endemic species where possible). Details of species to be replanted/revegetated shall be provided, including their appropriateness to the area and habitat for threatened species; (c) a description of locations along the corridor directly or indirectly impacted by the construction of the SSI (e.g. temporary ancillary facilities, access tracks, watercourse crossings, etc.) and details of the strategies to progressively rehabilitate regenerate and/or revegetate the locations with the objective of promoting biodiversity outcomes and visual integration; (d) take into account appropriate roadside plantings and landscaping in the vicinity of heritage items and ensure no additional heritage impacts; (e) a description of disturbed areas (including borrow sites) and details of the strategies to progressively rehabilitate, regenerate and/or revegetate these areas, including clear objectives and timeframes for rehabilitation works, procedures for monitoring success of regeneration or revegetation, and corrective actions should regeneration or revegetation not conform to the objectives adopted; (f) location and design treatments for any associated footpaths and cyclist elements, and other features such as seating, lighting (in accordance with AS 4282-1997 Control of the Obtrusive Effect of Outdoor Lighting), fencing, materials and signs; (g) an assessment of the visual screening effects of existing vegetation and the proposed landscaping and built elements. Where properties have been identified as likely to experience high visual impact as a result of the SSI and high residual impacts are likely to remain, the Applicant shall, in consultation with affected landowners, identify opportunities for providing at-property landscaping to further screen views of the SSI. Where agreed with the landowner, these measures shall be implemented during the construction of the SSI; (h) graphics such as sections, perspective views and sketches for key elements of the SSI, including, but not limited to built elements of the SSI; (i) strategies for progressive landscaping and other environmental controls such as erosion and sedimentation controls, drainage and noise mitigation; (j) monitoring and maintenance procedures for the built 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 (k) evidence of consultation with the relevant council and community on the proposed urban design and landscape measures prior to its finalisation. The Plan may be submitted in stages to suit the staged construction program of the SSI.	**Compliant**	Urban Design and Landscape Plan documents prepared, as provided, for various sections of the project sighted to have been prepared by specialist qualified experts. DPE review comments on the qualification and expertise of the plan authors and RMS response sighted. RMS responses to DPE comments also state that each of the individual Councils were consulted during detailed design development phase and each UDLP were placed on public display. It is noted that a specific register of consultation comments and how addressed is not available / sighted at this audit. DPE, via letter dated 20/12/2016 granted an extension of date allowing commencement of construction of permanent built works prior to the submission and approval of the UDLP and thereafter approved the UDLP via letter dated 17/7/2018 (signed by Glenn Snow). The Urban Design and Landscape Plans, as approved by DPE, include the specific matters as required by this condition including the EIS Working Paper: Biodiversity (section 2.4 of S5-6 and S10-11 UDLPs) UDLP has been prepared and submitted in a staged manner with DPIE approval.	W2B design and landscape plan | Maclean to Devils Pulpit Sections 5 and 6 (W2B-ABJ-B-LX-RPT-00001) Response to DPE Comments - Urban Design Landscape Management Plan Sections 3-11(W2B-PC0-0-LX-COM-00001) Submission of Updated Urban Design Landscape Management Plans - Response to DPE Comments- Sections 3 - 11 - MCoA D20 (W2B-PC0-0-LX-EML-00001) DPE Approval Letter / Extension for submission of Urban Design Landscape Plan Sections 3-11 - (W2B-PC0-0-LX-LET-00001) Approval of Urban Design and Landscape Management Plan - Sections 3 - 11 | MCoA D20 (W2B-PC0-0-LX-LET-00002) W2B Upgrade - Bridge over Clarence River at Harwood - Draft Urban Design & Landscape Plan (W2B-PC0-E-LX-RPT-00001) W2B Urban Design and Landscape Plan - Richmond River to Ballina - Sections 10 and 11 (W2B-SMC-D-LX-RPT-00001) Community and stakeholder engagement strategy W2B upgrade Haulage Strategy for Richmond River to Pimlico (S10-11 - W2B-PC0-D-EX-RPT-00007 available on project website document library) W2B Glenugie to Maclean Urban Design and Landscape Plan W2B Devils Pulpit to Richmond River Urban Design and Landscape Plan W2B Bridge over Richmond River Urban Design and Landscape Plan W2B Richmond River to Ballina Urban Design and Landscape Plan

ANCILLARY FACILITIES				
D21	The Applicant shall prepare and implement an Ancillary Facilities Management Plan to detail the management of ancillary facilities associated with the SSI. The Plan shall be prepared in consultation with the EPA, OEH, DPI (Fisheries), DoE, and the relevant council, and to the satisfaction of the Environmental Representative, and shall include, but not necessarily be limited to: (a) a description of the ancillary facility (including a site layout plan), its components and details of the existing environment on and in the vicinity of the site; (b) details of the activities to be carried out at the facility, including the hours of operation, staging of operation and predicted date of commissioning; (c) a description of the plant, equipment and materials to be used and/or stored on the site, including dangerous and hazardous goods; (d) details of the light and heavy construction vehicle movements to and from each facility, including site access and route(s) to be used during the establishment and operation of the facility, and an assessment of potential construction traffic impacts on the local road network and access tracks; (e) a summary of the potential environmental impacts associated with the construction and operation of the facility; (f) demonstrate compliance with the locational and environmental criteria in condition B73(a)—B73(n); (g) details of the mitigation, monitoring and management procedures specific to the facility that would be implemented to minimise environmental and amenity impacts or, where this is not possible, feasible and reasonable measures to offset these impacts; (h) a description of how the management and mitigation measures set out in the documents listed in condition A2 will be implemented on the site, and if not, justification for such decisions particularly on those sites assessed as having a high risk of flood impacts; (i) an assessment of alternative site layouts where either noise management levels are predicted to be exceeded and acoustic treatment of residences is not proposed, or where such treatment is proposed (consequent to the operational impacts of the SSI) but will not be provided prior to establishment of an ancillary facility; (j) a cumulative noise impact statement for the ancillary facility addressing the worstcase cumulative noise impacts resulting from the concurrent operation of the site (including construction traffic movements to and from the site), nearby construction works within the SSI corridor and any other nearby construction activities associated with other road upgrade projects; (k) identification of the timing for the completion of activities at the facility and how the site will be decommissioned (including any necessary rehabilitation); and (l) mechanisms for the monitoring, review and amendment of this plan.	Compliant	S2 CEMP refers to S3-11 Ancillary Facilities Management Plan- Appendix A2 provides Ancillary descriptions and impact assessment for the separate sites across various sections of the project; (l) Appendix B2 includes Ancillary facility checklist template for assessing monitoring, review and amendments; and Appendix B3 provides Major ancillary facilities assessment template including Section 3.1 of the Appendix B3 listing relevant MCoAs for checking. The MAFA samples sighted includes the required descriptions as per this condition throughout the reports. Appendix C of MAFA Harwood reports provide Agency comments & Appendix D is community consultation; Appendix G of MAFA McIntyre's Lane provided Agency comments.	S2 (Halfway Ck to Glenugie) CEMP Appendix B8; S3-11 CEMP Appendix B9 Ancillary Facilities Management Plan Rev5 May2017 (W2B-PC0-0-ZH-PLN-00004-09) Consultation (telephone conversation on 13/7/21) with the Environmental Representative Murray Curtis of ERM. Major Ancillary Facility Assessment - Main site compoint - Bridge over Clarence River at Harwood Rev5 dated 02/12/2016, provided as W2B-AFV-E-EX-RPT-00003; MAFA McIntyre's Lane Ancillary Facility Assessment Rev A dated 16/2/2016- W2B-PC0-A-EX-ASS-0001; MAFA Avenue Road Rev0 dated 07/07/2016 - W2B-PC0-A-EX-ASS-00004
	The plan shall be approved by the Environmental Representative prior to the establishment of the ancillary facilities described therein. In considering the approval of the plan, the Environmental Representative shall take into account the Applicant's response to public authority and council comments on the plan. The Applicant may prepare a separate plan for the facility or include multiple sites within a single or multiple management plans.	Compliant	ER endorsement to CEMP sighted	Email from Murray Curtis, 11/2/2019, to Mark Woods (PC0) providing ER endorsement of the S3-11 CEMP Rev5
BORROW SITES				
D22	The Applicant shall prepare and implement a Borrow Sites Management Plan, to manage the construction, operation and rehabilitation of the borrow sites used to source construction material for the SSI, prior to the commencement of construction at the borrow sites, or as otherwise agreed by the Secretary. The Plan shall be prepared in consultation with the EPA, OEH and DPI (Fisheries) and to the satisfaction of the Secretary, and shall include, but not necessarily be limited to: (a) details of construction/extraction methods and activities carried out at the borrow site; (b) management and mitigation measures to be used to minimise surface and groundwater impacts, Aboriginal and non-Aboriginal heritage, air quality, noise and vibration, biodiversity and visual impacts; (c) consultation with sensitive receivers; and (d) details of the rehabilitation of the borrow site, including future landform and use of the borrow site, landscaping and revegetation, and measures that would be implemented to minimise or manage the ongoing environmental effects of the site. The Plan shall demonstrate that the construction and operation of the Lang Hill borrow site has no adverse impact on the known Oxleyan Pygmy Perch habitat waterway.	Compliant	The Borrow Site Management Plans as approved includes the required processes to satisfy this condition. The Lang Hill Borrow Site section 5, Environmental impacts of the borrow site, refers to measures to manage OPP waterways.	S3-11 CEMP Appendix 10 provides five Borrow Site Management Plans: B10.1 Tyndale Borrow Site B10.2 Lang Hill Borrow Site Rev5 Nov2016 B10.3 Lumleys Hill Borrow Site B10.4 Gibson Borrow Site B10.5 Jali Borrow Site DPE Approval of Jali and Gibson, Lumleys Hill, Lang Hill, Tyndale Borrow Sites (Letters provided as W2B-PC0-0-ZH-LET-00023/24/09/07 respectively) W2B upgrade Haulage Strategy for Richmond River to Pimlico (S10-11 - W2B-PC0-D-EX-RPT-00007 available on project website document library)

