



Stage 2 of the Hornsby Ku-ring-gai Hospital Redevelopment

Construction Compliance Report

31 March 2021

Version 0.1

Application No. SSD 8647

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1. Executive Summary

The Hornsby Ku-ring-gai Stage 2 Hospital Redevelopment comprises various design and construction phases. State Significant Development (SSD) approval, SSD8647, was received from NSW Dept Planning & Environment on 30 May 2018.

Health Infrastructure (HI) appointed BESIX Watpac Constructions Pty Ltd (WTP) on 20 June 2018 to deliver the works as Principal Contactor in accordance with the requirements of SSD8647.

This Construction Compliance Report has been prepared for the Stage 2 Hornsby Ku-ring-gai Hospital project in order to satisfy SSD8647 Stage 2 conditions B37 and B38. Construction Compliance Reports must be submitted to the Department at compliance@planning.nsw.gov.au for information every six months from the date of the commencement of construction, for the duration of construction. Please refer to the extract of the condition clause in the table below.

ID	Condition
B37	Construction Compliance Reports must be submitted to the Department at compliance@planning.nsw.gov.au for information every six months from the date of the commencement of construction, for the duration of construction. The Construction Compliance Reports must provide details on the compliance performance of the development for the preceding six months and must be submitted within one month following the end of each six-month period for the duration of construction of the development, or such other timeframe as required by the Secretary.
B38	The Construction Compliance Reports must include: a) a results summary and analysis of environmental monitoring; b) the number of any complaints received, including a summary of main areas of complaint, action taken, response given and proposed strategies for reducing the recurrence of such complaints; c) details of any review of the CEMP and the Environmental Management Strategy and associated sub-plans as a result of construction carried out during the reporting period; d) a register of any modifications undertaken and their status; e) results of any independent environmental audits and details of any actions taken in response to the recommendations of an audit; f) a summary of all incidents notified in accordance with this consent; and g) any other matter relating to compliance with the terms of this consent or requested by Secretary.

Prior to the commencement of construction, a Compliance Monitoring and Reporting Program was submitted to, the Department of Planning, Infrastructure and Environment (DPE).

The project was found to be compliant, with no non-compliances noted.

2. Introduction

2.1 Project Name and Project Application Number

The name of this project is Stage 2 of the Hornsby Ku-ring-gai Hospital Redevelopment.

Application Number: SSD 8647

2.2 Project Address

The site address of the development is Palmerston Road, Hornsby NSW 2077

2.3 Project Phase, Name of Compliance Report

The project is currently at the Construction phase.

Stage 2 Construction includes:

- 1) construction of a seven-storey building including part basement level and rooftop plant level.
- 2) car parking;
- 3) demolition works;
- 4) remediation; and
- 5) landscaping works.

In accordance Conditions B37 and B38, this report is the 'Construction Compliance Report'.

2.4 Compliance Reporting Period

The compliance reporting period for this report is for the duration from the previous submission of the Construction Compliance Report (September 2020) to the current submission of the Construction Compliance Report (February 2021).

2.5 Project Activities Summary

In this reporting period (September 2020 to February 2021), the project has completed the following activities.

2.5.1 Authorities

Stage 2 SSD Approval and Conditions of Consent

A modification to SSD8647 Condition A3, dated 11 November 2020, was approved by the DPIE to allow for internal reconfiguration and external alterations to the Emergency Department and Psychiatric Emergency Care Centre, revision to the ambulance awning and relocation of decontamination shower facility.

Please refer **Appendix E** for register of modifications undertaken to date.

Crown Certificate

Crown Certificate 6 for the Modification to the façade of the Emergency Department Building works was obtained on 09 March 2021.

2.5.2 Construction Activities

Internal works to the Main Building are near completion with handover of the remainder of CSB scheduled for end of March 2021, including Level 7 Helipad Landing Surface (HLS).

Internal works within ED extension and Main Entry are progressing. Soft demolition of Buildings 1 and 2, including removal of HAZMAT, is progressing. Buildings 13 and 43 have been demolished in preparation for the excavation and construction of the Level 0 Tunnel.

2.5.3 Site Plan

The figure below provides reference to the building footprint, boundaries, construction and operational disturbance areas, and adjacent relevant land uses. The below is reflective of the Site Plan approved as part of the SSD.