	ENVIRONMENTAL REPRESENTATIVE			
D23	Prior to the commencement of construction of the SSI, or as otherwise agreed by the Secretary, the Applicant shall nominate for the approval of the Secretary a suitably qualified and experienced Environmental Representative(s) that is independent of the design and construction personnel. The Applicant shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Secretary. The Environment Representative(s) shall: (a) be the principal point of advice in relation to the environmental performance of the SSI; (b) monitor the implementation of environmental management plans and monitoring programs required under this approval and advise the Applicant upon the achievement of these plans/programs; (c) have responsibility for considering and advising the Applicant on matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the SSI; (d) ensure that environmental auditing is undertaken in accordance with the Applicant's Environmental Management System(s); (e) be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan; (f) be given the authority to approve/reject Out of Hours Works in accordance with condition B17. These works shall be conducted in accordance with the Out of Hours Works Protocol (OOHW Protocol) required in accordance with condition D26(vi); (g) be given the authority to approve/reject ancillary facilities in accordance with conditions B73 and B74 and the Ancillary Facilities Management Plans under condition D21; (h) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and (i) be consulted in responding to the community concerning the environmental performance of the SSI where the resolution	**Compliant**	Murray Curtis of ERM had been appointed as ER for the project and is continuing in the role as per the conditions in this requirement. There is evidence of the ER's involvement as required per this project as per various review/approval correspondences, signed/email documentation reviews and approvals and site investigation notes.	Consultation (telephone conversation on 13/7/21) with the Environmental Representative Murray Curtis of ERM. Various correspondences issued by ER with regard to his function as ER reviewing and endorsing documentation
D24	The Environmental Representative shall prepare and submit to the Secretary a monthly report on the Environmental Representative's actions and decision on matters specified in condition D23 for the preceding month. The reports shall be submitted for the duration of construction of the SSI, unless otherwise agreed by the Secretary.	**Compliant**	Reports by ER are not uploaded to project website. ER sends the reports direct to DPIE. Sample reports sighted for June 2021 (Ref 0349912-ER-2106 dated 07/7/2021), for July 2021 (Ref 0349912-ER-2107 dated 07/8/2021) and for June 2017 (Ref 0349912-ER-1706 dated 14/7/2017). ERG meeting#24 notes dated 20/6/2017 sighted. Reports and meeting notes include detailed reporting of project activities, monitoring reports and assessment and sign off.	Email from Murray Curtis, 30/08/20219, to Mark Woods (PC0) providing evidence of submission of ER reports to DPIE provided as W2B-PC0-0-EX-EML-00018-B with various ER reports attached and ERG meeting notes

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN				
D25	The Applicant shall prepare and implement (following approval) a Construction Environmental Management Plan for the SSI, prior to the commencement of construction, or as otherwise agreed by the Secretary. The Plan shall be prepared in consultation with the EPA, OEH, DPI (Fisheries), NOW and DoE and outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies and in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004).	**Compliant**	S3-11 CEMP Revision History table- Rev4 approval is dated 18/11/2016 and Rev5 approval is dated 29/4/2016. CEMP for all sections of the project sighted. Section 1.3 of the CEMP S3-11 provides details of consultation undertaken during the project's early stages and in preparing the CEMP and sub-plans. CEMP section 6.2 refers to processes for external and government authority consultation and ERG. Evidence of CEMP implementation verified via six monthly compliance reports, annual monitoring reports as relevant.	CEMP for S1, S2, S3-11 DPIE approval of CEMP S3-11 (W2B-PC0-0-ZH-LET-00015) via letter dated 16/3/17 Environmental Representative certification of CEMP Rev5 (W2B-PC0-0-ZH-EML-00002)
	The Plan shall include, but not necessarily be limited to: (a) a description of activities to be undertaken during construction of the SSI (including staging and scheduling); (b) statutory and other obligations that the Applicant is required to fulfil during construction, including approvals, consultations and agreements required from authorities and other stakeholders under key legislation and policies; (c) a description of the roles and responsibilities for relevant employees 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; (d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the SSI). In particular, the following environmental performance issues shall be addressed in the Plan: (i) measures to monitor and manage dust emissions including dust from stockpiles, blasting, traffic on unsealed public roads and materials tracking from construction sites onto public roads; (ii) measures to minimise hydrology impacts, including measures to stabilise bed and bank structures as required; (iii) measures for the handling, treatment and management of contaminated materials; (iv) measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures or dealing with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including potential for reuse of treated water from sediment control basins); (v) measures to monitor and manage spoil, fill and materials stockpile sites including details of how spoil, fill or material would be handled, stockpiled, reused and disposed in a Stockpile Management Protocol. The Protocol shall include details of the locational criteria that would guide the placement of temporary stockpiles, and management measures that would be implemented to avoid/minimise amenity impacts to surrounding residents and environmental risks (including surrounding water courses). Stockpile sites that affect heritage, threatened species, populations or endangered ecological communities require the approval of the Secretary, in consultation with the EPA, OEH and DPI (Fisheries); (vi) measures to monitor and manage hazard and risks including emergency management and management measures to address potential risks to the Woodburn borefield drinking water catchment. These measures shall be developed in consultation with Rous Water; (vii) the issues identified in condition D26; (viii) details of community involvement and complaints handling procedures during construction, consistent with the requirement of conditions C1 to C4; (ix) details of compliance and incident management consistent with the requirements of condition D27; and (x) procedures for the periodic review and update of the Construction Environmental Management Plan and Plans required under condition D26, as necessary (including where minor changes can be approved by the Environmental Representative).		CEMPs include: a) Chapter 2 provides a description of activities; b) Chapter 3 provides statutory obligations and Appendix A1 lists legal and other requirements; c) Chapters 4-5 provides roles and responsibilities, training and induction processes; d) Chapter 3 includes environmental risk analysis and Appendix A2 presents Environmental Aspects and Impacts analysis (i) Appendix B6 - Air quality management plan (ii) Appendix B4 - Soil and water management plan (iii) Appendix B8 - Contaminated land management plan (iv) CEMP S1/S2 Appendix B7 - Waste and Energy Management Plan CEMP S3-11 Appendix B7 Construction Waste, Resource and Energy Management Plan (v) Appendix B4 - Stockpile Management Protocol is provided in Appendix C of the Soil and water management plan (vi) various chapters in S3-11 CEMP Appendix B4 Soil and Water management plan discuss risk management measures for Woodburn borefield drinking water catchment (project section 8) (viii) CEMP chapter 6 discusses internal, external, stakeholder and community consultation with reference to Communications and Stakeholder Engagement Strategy (ix) Chapter 7-8 and Appendix A5 refer to compliance monitoring and incident management (x) Chapter 9 details management review processes	CEMP for S1 (Rev7 May 2015), S2 (Rev4 May 2015), S3-11 (Rev5 May 2017) and Appendices as available on project website and provided in this audit
	The Plan 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 Plan may be prepared in stages, however, construction works shall not commence until written approval of the relevant stage has been received from the Secretary. The approval of a Construction Environmental Management Plan does not relieve the Applicant 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.		DPIE approval of CEMPs and sub plans (Appendices) including approval of amendments undertaken in response to DPE comments sighted as per the timeline noted in this condition.	DPIE approval of CEMPs for S1 and S2 including sub plans (W2B-PC0-0-ZH-LET-00042) via letter signed 15/5/2015 and 4/6/2015 DPIE approval of CEMP S3-11 including sub plans (W2B-PC0-0-ZH-LET-00015) via letter dated 16/3/17 Environmental Representative certification of CEMP Rev5 (W2B-PC0-0-ZH-EML-00002)