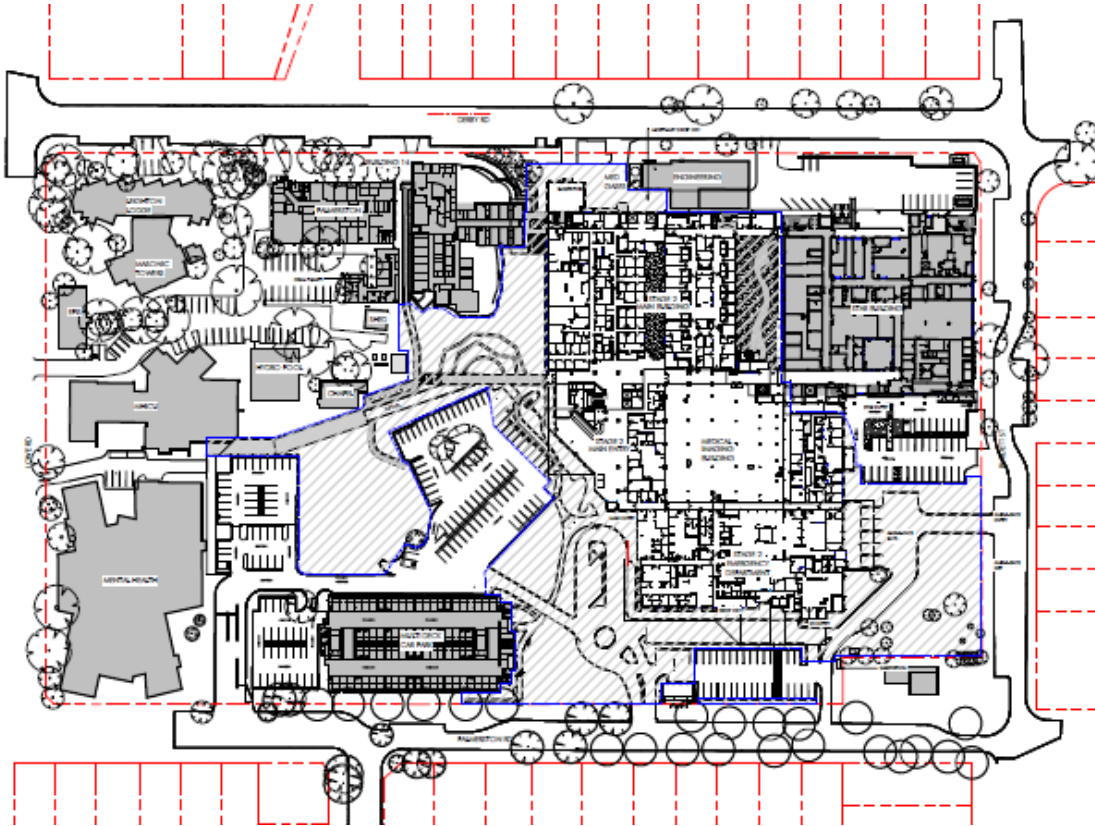


Figure 1: Site Plan

2.6 Key Environmental Management Personnel

HI has engaged BESIX Watpac as the Principal Contractor.

The name and contact detail of the Key Environmental Management Personnel who are responsible for environmental management of the development as follows:

Mark Cahalin
Project Manager, BESIX
Watpac
M. 0411 679 160
E. mcahalin@Watpac.com.au

Craig Scott
Site Manager, BESIX Watpac
M. 0431 308 944
E. cscott@Watpac.com.au

Helena Veljovic
Building Cadet, BESIX Watpac
M. 0405 835 203
E. hveljovic@Watpac.com.au

HI has engaged AQUAS as the Independent Environmental Auditor in compliance with Condition B39 of the SSD approval. A recent audit was undertaken, with no non-compliances raised.

2.7 Site Inspection

A Site Inspection was conducted as part of the Independent Environmental Audit. Compliance with the obligations was again demonstrated during the site walk and through maintenance of the required documentation, including crown certificates, inspection reports, dockets, correspondence, etc. Environmental documentation was available, including the Project Environmental Management Plan (Rev.06), Noise & Vibration, Erosion and Sedimentation, Waste, Traffic Management Plans and other sub-Plans. There was

evidence of inductions and regular toolbox talks to maintain the environmental awareness of all workers at the site.

The implementation of environmental controls included suitable signage, noise and vibration controls, compliance with working hours, waste management, erosion and sedimentation measures, traffic controls and ongoing site monitoring.

3. Environmental Monitoring

Weekly Environmental Inspections were conducted by WTP throughout the reporting period utilising the form C-FRM-061, inclusive of photographs, corrective actions and general notes for record. The inspections involve inspection and review of controls including; spill kits (availability and stock), site cleanliness and waste management, noise levels, washout areas (concrete and wet-trade), sediment control, stormwater management, stockpiles, roads and footpaths, washdown areas, dust / odours and general air quality, tree and flora protection and checks for fauna. Minor improvements and corrective actions were managed week-to-week, with no significant events or non-conformances needing to be raised.

Noise monitoring continues to be undertaken by BESIX Watpac weekly, or as otherwise specifically requested, adjacent to the nominated sensitive receivers around the site. Noise monitoring is undertaken with a calibrated handheld sound monitor, with readings taken during the course of regular site activity, equalised over an ~2 minute period. No exceedances as a result of works associated with the development were recorded during the period.

Water quality sampling and testing continues to be undertaken by BESIX Watpac with a number of tests conducted throughout the period following rain events. The collected water was sampled for PH, turbidity and temperature to ensure it was suitable for discharging to stormwater infrastructure. Liquid flocculant was added if / as necessary to manage turbidity / suspended solids prior to discharge. A register of noise monitoring and water sampling results is available on the project website.

Soil classification and tip dockets were collated by BESIX Watpac for all exported soils during the period. Imported soils or fill were brought to site during the period, with certification provided to support the fill origin.

Waste management records and recycling reports were collated (on a monthly basis) throughout the period, recording an average of 89.01% recycled content, by weight.

Refer to **Appendix F** for WTP's Project Environmental Management Plan (Rev.06 – November 2019)

4. Compliance Status Summary

The compliance status for each condition has been assessed. Refer to **Appendix A - Compliance Matrix for Stage 2 of Hornsby Ku-ring-gai Hospital** for a detailed assessment and commentary of the conditions.

Table 1 - Compliance status descriptors

Status	Description
Compliant (C)	The proponent has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with.
Non-compliant (NC)	The proponent has identified a non-conformance with one or more of the elements of the requirement.
Not triggered (NT)	A requirement has an activation or timing trigger that has not been met at the time when the compliance assessment is undertaken, therefore an assessment of compliance is not relevant.

In summary, the outcome of the compliance assessment of 142 Conditions of Approval is as follows:

- 0 non-compliances
- 112 compliances
- 09 notes only
- 20 conditions that were not triggered

(Note: In relation to the tally above, whole conditions of consent have been used to generate the tally. i.e. where a condition contains part a), b), c) etc this has been counted as one condition.)

5. Non-Compliances

An Independent Environmental Audit was undertaken by AQUAS on 14 December 2020 (Final report issued on 27 January 2021, see **Appendix C**) in accordance with Condition B39 of the SSD. No non-conformances were identified

6. Opportunities for Improvement

Two opportunities for improvement were raised during the audit as detailed in the below table;

Finding No.	Ref.	Finding	Comment/ Recommendation	Close Out Comments
OFI-01	SSD Cl. A1 & C9 (Checklist items 2.10 & 4.40)	<u>Erosion and Sediment Control</u> ErSed Controls were observed during site visit, e.g. sand bags around drains and slit fences. However, no controls were installed around a small stockpile close to the site office. It is noted that no live stormwater drains were close to the stockpile.	It is recommended that additional Erosion and Sediment controls are added around a small stockpile that resulted from retaining wall works recently built close to the site office. <u>Note:</u> Photo evidence was submitted by BESIX Watpac shortly after the audit showing environmental controls installed around the stockpile to address this issue.	As noted within <i>AQUAS Comments/ Recommendations</i> section, photo evidence was submitted by BESIX Watpac showing environmental controls installed around the stockpile which was accepted by the Independent Environmental Auditor (AQUAS).
OFI-02	SSD Cl. C27 (Checklist Item 5.9)	<u>Access to Information</u> Sighted in HI website for the HKH2 project – the noise and water monitoring results are now published. However, other information required is now not included, e.g. the CEMP and other sub-plans, the Complaints Register, Audit report for Independent Audit 5, and other.	It is recommended that all the information listed in SSD Clause C27 be published in the Project website as required.	As noted, all required documents highlighted within OFI-02 under SSD Clause C27 have since been uploaded to Project website.

The above opportunities have been closed out by the Principal Contractor BESIX Watpac and Health Infrastructure as of 10th February 2021, The Environmental Audit Report along with a cover letter and close out evidence was issued to DPIE on the 11th of February 2021, within three months of undertaking the Environmental Audit, as stipulated in Condition B41.

7. Previous Report Actions

An Independent Environmental Audit was undertaken by AQUAS 23 June 2020 (report issued 10 July 2020) in accordance with condition B39 of the SSD. Refer **Appendix D** for full report. The audit confirmed that BESIX Watpac had implemented its Environmental Management System to a satisfactory level and three opportunities for improvement were identified. The table below provides detail of the progress made to address each action and the outcome of each action.

Finding No.	Ref.	Finding	Comment/ Recommendation	Closeout
OFI-01	ISO 14001 Section 7.1	<u>Resources, Roles and Responsibilities</u> The Contractor has identified and provided the resources required to implement the EMS for the project.	Project Organisational Chart showing resources in place was updated on the 11 of October 2019. It was noted that The Project Management Plan (PMP) has an old version of the Project Organisational Chart (January 2019 - Revision 5). BESIX Watpac to update the PMP with latest version of the Organisation Chart.	BESIX Watpac have issued updated Rev 4 Project Management Plan (August 2020) with latest version of Organisational Chart. Item closed.
OFI-02	SSD Cl. A15	<u>Revision of Strategies Plans and Programs</u> Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.	The Project Environmental Management Plan (PEMP) was reviewed during December 2019 (Rev.6) and a copy was sent to the DPIE in 7 April 2020 (about 15 weeks after the review). Proponent needs to ensure that every time the PEMP is reviewed a copy is submitted to the DPIE within six weeks of the review.	As noted, HI issued PEMP to DPIE on the 7th of April 2020. Next revision will be issued to DPIE within 6 weeks of submission. Item closed.
OFI-03	SSD Cl. C36	<u>Trade Waste</u> Liquid trade waste generated on the site must be discharged in accordance with a trade waste agreement with Sydney Water and by a licensed liquid trade waste contractor.	A Water Meter Report Card for control of water quality was completed on the 17 March 2020. The water turbidity and pH were within limits and it was ok to discharge out to the stormwater. It was suggested that the Water Meter Report Card includes the location where the water was taken from.	Water test has not been conducted since the Audit undertaken on 23 June 2020. BESIX Watpac will include location in next water testing report which will be presented to Independent Environmental Auditor (AQUAS) at next Environmental Audit.