D26 D26-a	As part of the Construction Environmental Management Plan for the SSI, the Applicant shall prepare and implement: (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 developed in consultation with the EPA and shall be consistent with the guidelines contained in the Interim Construction Noise Guidelines (DECC, 2009) and shall include, but not necessarily be limited to: (i) identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSI stipulated in this approval; (ii) details of 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 at ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas; (iii) identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts (including construction traffic noise impacts); (iv) procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved, including a suitable blast program, applicable buffer distances for vibration intensive works, use of low-vibration generating equipment/vibration dampeners or alternative construction methodology, and pre- and post-construction dilapidation surveys of sensitive structures where blasting and/or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria); and (v) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified; (vi) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours as defined in condition B15, including a risk assessment process under which the Environmental Representative may approve out-of-hour construction activities. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, consultation procedures with the EPA, the relevant council and affected landowners; (i) procedures for notifying sensitive receivers of construction activities that are likely to affect their noise and vibration amenity, as well as procedures for dealing with and responding to noise complaints; (vii) a program for construction noise and vibration monitoring clearly indicating monitoring frequency, location, how the results of this monitoring would be recorded and, procedures to be followed where exceedances of relevant noise and vibration goals are detected; and (viii) mechanisms for the monitoring, review and amendment of this plan.	**Compliant**	The CNVMP has been sighted and found to address the requirements of D26-a Evidence of CEMP subplans implementation verified via six monthly compliance reports, noise monitoring reports as relevant.	CEMP Appendix B3 - CNVMP DPIE approval of CEMPs for S1 and S2 including sub plans (W2B-PC0-0-ZH-LET-00042) via letter signed 15/5/2015 and 4/6/2015 Environmental Representative certification of CEMP Rev5 (W2B-PC0-0-ZH-EML-00002) DPE Approval letter on CNVMP S3-11 dt 3 Dec 2015 DPIE Ref 14/15001 signed by Karen Jones, Director Transport Assessments, as Delegate of the Secretary.
D26-b	a Construction Traffic and Access Management Plan to manage construction traffic and access impacts of the SSI. The Plan shall be developed in consultation with the relevant council and shall include, but not necessarily be limited to: (i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle/spoil haulage) on these routes; (ii) details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points; (iii) identification of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, property access, including details of oversize load movements; (iv) details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cycle access; (v) details of measures to manage traffic movements, parking, loading and unloading at ancillary facilities during out-of-hours work; (vi) a response plan which sets out a proposed response to any traffic, construction or other incident; and (vii) mechanisms for the monitoring, review and amendment of this plan.	**Compliant**	The CTAMP has been sighted and found to address the requirements of D26-b. Evidence of CEMP subplans implementation verified via six monthly compliance reports, annual monitoring reports as relevant.	CEMP Appendix B1 - Construction Traffic and Access Management Plan: S1-2 May 2015, S3-11 Oct 2017
D26-c	a Construction Soil and Water Quality Management Plan to manage surface and groundwater impacts during construction of the SSI. The Plan shall be developed in consultation with the EPA, DPI (Fisheries), NOW, Rous Water (in relation to the Woodburn borefield), DoE and the relevant council and include, but not necessarily be limited to: (i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater; (ii) surface water and ground water impact assessment criteria consistent with Australian and New Zealand Environment Conservation Council (ANZECC) guidelines or relevant site specific baseline data collected for known Oxleyan Pygmy Perch waterways; (iii) management measures to be used to minimise surface and groundwater impacts, including details of how spoil and fill material required by the SSI will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events; (iv) a Groundwater and Soil Salinity report should geotechnical investigations determine the presence, extent and severity of soil salinity within the SSI boundary, The report shall detail the outcomes of geotechnical investigations and identify and mitigate impacts to groundwater resources; (v) an Acid Sulfate Soils contingency plan, consistent with the Acid Sulfate Soils Manual, to deal with the unexpected discovery of actual or potential acid sulfate soils, including procedures for the investigation, handling, treatment and management of such soils and water seepage;	**Compliant**	The CSWMP has been sighted and found to address the requirements of D26-c Evidence of CEMP subplans implementation verified via six monthly compliance reports, annual monitoring reports as relevant.	CEMP Appendix B4 Construction Soil and Water Management Plan

(vi) a tannin leachate management protocol to manage the stockpiling of mulch and use of cleared vegetation and mulch filters for erosion and sediment control;
(vii) an Oxleyan Pygmy Perch habitat waterway management framework to detail the measures and construction methods that will be employed to avoid direct discharge of construction water to known Oxleyan Pygmy Perch habitat waterways and downstream impacts to suitable habitat;
(viii) management measures for contaminated material and a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction;
(ix) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; and mechanisms for the monitoring, review and amendment of this plan.

D26-d	a Construction Heritage Management Plan to detail how construction impacts on Aboriginal and non-Aboriginal heritage will be minimised and managed. The Plan shall be developed in consultation with the EPA, the NSW Heritage Council (for non-Aboriginal heritage) and Registered Aboriginal Parties (for Aboriginal heritage), and include, but not necessarily be limited to: (i) in relation to Aboriginal Heritage: (A) details of further investigation and identification of Aboriginal cultural heritage sites within the SSI boundary; (B) details of management measures to be carried out in relation to Aboriginal heritage, including a detailed methodology and strategies for protection, monitoring, salvage, and conservation, of sites and items associated with the SSI; (C) 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 recommence by a suitably qualified archaeologist in consultation with Department of Planning and Environment, EPA and Registered Aboriginal Parties and assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the SSI, and registering of the new site in the EPA's Aboriginal Heritage Information Management System (AHIMS) register; (D) procedures for dealing with human remains in accordance with the Unexpected Human Remains Procedure; (E) heritage training and induction processes for construction personnel (including procedures for keeping records of inductions) and obligations under the conditions of this approval including site identification, protection and conservation of Aboriginal cultural heritage; and (F) procedures for ongoing Aboriginal consultation and involvement for the duration of the SSI; and (ii) in relation to non-Aboriginal Heritage: (A) identification of heritage Items directly and indirectly affected by the SSI; (B) details of management measures to be implemented to prevent and minimise impacts on heritage items (including further heritage investigations, archival recordings and/or measures to protect unaffected sites during construction works in the vicinity); (C) details of monitoring and reporting requirements for impacts on heritage items; (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 new heritage impacts against the approved impacts of the SSI; and (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 (iii) mechanisms for the monitoring, review and amendment of this plan.	**Compliant**	The CHMP has been sighted and found to address the requirements of D26-d. Evidence of CEMP subplans implementation verified via six monthly compliance reports, annual monitoring reports as relevant.	CEMP Appendix B5 Construction Heritage Management Plan Aboriginal Cultural Heritage Assessment working paper (Nov 2012) including Report on Previous Aboriginal Community Consultation (available on project document library)
D26-e	a Construction Flora and Fauna Management Plan to detail how construction impacts on ecology will be minimised and managed. The Plan shall be prepared by a suitably qualified and experienced ecologist and developed in consultation with the EPA, DPI (Fisheries) and DoE, and shall include, but not necessarily be limited to: (i) details of pre-construction surveys undertaken by a suitably qualified and experienced ecologist to verify the SSI footprint based on detailed design; (ii) plans for impacted and adjoining areas showing vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including preclearing surveys to confirm the location of threatened flora and fauna species and associated habitat features; (iii) the identification of areas to be cleared and details of management measures (such as fencing, clearing procedures, removal and relocation of fauna during clearing, habitat tree management and construction worker education) to avoid any residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat; (iv) a protocol for the removal and relocation of fauna during clearing, including provision for engagement of a suitably qualified and experienced ecologist to identify locations where they would be present; to oversee clearing activities and facilitate fauna rescue and re-location; and consideration of timing of vegetation clearing with consideration to the avoidance of clearing native vegetation during the breeding/nesting periods of threatened species, where feasible and reasonable; (v) details of general work practices and mitigation measures to be implemented during construction and operation to minimise impacts on native fauna and native vegetation (particularly threatened species and their habitats and EEC) not proposed to be cleared as part of the SSI, including, but not necessarily limited to: fencing of sensitive areas; measures for maintaining existing habitat features (such as bush rock and tree branches etc); seed harvesting and appropriate topsoil management; construction worker education; weed management (including controls to prevent the introduction or spread of Phytophthora cinnamomi and myrtle rust (Puccinia psidii s.l.); erosion and sediment control, including measures to at least maintain habitat values downstream; and progressive re-vegetation;	**Compliant**	The CFFMP has been sighted and found to address the requirements of D26-e. Evidence of CEMP subplans implementation verified via six monthly compliance reports, annual monitoring reports as relevant. EPA had issued a Penalty Notice on 18 October 2019 - failed to comply with Condition D26(e) of SSI 4963 which resulted in the removal of a Green-leaved Rose Walnut tree. No other related issues have been noted. During site audit, a Green Leaved Rose Walnut protected area was sighted (Appendix E Photo 33 of this audit report).	CEMP Appendix B2 Flora and Fauna Management Plan

	(vi) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of rehabilitated areas; (vii) weed management measures focusing on early identification, suppression and control of invasive weeds and effective management controls; (viii) a protocol for managing aquatic and terrestrial pest animal/invasive species and plant species, and pathogens; (ix) consideration of the Threatened Species Management Plans; (x) a description of how the effectiveness of these management measures would be monitored and linked to the monitoring undertaken as part of the Threatened Species Management Plans; (xi) a procedure for dealing with unexpected EEC/threatened species identified during construction, including cessation of work and notification of the EPA, DPI (Fisheries) and DoE, determination of appropriate mitigation measures in consultation with these agencies (including relevant re-location measures) and updating of ecological monitoring and/or biodiversity offset requirements; and (xii) mechanisms for the monitoring, review and amendment of this plan.			
COMPLIANCE MONITORING AND TRACKING				
D27	The Applicant shall prepare and implement a Compliance Tracking Program, to track compliance with the requirements of this approval, prior to the commencement of construction and operate from the date of its approval to a minimum of one year following commencement of operation, or as otherwise agreed by the Secretary. The Program shall be prepared for the approval of the Secretary, and include, but not necessarily be limited to: (a) provisions for the notification of the Secretary prior to the commencement of construction and prior to the commencement of operation of the SSI (including prior to each stage, where works are being staged); (b) provisions for periodic review of the compliance status of the SSI against the requirements of this approval; (c) provisions for periodic reporting of compliance status to the Secretary, including a Pre-Construction Compliance Report, prior to the commencement of construction, and a Pre-Operation Compliance Report prior to the commencement of operation. These reports may be staged to suit the staged construction/operation of the SSI; (d) a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing; (e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents; (f) provisions for reporting environmental incidents to the Secretary and relevant public authorities during construction; (g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and (h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	**Compliant**	CEMP S2 Appendix A8 / CEMP section 8.4 details Compliance tracking program. Evidence noted of detailed compliance monitoring program provided in the pre-construction compliance report. There is evidence of compliance tracking undertaking by PCo with six-monthly reports uploaded to the project website. Section 2 of the reports provide details of: a) notification to the Secretary b) periodic review of compliance status of SSI against requirements c) periodic reporting of compliance status to the Secretary d) program for independent environmental auditing - Example noted as part of LendLease Engineering wider ISO 9001 and ISO 14001 system compliance audits by DCLS International on 25/2/20 e) recording of environmental incidents and actions f) reporting of environmental incidents to the Secretary and relevant authorities g) rectifying non-compliances identified during environmental audits h) employee induction with reference to section 5.1 of the CEMP. Appendix A of the report(s) provides detailed compliance tracking tables identifying the stage/section of works and status against each relevant MCoA. As per EPA's compliance audit on EPL 20713, there were non-compliances reported - Pacific Complete has responded to the non-compliances in a timely manner.	Audit discussions 30/8/2021 and 17/9/2021; Construction Environment Management Plan (CEMP) S1-2 and S3-11; Woolgoolga to Halfway Creek six-monthly construction compliance report May to Nov 2016; Wells Crossing to Glenugie pre-construction compliance tracking report (Ver.1, Jul 2019); Wells Crossing to Glenugie six monthly construction and pre-operational compliance report May-Oct2020; Email correspondence from ER and DPIE on endorsement/approval of various compliance reports sighted: •Six (6) Monthly Construction Compliance Tracking Report – DPE Version | April to September 2016 - Sections 3 to 11 •Submission of Six Monthly Compliance Tracking Report | April to September 2016 - Sections 3 to 11 •DPE Approval - Six (6) Monthly Compliance Tracking Report | April to September 2016 - Sections 3 to 11 •Six (6) Monthly Construction Compliance Tracking Report | October 2016 to March 2017 - Sections 3 to 11 •Six (6) Monthly Construction Compliance Tracking Report | April 2017 to September 2017 | Sections 3 - 11 •Six (6) Monthly Construction Compliance Tracking Report | October 2017 - March 2018 | Sections 3 – 11 •Letter from DPIE dt 17 Sep 2018 requesting further information on S3-11 compliance report Oct 2017 - Mar 2018 •Six (6) Monthly Construction Compliance Tracking Report | 5th | April - September 2018 | Sections 3-11 •Environmental Representative (ER) Endorsement of Six Monthly Construction Compliance Report (5th) email dated 11/2/2019 | April to September 2018 •Six (6) Monthly Construction Compliance Tracking Report | 6th | 1 October 2018 - 31 March 2019 | Sections 3-11 •Environmental Representative (ER) Endorsement of Six Monthly Construction Compliance Report (6th) letter dated 25/9/2019 | 1 October 2018 to 31 March 2019 •Submission of 6th Six Monthly Construction Compliance Report / 1 Oct 2018 - 31 March 2019 / Sections 3 - 11 •Six (6) Monthly Construction Compliance Tracking Report | 7th | 1 April - 30 September 2019 | Sections 3-11 •Six (6) Monthly Construction Compliance Tracking Report | 8th | 1 October 2019 - 31 March 2020 | Sections 3-11 •Six (6) Monthly Construction Compliance Tracking Report | 9th | 1 April - 30 September 2020 | Sections 3-11 •Email acknowledgement dated 3/5/2021 Compliance Report | April – September 2020 * S1 and S2 pre-operational compliance reports dated July 2015 and Aug 2017 * EPA Compliance Audit on EPL 20713 dated 6/6/2018 with report dated 10/8/2018