8. Incidents

There have been no recorded incidents to date.

9. Complaints

Two complaints were received over the reporting period.

- 1) September 14 2020, from a Hospital patron. The complainant was reading a traffic management plan at Palmerston Road and feared leaving his car parked unattended on Palmerston Road after a disagreement with a construction worker. Upon receipt of the complaint, BESIX Watpac contacted the complainant and unreservedly apologised. The complainant was assured that no member of the public nor their possessions have been at risk, injured or fallen victim to criminal activity since the commencement of the project. It was also explained to the complainant that the stretch of Palmerston Road running along the western side of the hospital campus was under the supervision by two traffic controllers and a site manager at the time of his complaint. Closed.
- 2) November 17 2020, from a resident in Derby Road. The complainant witnessed BESIX Watpac's shuttle bus reversing into his partner's car and driving off. BESIX Watpac investigated the incident and took photos of the damaged car and bus. BESIX Watpac put the bus operator in contact with the resident to arrange repairs through the operator's insurance. Closed.

Refer **Appendix B** for Project Complaints and Incident Register, which is available on the project's website.

10. Appendices

Appendix A – Compliance Matrix for Stage 2 Hornsby Ku-ring-gai Hospital

STAGE 2 of the HORNSBY KU-RING-GAI HOSPITAL REDEVELOPMENT
PROJECT SUBMISSIONS MATRIX [B37 / B38 COMPLIANCE REPORT]



UPDATED FEB 2021 (EXACT DATE TBA)