	OPERATIONAL NOISE AND VIBRATION			
D28	The Applicant shall undertake operational noise monitoring, to compare actual noise performance of the SSI against noise performance predicted in the review of noise mitigation measures required by condition D11, within 12 months of the commencement of operation of the SSI, or as otherwise agreed by the Secretary.	**Compliant**	Cited in S1-2 and S3-11 ONCRs, noting that the S3-11 ONCR is still being finalised. Auditee responded that the ONCR is still under discussion with TfNSW vs DPIE as at the end of August 2021. Stage 2 submission is awaiting technical resolution of matters in Stage 1 report, still under review. There is evidence that the monitoring has been undertaken during the timeframe required by this condition, just that the report has not been finalised. This is as per Auditor's telephone consultation discussions with ER and DPIE Transport Assessments	Woolgoolga to Glenugie Pacific Highway upgrade Operational noise compliance report February 2019, Woolgoolga to Ballina Pacific Highway Upgrade Glenugie to Pimlico (S3-11) Operational noise compliance review 13 April 2021 Auditor discussion with ER 13/7/2021 DPIE Letter dated 14/5/2021 (W2B-PC0-0-EN-LET-00218) grating extension until 31/07/2021 for Stage 2 ONCR to be finalised and submitted to DPIE and EPA. Audit discussions 30/8/2021
	The Applicant shall subsequently prepare an Operational Noise Compliance Report to document this monitoring. The Report shall include, but not necessarily be limited to: (a) noise monitoring to assess compliance with the operational noise levels predicted in the review of operational noise mitigation measures required under condition D11 and documents listed in condition A2; (b) a review of the operational noise levels in terms of criteria and noise goals established in the NSW Road Noise Policy 2011; (c) methodology, location and frequency of noise monitoring undertaken, including monitoring sites at which SSI noise levels are ascertained, with specific reference to locations indicative of impacts on sensitive receivers; (d) 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; (e) any required recalibrations of the noise model taking into consideration factors such as noise monitoring and actual traffic numbers and proportions; (f) an assessment of the performance and effectiveness of applied noise mitigation measures together with a review and if necessary, reassessment of feasible and reasonable mitigation measures; and (g) identification of additional feasible and reasonable measures to those identified in the review of noise mitigation measures required by condition D11, that would be implemented with the objective of meeting the criteria outlined in the NSW Road Noise Policy 2011, when these measures would be implemented and how their effectiveness would be measured and reported to the Secretary and the EPA.	**Compliant**	Cited in S1-2 and S3-11 ONCRs, noting that the S3-11 ONCR is still being finalised. The ONCRs have included additional noise monitoring to assess compliance, review of operational noise mitigation measures and predicted noise levels, details of complaints, effectiveness of measures and identification of additional mitigation measures. It was raised in this audit that similar to the S1-2 ONCR, the S3-11 ONCR should provide details of the noise complainant locations/addresses. However auditee responded that the location and address should not be included in public reports for privacy.	Woolgoolga to Glenugie Pacific Highway upgrade Operational noise compliance report February 2019, Woolgoolga to Ballina Pacific Highway Upgrade Glenugie to Pimlico Operational noise compliance review 13 April 2021
	The Applicant shall provide the Secretary and the EPA with a copy of the Operational Noise Report within 60 days of completing the operational noise monitoring referred to in (a) above or **as otherwise agreed by the Secretary.**	**Compliant**	Cited in S1-2 and S3-11 ONCRs, noting that S3-S11 stage 2 ONCR is still being finalised at the time of this audit. However, a copy as at 13 April 2021 was provided. Extension of time till 31/7/2021 to submit stage 2 ONCR sighted. Stage 1 ONCR was submitted 1/3/2021 (S3-4) - Major Projects portal submission notification notes the applicable MCoA D28. S1-2 report is dated 15/2/2019 sighted. Auditee responded that the ONCR is still under discussion with TfNSW vs DPIE. Stage 2 submission is awaiting technical resolution of matters in Stage 1 report, still under review. This was mentioned in telephone audit consultation with DPIE Transport Assessments and ER.	Woolgoolga to Glenugie Pacific Highway upgrade Operational noise compliance report February 2019, Woolgoolga to Ballina Pacific Highway Upgrade Glenugie to Pimlico (S3-11) Operational noise compliance review 13 April 2021 DPIE Letter dated 14/5/2021 (W2B-PC0-0-EN-LET-00218) grating extension until 31/07/2021 for Stage 2 ONCR to be finalised and submitted to DPIE and EPA. Audit consultation (telephone) with DPIE Transport Assessments and ER (13/7/2021)

ENVIRONMENTAL MANAGEMENT SYSTEMS					
D29	Prior to the commencement of operation, the Applicant shall incorporate the SSI into existing environmental management systems administered by the Applicant and prepared in accordance with the AS/NZS ISO 14000 Environmental Management System series. If there is an inconsistency between the existing environmental management systems and the conditions of this SSI approval, the requirements of this SSI approval shall prevail.	**Compliant**	CEMP section 8 refers to Pacific Complete compliance systems and to non-conformance, corrective and preventive actions. Table A1.1 clarifies that the CEMP also addresses RMS G36 requirement to implement a Contractors EMS. CEMP Appendix A3 includes PC Environmental Policy. This demonstrates the elements of an EMS. PCo/TfNSW stated that, following completion of the W2B project, the built asset is incorporated into the existing maintenance and asset management systems managed by Regional and Outer Metropolitan Assets Division. The Assets Maintenance and Delivery (M&D) Teams carried out all works in accordance with their Environmental Management System which designed to ensure that M&D projects maintain a high standard of compliance and controls are put in place to minimise the environmental impact of the work it carries out. The system is certified to the international standard ISO 14001 Environmental Management Systems.	Construction Environment Management Plans (CEMP) S1, S2 and S3-11 Audit discussions 30/8/2021 TfNSW Network and Assets, Maintenance and Delivery EMS ISO14001:2016 Certificate 6FD9E1A925B48FF5CA258708003E247D issued by Global Mark (W2B-PC0-0-EX-REC-00010) last certified 27/8/2019 current update issued 15/7/2021	
INDEPENDENT ENVIRONMENTAL AUDIT					
D30	Within 12 months of the commencement of operation, and then as required by the Secretary, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the SSI. This audit shall: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the SSI and assess whether it is complying with the requirements in this approval, and any other relevant approvals (including any assessment, plan or program required under these approvals); (d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and (e) recommend measures or actions to improve the environmental performance of the SSI, and/or any strategy, plan or program required under these approvals. Note: • This audit team shall be led by a suitably qualified auditor, and include experts in biodiversity, noise and vibration, hydrology and any other fields specified by the Secretary. • The audit may be staged to suit the staged operation of the SSI.	**Compliant**	The IEA is in progress (this audit). (a) The Team comprising qualified auditor and relevant technical specialists and their backup personnel has been endorsed by DPIE. (b) Standard drafted letter was issued to DPIE Compliance, DPIE Transport, DPI Fisheries, NSW EPA, Rous Water and the IEMR (ERM) on 25 June, inviting comments and submissions by 9 July - written responses received by Lead Auditor from DPI Fisheries (8 July), DPIE Compliance (20 July) and EPA (9 July); telephone conversations held with IEMR and DPIE Transport. (c) this report (d) this report (e) this report The audit was commissioned after and within 12 months of commencement of operations, and was not staged.	Engagement of GHD to undertake the W2B IEA - DPIE Letter dated 27 May 2021 signed by Shelley McPhee, Compliance Team Leader, as nominee of Planning Secretary.	-
D31	Within 60 days of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary and relevant public authorities, together with its response to any recommendations contained in the audit report.	**Not triggered**	This audit.	This audit report.	-
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Detailed Findings and Recommendations - TABLE D-5

DoE EPBC Approval 2012-6394

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
1	The Staging Report as required by NSW approval condition A7 must be submitted to the Minister prior to the commencement of each of the proposed stage(s). In accordance with NSW approval condition A7, the Staging Report must outline how the proposal will be staged. The Staging Report must also outline the threatened species and communities, and migratory species impacted in each stage.	**Compliant**	Staging report sighted, as submitted to DPE with letter dated on 24 Mar 2015. DPE response by Karen Jones, Delegate of the Secretary, with approval dated 30 Apr 2015 sighted. The Staging Report was further revised and submitted, subsequently approved by DPE. Sections 3 (Staging) and 4 (Threatened species and ecological communities) address the specific requirements as per this condition.	W2B Staging Report Mar 2015, provided as W2BP1DR-STAG-DEV-000001 Letter of submission to DoE on 5/4/2016, provided as W2B-PC-0-ZH-LET-000041 Letter of approval by DPE ref 14/15001 dated 30 Apr 2015, signed by Karen Jones, provided as W2B-PC0-0-ZH-LET-00037 Letter of submission version 2 to DPIE on 5/4/2016 provided as W2B-RMS-0-TS-LET-00002 includes the staging plan (timeline) Letter of approval on revised staging report for Stage 2, ref 14/11502, dated 2 Aug 2016 by Karen Harragon, provided as W2B-PC0-0-ZH-LET-00006. Revised Staging Report dated 21 Aug 2017, approved by DPE 5 Oct 2017	
2	In order to minimise impacts to threatened species and communities, and migratory species, the approval holder must: a. Adhere to the clearance limits outlined in the NSW approval condition B1; b. Undertake pre-clearance surveys in accordance with NSW approval condition B5; c. Undertake all soil and water management measures in accordance with NSW approval condition B34; and d. Design and construct any additional ancillary facilities in accordance with the requirements of NSW approval condition B73 to ensure that no impacts occur to threatened species and communities, and migratory species or their habitat.	**Compliant**	Assessed against relevant NSW MCoA B1, B5, B34 and B73 as per observed evidence as compliant.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018 Construction Flora and Fauna Management Plan Threatened Species MPs Construction Environment Management Plan Final Clearing Report (Status of W2B project compliance against MCoA B1 clearing limits Memo - W2B-PC0-0-EX-MEM-00039) dated 12/8/2021 Pre-clearing assessment reports for chainages 162250-163350, 157150-157700, 159900-163860, culvert D200 Wardell Rd CEMP Appendix B4 - Soil and Water Management Plan CEMP Appendix B9 Ancillary Facilities Management Plan Rev5 May2017 (W2B-PC0-0-ZH-PLN-00004-09) Audit discussions (13/7/21) with ER Major ancillary facility assessment - Avenue Road S3 - assessment report of Jul 2016 - W2B-PC0-A-EX-ASS-00004 Ancillary facility assessment - section 6 site 5 report un-dated W2B-PC0-B-EX-ASS-00001	
3	In order to minimise impacts to the Oxleyan Pygmy Perch, the approval holder must undertake the action in accordance with NSW approval conditions B7, B8, B9, B13, B40, B41 and B42.	**Compliant**	Assessed against relevant NSW MCoA and observed evidence.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018 and Evidence sighted against referenced NSW approval conditions	

4	In order to minimise impacts to the Giant Barred Frog, the approval holder must undertake the action in accordance with the requirements of NSW approval condition B39.	**Compliant**	Assessed against relevant NSW MCoA and observed evidence. During the reporting year May 2015 - May 2016, at Boney Creek culvert in Section 1, a BGF was found as an unexpected find. At this location, an existing culvert had to be extended under the alignment as a bridge was not feasible. The location was monitored for three consecutive years with no further sightings of BGF. All other crossings through BGF habitat are considered to have been constructed with Bridges. Evidence sighted against referenced NSW approval condition.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018
5	In order to ensure the long-term viability of the Ballina Koala population, the approval holder must engage a suitably qualified expert to undertake population viability modelling of the Ballina Koala population over a time period of no less than 50 years, taking into account the impacts resulting from the road upgrade in Section 10. This modelling should consider the current proposed route and any proposed avoidance or mitigation measures as appropriate.	**Compliant**	Dr Rod Kavanagh of Niche Environment & Heritage was engaged as the expert. Requirements of this condition have been addressed in the Ballina Koala Plan.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018, 2020-2021 Ballina Koala Plan Jan 2016
6	The approval holder must have the modelling required by Condition 5 peer reviewed by a second suitably qualified expert.	**Compliant**	Dr Jonathan Rhodes was engaged as the second expert to undertake a peer review of the population viability modelling.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018
7	In addition to the Koala Management Plan(s) required by NSW approval conditions D8 and D9, to ensure that an unacceptable impact will not occur to the Ballina Koala population, the approval holder must submit for the Minister's approval, a Ballina Koala Plan no less than 3 months prior to commencement of Section 10. The Minister will only approve the plan and the commencement of Section 10 of the action, if the impacts to the Ballina Koala population are demonstrated to be acceptable within the Ballina Koala Plan. The Ballina Koala Plan must include: a. the modelling required by Condition 5 and the results of this modelling, and the peer review required by Condition 6; b. discussion of the future viability of the Ballina Koala population; c. in the context of relevant environmental and social and economic considerations, any additional avoidance, mitigation of offsets, beyond those required by the NSW approval conditions, proposed to minimise the impacts to the Ballina Koala population; and d. evidence that any additional avoidance and mitigation measures proposed have been considered in the modelling required in Condition 5. The approval holder must not commence Section 10 unless the Ballina Koala Plan has been approved by the Minister. The approved Plan must be implemented.	**Compliant**	As per the EPBC compliance reports, the Koala Plan was approved on 19/7/2016. This (DoE) approval was not sighted/verified in this audit. The Ballina Koala Plan includes modelling as per Condition 5 (chapter 5-6) and peer review (Appendix), Koala Population Viability Analysis (chapter 3) and mitigation of offsets (chapter 2). The plan includes sensitivity tests of impact of works with regard to population projections.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018, 2020-2021 Ballina Koala Plan Jan 2016 DoE approval of Ballina Koala Plan section 10 letter provided as W2B-PC0-0-EX-LET-00012 dated 17/7/2016
8	The approval holder must develop a Koala Management Plan pursuant to the requirements of NSW approval conditions D8 and D9 for each relevant stage(s). The Koala Management Plan must minimise impacts to the Koala to the satisfaction of the Minister and must be submitted to the Minister for approval. The relevant stage(s) cannot commence until the Koala Management Plan for that stage is approved by the Minister. The approved Plan(s) must be implemented.	**Compliant**	Evidence sighted to satisfy this condition as noted. The Koala MP update approval letter from DPIE, dated 26/2/2019, notes the planting of 130Ha of Koala food tree species as a mitigation measure noted in the Koala MP. Koala annual monitoring and site observations confirmed the implementation of Koala MP measures.	Koala Management Plan v5 Jun2019 S1-11 (W2B-RMS-0-EF-PLN-00048) DPE Approval dated 4/8/2016 on v1 plan dated 11/5/2015 DPE Approval dated 26/2/2019 (W2B-PC0-0-EF-LET-00096) on v4 plan DoEE Approval (W2B-PC0-0-EF-LET-00098) dated 24/10/2019 Koala Annual Monitoring Report Year 1 Koala Annual Monitoring Report Year 2 Koala Annual Monitoring Report Year 3 Site audit observations

9	The Koala Management Plan, relevant to Section 10, must be consistent with the approved Ballina Koala Plan and can only be submitted to the Minister for approval after the Ballina Koala Plan has been approved by the Minister.	**Compliant**	Compliance report states the dates each plan was approved, to satisfy this condition. Koala MP section 6.3 and 7.3 includes Ballina Koala management measures and includes Koala revegetation strategy for S10. The two plans are consistent.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018 Koala Management Plan v5 Jun2019 S1-11 Ballina Koala Plan Jan 2016
10	Should further offsets be required in accordance with the NSW approval condition D9(d)j or be proposed as part of the Ballina Koala Plan these must be in accordance with the EPBC Offsets Policy.	**Not triggered**	Based on documentation sighted, no further offsets have been required as no changes to population were detected.	Koala Annual Monitoring Report (Year 1) Koala Annual Monitoring Report (Year 2) Koala Annual Monitoring Report (Year 3) Koala Management Plan EPBC 2012/6394 Compliance Report 2017-2018
11	The approval holder must develop a Threatened Mammal Management Plan(s) pursuant to the requirements of NSW approval condition D8 for each stage impacting on the Spotted-tail Quoll and the Long-nosed Potoroo. The Threatened Mammal Management Plan must minimise impacts to the Spotted-tail Quoll and the Long-nosed Potoroo to the satisfaction of the Minister and must be submitted to the Minister for approval. The relevant stage(s) cannot commence until the Threatened Mammal Management Plan for that stage is approved by the Minister. The approved Plan(s) must be implemented.	**Compliant**	Threatened Mammal Management plan sighted as approved by DoE, ER and DPIE. There is evidence of consultation with DoE and is compliant with NSW approval condition D8. The plan includes survey details of and measures to minimise impacts to Spotted-tail Quoll and Long-nosed Potoroo (throughout the plan) among others. Implementation of the measures noted in the plan is checked via threatened mammal monitoring reports.	Threatened Mammal Management Plan v3.3 ER Approval v3.3 5/10/17 DPIE Approval v3.1 21/0/15 Letter from RMS to DoE date 31/3/15 DoE approval dated 17/4/15 Threatened mammal monitoring report 2017, 2019 (Lewis Ecological)
12	The approval holder must develop a Threatened Flora Management Plan(s) pursuant to the requirements of NSW approval condition D8 for each stage impacting on the EPBC Act listed flora species. The Threatened Flora Management Plan must minimise impacts to the EPBC Act listed flora species to the satisfaction of the Minister and must be submitted to the Minister for approval. The relevant stage(s) cannot commence until the Threatened Flora Management Plan for that stage is approved by the Minister. The approved Plan(s) must be implemented.	**Compliant**	Evidence sighted to satisfy this condition as noted. The Threatened Flora MP includes targeted surveys for each section of the road corridor by various engaged contractors/consultants, with commentary on potential impacts and management approach (pre-construction, construction and operational) including mitigation goals and corrective actions and monitoring program. Appendix includes map showing location of threatened plants in proximity to the project. Monitoring reports prepared by consultant ecologists include translocation details, monitoring results and recommendations. Evaluation of flora translocation program states that directly impacted individuals of threatened species had been salvaged and relocated.	Threatened Flora Management Plan DPE Letter dated 21/8/2015 approving Threatened Flora Management Plan v3 (Aug2015) DoE Letter dated 4/9/2015 approving Threatened Flora MP v3 Rainforest Communities and Threatened Rainforest Plants MP Threatened Flora Reports 2017, 2018, 2021