SSD DEVELOPMENT CONSENT #SSD8647 of 30 May 2018																																																																																																																																																																									
A. ADMINISTRATIVE CONDITIONS																																																																																																																																																																									
UNIQUE ID.		COMPLIANCE REQUIREMENT	DEVELOPMENT PHASE	MONITORING METHODOLOGY	EVIDENCE & COMMENTS STATUS JUL 2018 - JAN 2019	EVIDENCE & COMMENTS STATUS FEB 2019 - JUL 2019	EVIDENCE & COMMENTS STATUS AUG 2019 - FEB 2020	EVIDENCE & COMMENTS STATUS MAR 2020 - JUL 2020	EVIDENCE & COMMENTS STATUS AUG 2020 - FEB 2021																																																																																																																																																																
A1	<u>Obligation to Minimise Harm to the Environment</u>	In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development.			Compliant	Compliant	Compliant	Compliant	Compliant																																																																																																																																																																
A2	<u>Terms of Consent</u>	The development may only be carried out: a) in compliance with the conditions of this consent: <table><tr><th colspan="4">Architectural drawings and plans prepared by Nettleton Tribe</th></tr><tr><th>Drawing No.</th><th>Issue</th><th>Name of Plan</th><th>Date</th></tr><tr><td>NET-AR-S2-0011</td><td>4</td><td>SITE PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-0012</td><td>6</td><td>DEMOLITION PLAN – SITE</td><td>23.04.18</td></tr><tr><td>NET-AR-S2-0013</td><td>3</td><td>DEMOLITION PLAN – HOPE BUILDING</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1001</td><td>4</td><td>LEVEL 0 – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1011</td><td>4</td><td>LEVEL 1 – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1021</td><td>4</td><td>LEVEL 2 – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1031</td><td>4</td><td>LEVEL 3 – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1041</td><td>4</td><td>LEVEL 4 – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1051</td><td>4</td><td>LEVEL 5 – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1061</td><td>4</td><td>LEVEL 6 – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1071</td><td>4</td><td>ROOF – OVERALL PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1112</td><td>6</td><td>LEVEL 1 – PLAN – MAIN ENTRY</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-1161</td><td>I 6</td><td>LEVEL 6 – PLAN – PLANT</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-2001</td><td>4</td><td>OVERALL SECTIONS</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-2011</td><td>4</td><td>SECTIONS – MAIN BUILDING 01</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-2012</td><td>4</td><td>SECTIONS – MAIN BUILDING 02</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-3001</td><td>10</td><td>STREET ELEVATIONS</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-3002</td><td>10</td><td>NORTH ELEVATIONS</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-3003</td><td>10</td><td>EAST ELEVATION</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-3004</td><td>10</td><td>SOUTH ELEVATIONS</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-3005</td><td>10</td><td>WEST ELEVATIONS – EMERGENCY DEPARTMENT</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-3006</td><td>10</td><td>WEST ELEVATIONS – MI, PAEDS & MAIN BUILDING</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-9202</td><td>5</td><td>STAGE 2 SIGNAGE</td><td>16.10.17</td></tr><tr><td>NET-AR-S2-9204</td><td>4</td><td>TYPUCAL SIGN TYPES SHEET 2</td><td>10.04.18</td></tr><tr><td>NET-AR-S2-9401</td><td>2</td><td>TUNNEL LEVEL 0 PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-9402</td><td>2</td><td>TUNNEL LEVEL 1 PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-9403</td><td>2</td><td>TUNNEL SECTIONS</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-9404</td><td>1</td><td>PATHWAY PLAN</td><td>28.09.17</td></tr><tr><td>NET-AR-S2-9405</td><td>1</td><td>PATHWAY ROOF PLAN AND SECTION</td><td>28.09.17</td></tr><tr><th colspan="4">Landscape drawings prepared by SiteDesign+Studios</th></tr><tr><td>1032-L01</td><td>E</td><td>LANDSCAPE MASTERPLAN</td><td>3.11.17</td></tr><tr><td>1032-L02</td><td>D</td><td>AREA 1 LANDSCAPE PLAN</td><td>27.09.17</td></tr><tr><td>1032-L03</td><td>E</td><td>AREA 2 LANDSCAPE PLAN</td><td>10.04.18</td></tr><tr><td>1032-L04</td><td>D</td><td>AREA 3 LANDSCAPE PLAN</td><td>27.09.17</td></tr><tr><td>1032-L05</td><td>D</td><td>CONCEPT SECTIONS</td><td>27.09.17</td></tr><tr><td>1032-L06</td><td>D</td><td>LEVEL 2 COURTYARD LANDSCAPE PLAN</td><td>27.09.17</td></tr><tr><td>1032-L07</td><td>D</td><td>PLANTING SCHEDULE & DETAILS</td><td>27.09.17</td></tr><tr><td>1032-L08</td><td>D</td><td>PLANTING PALETTE</td><td>27.09.17</td></tr></table> Addendum; and	Architectural drawings and plans prepared by Nettleton Tribe				Drawing No.	Issue	Name of Plan	Date	NET-AR-S2-0011	4	SITE PLAN	28.09.17	NET-AR-S2-0012	6	DEMOLITION PLAN – SITE	23.04.18	NET-AR-S2-0013	3	DEMOLITION PLAN – HOPE BUILDING	28.09.17	NET-AR-S2-1001	4	LEVEL 0 – OVERALL PLAN	28.09.17	NET-AR-S2-1011	4	LEVEL 1 – OVERALL PLAN	28.09.17	NET-AR-S2-1021	4	LEVEL 2 – OVERALL PLAN	28.09.17	NET-AR-S2-1031	4	LEVEL 3 – OVERALL PLAN	28.09.17	NET-AR-S2-1041	4	LEVEL 4 – OVERALL PLAN	28.09.17	NET-AR-S2-1051	4	LEVEL 5 – OVERALL PLAN	28.09.17	NET-AR-S2-1061	4	LEVEL 6 – OVERALL PLAN	28.09.17	NET-AR-S2-1071	4	ROOF – OVERALL PLAN	28.09.17	NET-AR-S2-1112	6	LEVEL 1 – PLAN – MAIN ENTRY	28.09.17	NET-AR-S2-1161	I 6	LEVEL 6 – PLAN – PLANT	28.09.17	NET-AR-S2-2001	4	OVERALL SECTIONS	28.09.17	NET-AR-S2-2011	4	SECTIONS – MAIN BUILDING 01	28.09.17	NET-AR-S2-2012	4	SECTIONS – MAIN BUILDING 02	28.09.17	NET-AR-S2-3001	10	STREET ELEVATIONS	28.09.17	NET-AR-S2-3002	10	NORTH ELEVATIONS	28.09.17	NET-AR-S2-3003	10	EAST ELEVATION	28.09.17	NET-AR-S2-3004	10	SOUTH ELEVATIONS	28.09.17	NET-AR-S2-3005	10	WEST ELEVATIONS – EMERGENCY DEPARTMENT	28.09.17	NET-AR-S2-3006	10	WEST ELEVATIONS – MI, PAEDS & MAIN BUILDING	28.09.17	NET-AR-S2-9202	5	STAGE 2 SIGNAGE	16.10.17	NET-AR-S2-9204	4	TYPUCAL SIGN TYPES SHEET 2	10.04.18	NET-AR-S2-9401	2	TUNNEL LEVEL 0 PLAN	28.09.17	NET-AR-S2-9402	2	TUNNEL LEVEL 1 PLAN	28.09.17	NET-AR-S2-9403	2	TUNNEL SECTIONS	28.09.17	NET-AR-S2-9404	1	PATHWAY PLAN	28.09.17	NET-AR-S2-9405	1	PATHWAY ROOF PLAN AND SECTION	28.09.17	Landscape drawings prepared by SiteDesign+Studios				1032-L01	E	LANDSCAPE MASTERPLAN	3.11.17	1032-L02	D	AREA 1 LANDSCAPE PLAN	27.09.17	1032-L03	E	AREA 2 LANDSCAPE PLAN	10.04.18	1032-L04	D	AREA 3 LANDSCAPE PLAN	27.09.17	1032-L05	D	CONCEPT SECTIONS	27.09.17	1032-L06	D	LEVEL 2 COURTYARD LANDSCAPE PLAN	27.09.17	1032-L07	D	PLANTING SCHEDULE & DETAILS	27.09.17	1032-L08	D	PLANTING PALETTE	27.09.17			Compliant	Compliant	Compliant	Compliant	Compliant
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NET-AR-S2-2012	4	SECTIONS – MAIN BUILDING 02	28.09.17																																																																																																																																																																						
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NET-AR-S2-3002	10	NORTH ELEVATIONS	28.09.17																																																																																																																																																																						
NET-AR-S2-3003	10	EAST ELEVATION	28.09.17																																																																																																																																																																						
NET-AR-S2-3004	10	SOUTH ELEVATIONS	28.09.17																																																																																																																																																																						
NET-AR-S2-3005	10	WEST ELEVATIONS – EMERGENCY DEPARTMENT	28.09.17																																																																																																																																																																						
NET-AR-S2-3006	10	WEST ELEVATIONS – MI, PAEDS & MAIN BUILDING	28.09.17																																																																																																																																																																						
NET-AR-S2-9202	5	STAGE 2 SIGNAGE	16.10.17																																																																																																																																																																						
NET-AR-S2-9204	4	TYPUCAL SIGN TYPES SHEET 2	10.04.18																																																																																																																																																																						
NET-AR-S2-9401	2	TUNNEL LEVEL 0 PLAN	28.09.17																																																																																																																																																																						
NET-AR-S2-9402	2	TUNNEL LEVEL 1 PLAN	28.09.17																																																																																																																																																																						
NET-AR-S2-9403	2	TUNNEL SECTIONS	28.09.17																																																																																																																																																																						
NET-AR-S2-9404	1	PATHWAY PLAN	28.09.17																																																																																																																																																																						
NET-AR-S2-9405	1	PATHWAY ROOF PLAN AND SECTION	28.09.17																																																																																																																																																																						
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1032-L01	E	LANDSCAPE MASTERPLAN	3.11.17																																																																																																																																																																						
1032-L02	D	AREA 1 LANDSCAPE PLAN	27.09.17																																																																																																																																																																						
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1032-L04	D	AREA 3 LANDSCAPE PLAN	27.09.17																																																																																																																																																																						
1032-L05	D	CONCEPT SECTIONS	27.09.17																																																																																																																																																																						
1032-L06	D	LEVEL 2 COURTYARD LANDSCAPE PLAN	27.09.17																																																																																																																																																																						
1032-L07	D	PLANTING SCHEDULE & DETAILS	27.09.17																																																																																																																																																																						
1032-L08	D	PLANTING PALETTE	27.09.17																																																																																																																																																																						
A3		Consistent with the requirements in this consent, the Secretary may make written directions to the Applicant in relation to: a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Secretary; and b) the implementation of any actions or measures contained in any such document referred to in (a) above.			Note Only	Note Only	Note Only	Note Only	Note Only																																																																																																																																																																
A4		The conditions of this consent and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c) or A2(d). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c) and A2(d), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.			Note Only	Note Only	Note Only	Note Only	Note Only																																																																																																																																																																
A5	<u>Inconsistency between documents</u>	If there is any inconsistency between the plans and documentation referred to above the most recent document shall prevail to the extent of the inconsistency. However, conditions of this consent prevail to the extent of any inconsistency. Where there is an inconsistency between approved elevations and plans, the elevations prevail.			Note Only	Note Only	Note Only	Note Only	Note Only																																																																																																																																																																
A6	<u>Demolition</u>	No consent is granted for the demolition of the 'Palmerston' building.			Note Only	Note Only	Note Only	Note Only	Note Only																																																																																																																																																																