13	The approval holder must develop a Connectivity Strategy(ies) pursuant to the requirements of NSW approval condition D2 for each stage impacting on the Threatened species and ecological communities. The Connectivity Strategy must minimise impacts to the Threatened species and ecological communities to the satisfaction of the Minister and must be submitted to the Minister for approval. Commencement of the relevant stage(s) cannot occur until the Connectivity Strategy for that stage is approved by the Minister. The approved strategy(ies) must be **implemented**.	**Compliant**	Connectivity Strategy has been developed and approved. MCoA D2 requires that, unless connectivity measures can be demonstrated to be effective at successfully mitigating the barrier and fragmentation impact to relevant species, in accordance with the requirements of the construction flora and fauna management plan required under condition D26(e), and threatened species management plans required under conditions D8 and D9, the residual impact to connectivity shall be offset. The 2019 threatened mammal monitoring report states that in the case of Long-nosed Potoroo thresholds for corrective action have been exceeded at some sites, with connectivity being cited as a potential reason particularly Site 6, the monitoring report notes on pg. 14 that "the main concern with this site is habitat connectivity, severed from the adjacent Wardell sandplain since clearing for the Upgrade occurred in 2017". The corrective action of "continued monitoring" is noted. Sections 1-2 Operational fauna connectivity monitoring are in the final stages of the 3 year monitoring program. The determination of effectiveness will be determined at the end of this program. Section 3-11 - Operational fauna connectivity monitoring commenced in early 2021. The determination of effectiveness will be determined at the end of this program. Annual Monitoring reports are sighted on the Project website. In audit discussions, auditee Simon Wilson confirmed there has been no requirement for additional offsets noted as result of monitoring to date.	Fauna Connectivity Strategy (sections 3-11) Fauna Connectivity Strategy (sections 1-2); Letters of submission of the Strategy to DPE dated 14/12/2016 (S3-11) and DPE approval letter signed by Kane Winwood dated 27/04/2017, RMS Letter of submission to DoEE dated 14/12/2016 and DoEE approval letter signed by Kat Miller dated 16/05/2017. Threatened Species Management Plans Construction Flora and Fauna MP Koala monitoring reports Coastal Emu monitoring reports Threatened mammal monitoring report 2019 Glider monitoring report 2019 Links: https://www.pacifichighway.nsw.gov.au/document-library/woolgoolga-to-ballina-threatened-frog-monitoring-annual-report-2019-2020 https://www.pacifichighway.nsw.gov.au/document-library/woolgoolga-to-glenugie-mammal-connectivity-monitoring-2018-2019-report https://www.pacifichighway.nsw.gov.au/document-library/woolgoolga-to-ballina-pacific-highway-upgrade-koala-monitoring-program-annual Audit discussions on 30/08/2021

14	In order to minimise impacts to threatened species and communities, and migratory species, the approval holder must develop and implement all Frameworks, Strategies, Plans or Programs, in accordance with the requirements of the following NSW approval conditions:
	a. The Mitigation Framework required by NSW approval condition D1;
	b. The Connectivity Strategy required by NSW approval condition D2 and the requirements of NSW approval condition B12;
	c. The Threatened Species Management Plans required by NSW approval condition D8 and D9;
	d. The Construction Soil and Water Quality Management Plan required by NSW approval condition D26(c);
	e. The Construction Flora and Fauna Management Plan required by NSW approval condition D26(e);
	f. The Borrow Site Management Plan required by NSW approval condition D22;
	g. The Water Quality Monitoring Program required by NSW approval condition D12; and
	h. The Ancillary Facilities Management Plan required by NSW approval condition D21.
		Compliant	Assessed against relevant NSW MCoA and observed evidence:
			a) Mitigation Framework as required by MCoA D1 has been developed by a team of qualified and experienced ecologists (as per section 1.3 of the Framework document) and addresses the requirements of condition D1.
			b) Connectivity Strategies (S1-2 and S3-11) have been developed and approved as required by MCoA D2.
			c) TSMPs sighted (list included in assessment of condition D8)
			d) CSWMP developed as per MCoA D26(c) sighted as approved
			e) CFFMP assessed as approved and compliant as per MCoA D26(e)
			f) CEMP for S3-11 include Borrow Site Management Plans for specific sections
			g) WQMP has been developed and implemented for the project - the program was submitted to DPE in March 2015 and was approved in May 2015.
			h) AFMP for S3-11 have been developed and implemented, and referenced in S2 CEMP, as assessed against MCoA D21. This includes status of various ancillary site assessments.
				Biodiversity Mitigation Framework Apr 2015 prepared by Amec Foster Wheeler (provided as W2B-RMS-0-EX-RPT-00001); DPE letter Ref 14/15001 dated 8 May 2015, provided as W2BP1DR-ENV-DEV-000044,
				Connectivity Strategies for S1-2 and S3-11
				Threatened Species Management Plans
				CEMP Appendix B4 - Soil and Water Management Plan
				CEMP Appendix B2 - CFFMP
				CEMP Appendix B10 - Borrow Site Management Plan(s)
				Water Quality Monitoring Program, Sections 3-11, prepared by GeoLink
				CEMP Appendix B9 - Ancillary Facility Management Plan
				Water Monitoring Reports
				Koala monitoring reports
				Threatened mammal monitoring reports
				Threatened flora reports

15	The approval holder must prepare and implement a Biodiversity Offset Strategy and Biodiversity Offset Package that compensates for any residual significant impacts on threatened species and communities. The Biodiversity Offset Strategy and Biodiversity Offset Package must meet the requirements of the EPBC Offsets Policy and must be submitted to the Minister for approval.	**Compliant**	Biodiversity Offset Strategy and Package have been prepared. Biodiversity Offset Strategy approved by DPE 6 January 2016 and DoEE 7 January 2016. Appendix D of the Biodiversity Offsets Package includes EPBC Offset Calculations.	Biodiversity Offset Strategy Evidence of consultation with agencies Letters from DPE and DoE approving the Strategy Biodiversity Offset Package (W2B-PC0-0-EX-RPT-00137) dated Dec 2017 and Consultation with EPA, DPE, DoEE, DAWE, DPIE provided Communication from the DoEE (W2B-PC0-0-EX-COM-00012) email dated 27/11/2018 with review comments on BOP. Biodiversity Offset Status Report 2 Biodiversity Offset Status Report 3
16	The Biodiversity Offset Strategy and Biodiversity Offset Package must be prepared in accordance with the requirements NSW approval conditions D3, D4 and D5.	**Compliant**	Biodiversity Offset Strategy and Package assessed as compliant against MCoA D3, D4, D5.	Biodiversity Offset Strategy Evidence of consultation with agencies Communication from the Secretary Letters from DPE and DoE approving the Strategy Biodiversity Offset Package (W2B-PC0-0-EX-RPT-00137) dated Dec 2017 and Consultation with EPA, DPE, DoEE, DAWE, DPIE provided Biodiversity Offset Status Report 2 Biodiversity Offset Status Report 3
17	Commencement cannot occur until the Biodiversity Offset Strategy required by Condition 15 is approved by the Minister. Commencement of the relevant stage(s) cannot occur until the information required by NSW approval condition D4 is approved by the Minister.	**Compliant**	Biodiversity Offset Strategy Dec 2015 and Biodiversity Offset Status Report Nov 2015 were approved by DoE on 7/01/2016. As per Australian Govt Department of Infrastructure, Transport, Regional Development and Communications website, major construction activities commenced on 27 June 2015. The action noted in the EPBC compliance report 2017-2018 is to: Not commence construction that causes disturbance of relevant existing ecological communities, threatened species or their habitats unless otherwise agreed by the Secretary, in accordance with NSW Approval condition D4. The Offset Status Report and Biodiversity Offset Package address the requirements of MCoA D4.	Biodiversity Offset Strategy Evidence of consultation with agencies Communication from the Secretary Letters from DPE (W2B-RMS-0-EX-LET-00004) and DoE (W2B-RMS-0-EX-LET-00003) approving the Strategy Biodiversity Offset Package (W2B-PC0-0-EX-RPT-00137) dated Dec 2017 and Consultation with EPA, DPE, DoEE, DAWE, DPIE provided Biodiversity Offset Status Report 2 Biodiversity Offset Status Report 3
18	The Biodiversity Offset Package required by Condition 15 must be approved by the Minister and the approved Biodiversity Offset Package must be implemented within 24 months of the approval of the Biodiversity Offset Strategy.	**Compliant**	The Offset Status Report indicates the implementation status of the Biodiversity Offset Strategy (refer MCoA D4c).	Biodiversity Offset Strategy Evidence of consultation with agencies Communication from the Secretary Letters from DPE and DoE approving the Strategy Biodiversity Offset Package (W2B-PC0-0-EX-RPT-00137) dated Dec 2017 and Consultation with EPA, DPE, DoEE, DAWE, DPIE provided Biodiversity Offset Status Report 2 Biodiversity Offset Status Report 3
19	Any survey data collected for the project must be collected and recorded so as to conform to a reasonable standard such that it can be readily used by a third party of to data standards notified from time to time by the Department. When required by the Department, the proponent must provide to the Department all species and ecological survey data and related survey information from ecological surveys undertaken for matters of national environmental significance. This survey data must be provided within 30 business days of request, or in a timeframe agreed to by the Department in writing. The Department may use the survey data for other purposes.	**Compliant**	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018 states that the survey data and associated information is maintained within the Proponent's document management system. There has been no request from the Department noted in this requirement.	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018. Offset Status Report for MNES (update 3) Auditee response to Request for Information (#3) from Pacific Complete, provided 23/8/2021 Audit discussions 30/08/2021