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A7	<u>Evidence of consultation</u>	Where conditions of this consent require consultation with an identified party, the Applicant must: a) consult with the relevant party prior to submitting the subject document for approval; and b) provide details of the consultation undertaken including: i) a description of how matters raised by those consulted have been resolved to the satisfaction of both the Applicant and the party consulted; and ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.			Compliant	Compliant	Compliant	Compliant	Compliant
A8	<u>Structural Adequacy</u>	All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with the relevant requirements of the BCA.			Compliant	Compliant	Compliant	Compliant	Compliant
A9	<u>Applicability of Guidelines</u>	References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.			Note Only	Note Only	Note Only	Note Only	Note Only
A10		However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.			Note Only	Note Only	Note Only	Note Only	Note Only
A11	<u>Monitoring and Environmental Audits</u>	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification and independent environmental auditing. <i>Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.</i>			Compliant	Compliant	Compliant	Compliant	Compliant
A12	<u>Non-Compliance Notification</u>	The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifying Authority must also notify the Department in writing to complianceaplanninansw.clov.au within seven days after they identify any non-compliance.			No Non-compliances	Compliant	Compliant	Compliant	Compliant
A13		The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.			No Non-compliances	Compliant	Compliant	Compliant	Compliant
A14		A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.			No Non-compliances	Compliant	Compliant	Compliant	Compliant
A15	<u>Revision of Strategies, Plans and Programs</u>	Within three months of: (a) the submission of a compliance report under condition B37; (b) the submission of an incident report under condition A23; (c) the approval of any modification of the conditions of this consent; or (d) the issue of a direction of the Secretary under condition A3 that requires a review the strategies, plans and programs required under this consent must be reviewed, and the Department must be notified in writing that a review is being carried out.			Compliant Environmental Plan updated to Revision 3 November 2018. Revision 4 under review in Draft.	Compliant	Compliant Environmental Plan updated to Revision 6 December 2019.	Compliant	Compliant
A16		If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review. <i>Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.</i>			Compliant As above	Compliant As above	Compliant As above	Compliant As above	Compliant As above
A17	<u>Operation of Plant and Equipment</u>	All plant and equipment used on site, or to monitor the performance of the development must be (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.			Compliant	Compliant	Compliant	Compliant	Compliant
A18	<u>Lapsing of approval</u>	This consent will lapse five years from the date of consent unless the works associated with the development have physically commenced.			Note Only	Note Only	Note Only	Note Only	Note Only
A19	<u>Prescribed Conditions</u>	The Applicant must comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the EP&A Regulation.			Compliant	Compliant	Compliant	Compliant	Compliant
A20	<u>Secretary as Moderator</u>	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 Development, either party may refer the matter to the Secretary for resolution. The Secretary's resolution of the matter shall be binding on the parties.			Note Only	Note Only	Note Only	Note Only	Note Only
A21	<u>Long Service Levy</u>	For work costing \$25,000 or more, a Long Service Levy must be paid. For further information please contact the Long Service Payments Corporation Helpline on 131 441.			Compliant. LSL Paid	Compliant	Compliant	Compliant	Compliant
A22	<u>Legal Notices</u>	Any advice or notice to the consent authority shall be served on the Secretary.			Note Only	Note Only	Note Only	Note Only	Note Only