20	Within 14 days after the commencement of the action, the approval holder must advise the Department in writing of the actual date of commencement.	**Compliant**	Letter dated 5/4/16 to DoE submitting Staging Report V2 (Mar16) indicated the actual date of commencement of Stage 1 works (underway at the time).	EPBC 2012/6394 Compliance Report May2016-Apr2017, 2017-2018 Staging Report V2 submission letter W2B-PCO-0-ZH-LET-00041	
21	Within three months of every 12 month anniversary of the commencement of the action, the approval holder must publish a **report on their website** addressing compliance with each of the conditions of this approval, **including implementation** of any Frameworks, Strategies, Plans or Package as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. The approval holder must continue to publish the report until such time as agreed in writing by the Minister.	**Compliant**	Annual EPBC compliance reports sighted to include detailed description of action, timing and compliance evidence to each EPBC conditions. The first annual compliance report was published on the W2B project web site on the 19/08/2016. Subsequent annual compliance report were published on the RMS website on 19 August 2017, 26 Jun 2018. PCo Auditees stated that The Annual EPBC Compliance Reports are prepared to outline the status of compliance with the Commonwealth approval conditions for the Woolgoolga to Ballina Pacific Highway Upgrade project with particular reference to Condition 21. For each condition, one or more actions are identified which, once implemented, will achieve satisfactory compliance with the condition. Where appropriate, the timing for completion of individual actions is identified. For each action, the minimum relevant documentation to support demonstration of compliance is also identified. In addition the regular compliance reporting to address the NSW Ministers Conditions of Approval includes detailed project information and provides compliance status against the relevant conditions of approval. The EPBC compliance report (Final 2020-2021) provides action of developing the various documentation during pre-construction stage (Timing) and notes Status as compliant with Compliance Status providing details of approvals of the document. However the status report does not provide details of how these had been implemented. It is the view of the auditors that the compliance reports should also report how each action/plan has been implemented for the reported period.	Annual EPBC compliance reports (project website) 2015-2016, 2016-2017, 2017-2018 Letter of advice to DoEE from RMS dated 21/06/2018 Copy of Emails from Dept of AWE to RMS (provided as W2B-PC0-0-EX-EML-00020) dated 03/09/2021 accepting 2021 Annual EPBC Compliance Report submitted on 31/8/2021.	**R1**: The compliance tracking reports should include details of how the plans/strategies/frameworks have been implemented. The EPBC compliance report (Final 2020-2021), for example, provides action of developing the various documentation during pre-construction stage (Timing) and notes Status as compliant with Compliance Status providing details of approvals of the document. However the status report does not provide details of how these had been implemented.
22	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the condition of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.	**Compliant**	This Audit.	This Audit	
23	If the approval holder wishes to carry out any activity otherwise than in accordance with Frameworks, Strategies, Plans, Report or Package required by Conditions 7, 8, 10, 11, 12, 14, 15, 16 and 17, the approval holder must submit to the Department for the Minister's written approval a revised version of those Frameworks, Strategies, Plans, Report or Package. The varied activity shall not commence until the Minister has approved the revised plan or agreement in writing. The Minister will not approve a revised plan or agreement, unless the revised plan or agreement would result in an equivalent or improved environmental outcome. If the Minister approves the revised plan or agreement that plan or agreement must be implemented in place of the plan or agreement originally approved.	**Not triggered**	Noted.		

24	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species or communities to do so, the Minister may request that the approval holder submit for the Minister approval, or make revisions to any Frameworks, Strategies, Plans, Package, or Program specified in the conditions and submit the revised Frameworks, Strategies, Plans, Package or Program for the Minister's written approval. The approval holder must comply with any such request. The approved or revised approved Frameworks, Strategies, Plans, Package, or Program must be implemented. Unless the Minister has approved the revised Management Plans, then the approval holder must continue to implement the management plans originally approved, as specified in the conditions.	**Not triggered**	Noted.	
25	If, at any time after 5 years from the date of this approval, the approval holder has not substantially commenced the action, then the approval holder must not substantially commence the action without the written agreement of the Minister.	**Compliant**	Noted. As per Australian Govt Department of Infrastructure, Transport, Regional Development and Communications website, major construction activities commenced in June 2015. Thus, action has commenced within stated timeframe.	
26	The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the Frameworks, Strategies, Plans or Package required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audit will be posted on the Department's website. The results of audits may also be publicised through the general media.	**Compliant**	Noted. Records are kept as per evidence reviewed in this audit.	Documentation reviewed in relation with other assessed conditions.
27	Unless otherwise agreed to in writing by the Minister, the approval holder must publish all Frameworks, Strategies, Plans, or Package referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved.	**Compliant**	Relevant frameworks, strategies, plans and package referred to in EPBC and MCoA requirements are available in project website document library or made available in this audit.	Project website

Appendix E

SITE PHOTO LOG

Selected site photographs related to agency consultation input or audit scope are included here.

Photo 1: Power easement vehicle access

Photo 2: Corindi Creek crossing – new fence being planned for.

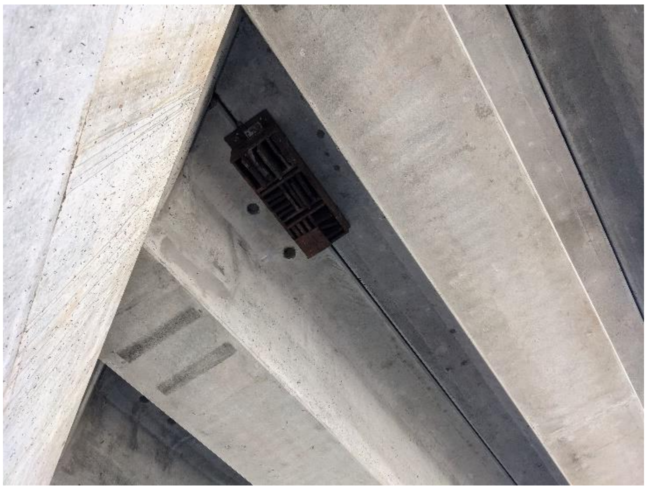

Photo 3: Bat box

Photo 4: Bat Box

Photo 5: Frog Pond

Photo 6: Koala connectivity furniture

Photo 7: Habitat structure

Photo 8: Connectivity Structure

Photo 9: Banana Road, vegetation management

Photo 10: Banana Road – Koala connectivity structure

Photo 11 and 12: Frog and fauna fence

Photo 13 and 14: OPP habitat under Bridge 10 CH101.600 crossin

Photo 15 and 16: Fauna crossing structure

Photo 17: Retained tree stump

Photo 18: Green Thighed Frog Ponds

Photo 19: Singleton Mint Bush

Photo 20: Maclean Levee

Photo 21: Transplanted Thorny Tree

Photo 22: Hydrological design of crossing

Photo 23: Koala grid on local road – Coolgardie interchange

Photo 24: Temporary visual screening until rehabilitation plantings mature

Photo 25: Koala feed plantation near Lumleys Lane

Photo 26: Major Ancillary Facility being rehabilitated

Photo 27: Koala crossing, Lumleys Lane West

Photo 28: Mororo rest area

Photo 29: Pine Brush rest area

Photo 30: Rehabilitated mangroves with seed capture structure, Richmond River – Backchannel Road

Photo 31: Planting of native species

Photo 32: Woodburn borefield – Rous Water

Photo 33: Green Leaved Rose Walnut protected area

Photo 34: Emu underpass – Crackers Drain

Photo 35: Emu feed species – Sharks Creek floodplain

Photo 36: Maclean Interchange – landscaping and signage

Photo 37: Noise Wall

Photo 38: Koala fence at Woodburn Interchange

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