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A23	<u>Incident Notification, Reporting and Response</u>	The Department must be notified in writing to compliance@planning.gov.au within 24 hours after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one), and set out the location and nature of the incident.			No Incidents	No Incidents	No Incidents	No Incidents	No Incidents
A24		A written incident notification must also be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant forms the view that an incident has not occurred. b) Written notification of an incident must i) identify the development and application number; ii) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); iii) identify how the incident was detected iv) identify when the Applicant became aware of the incident v) identify any actual or potential non-compliance with the conditions of consent; vi) describe what immediate steps were taken in relation to the incident; vii) identify further action(s) that will be taken in relation to the incident; and viii) identify a project contact for further communication regarding the incident			No Incidents	No Incidents	No Incidents	No Incidents	No Incidents
B. PRIOR TO COMMENCEMENT OF WORKS									
ITEM NO.	HEADING	SSD REQUIREMENT							
B1	<u>Notice of Commencement of Works</u>	The Department, Certifying Authority and Council must be notified in writing of the dates of commencement of physical work and operation at least 48 hours before those dates. If the construction or operation of the development is to be staged, the Department, Certifying Authority and Council must be notified in writing at least 48 hours before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.			Compliant. Notice issued	Compliant. Notice issued	Compliant. Notice issued	Compliant. Notice issued	Compliant. Notice issued
B2	<u>Certified Plans</u>	<i>Plans certified in accordance with Section 6.28 of the EP&A Act are to be submitted to the Certifying Authority and the Department prior to commencement of each stage of the construction works and must include details as required by any of the following conditions.</i>			Compliant. Relevant CC's received from Certifying Authority	Compliant. Relevant CC's received from Certifying Authority	Compliant. Relevant CC's received from Certifying Authority	Compliant. Relevant CC's received from Certifying Authority	Compliant. Relevant CC's received from Certifying Authority
B3	<u>Reflectivity</u>	<i>The building materials used on the facades of the structure must have a maximum normal specular reflectivity of visible light of 20 per cent and must be designed so as not to result in glare that causes any discomfort or threatens the safety of pedestrians or drivers. A statement demonstrating compliance with these requirements or where compliance cannot be met a report that demonstrates that the exceedance would not result in glare that causes any discomfort or threatens the safety of pedestrians or drivers is to be submitted to the satisfaction of the Certifying Authority prior to the commencement of above ground works.</i>			Compliant. Design only at present, façade construction not yet commenced	Compliant. Design only at present, façade construction not yet commenced	Compliant. Design only at present, façade construction not yet commenced	Compliant. Façade works progressing and installation certification issued to Certifying Authority	Compliant. Façade works progressing and installation certification issued to Certifying Authority
B4	<u>Outdoor Lighting</u>	All outdoor lighting within the site must comply with, where relevant, AS 1158.3.1:2005 <i>Pedestrian Area (Category P) Lighting</i> and AS 4282-1997 <i>Control of the Obtrusive Effects of Outdoor Lighting</i> . Details demonstrating compliance with these requirements are to be submitted to the satisfaction of the Certifying Authority prior to the commencement of above ground works.			Compliant. Design only at present, outdoor lighting installation not yet commenced	Compliant. Design only at present, outdoor lighting installation not yet commenced	Compliant. Design only at present, outdoor lighting installation not yet commenced	Compliant. Design only at present, outdoor lighting installation not yet commenced	Compliant. Design only at present, outdoor lighting installation not yet commenced
B5	<u>Hazards</u>	The Applicant must ensure that the design and operation of the hospital's oxygen supply system, including the use of the liquid oxygen bulk storage tanks, any oxygen cylinders connected to the oxygen supply system and any temporary oxygen supply tanks be in accordance with <i>Australian Standards 1894 The storage and handling of non-flammable cryogenic and refrigerated liquids' (AS 1894)</i> .			Compliant	Compliant	Compliant	Compliant	Compliant
B6		The Applicant must ensure that all control measures or safeguards described in the Preliminary Hazard Analysis (PHA, 9 February 2018) will be implemented.			Compliant	Compliant	Compliant	Compliant	Compliant
B7		The Applicant must update as necessary and in accordance with AS 1894, the hospital's emergency plan and emergency procedures to include emergency situations involving the hospital's oxygen supply system, as described in the PHA (9 February 2018).			Compliant	Compliant	Compliant	Compliant	Compliant
B8		If temporary oxygen supply tanks are to be installed prior to demolition of existing liquid oxygen bulk storage tanks for the purpose of hospital oxygen supply prior to commissioning of new tanks, the design and operation of these temporary tanks must be verified with AS 1894 and/or other relevant Australian Standards.			Compliant	Compliant	Compliant	Compliant	Compliant
B9	<u>Access for People with Disabilities</u>	The works that are the subject of this application must be designed and constructed to provide access and facilities for people with a disability in accordance with the BCA. The Certifying Authority must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any certified plans.			Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority
B10	<u>Bicycle Parking and End-of-Trip Facilities</u>	<i>Plans demonstrating compliance with the following requirements for bicycle parking shall be submitted to the satisfaction of the Certifying Authority:</i> <i>a) the provision of a minimum of 18 bicycle parking spaces;</i> <i>b) the layout, design and security of bicycle facilities shall comply with the all applicable minimum requirements of AS 2890.3:2015 Parking facilities — Bicycle parking, and be located in secure, convenient and accessible areas close to the main entries and incorporating adequate lighting and opportunities for passive surveillance; and</i> <i>c) the provision of end-of-trip facilities for staff including showers, changeroom and lockers.</i>			Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority	Compliant. Incorporated into design. Provided to Certifying Authority

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B11	<u>Erosion and Sedimentation Control</u>	Soil erosion and sediment control measures must be designed in accordance with the document <i>Managing Urban Stormwater — Soils & Construction Volume 1</i> (Landcom, 2004). Details are to be submitted to the satisfaction of the Certifying Authority prior to the commencement of any works.			Compliant. Designed by TTW Engineers. Provided to Certifying Authority	Compliant. Designed by TTW Engineers. Provided to Certifying Authority	Compliant. Designed by TTW Engineers. Provided to Certifying Authority	Compliant. Designed by TTW Engineers. Provided to Certifying Authority	Compliant. Designed by TTW Engineers. Provided to Certifying Authority
B12	<u>Pre-Construction Dilapidation Reports</u>	The Applicant is to engage a qualified structural engineer to prepare a Pre-Construction Dilapidation Report detailing the current structural condition of all retained existing and adjoining buildings within the site, infrastructure and roads within the 'zone of influence'. Any entry into private land is subject to the consent of the owner(s) and any inspection of buildings on privately affected land must include details of the whole building where only part of the building falls within the 'zone of influence'. The report must be submitted to the satisfaction of the Certifying Authority prior to the commencement of any works. A copy of the report is to be forwarded to Council.			Compliant. Dilap reports completed. Provided to Certifying Authority	Compliant. Dilap reports completed. Provided to Certifying Authority	Compliant. Dilap reports completed. Provided to Certifying Authority	Compliant. Dilap reports completed. Provided to Certifying Authority	Compliant. Dilap reports completed. Provided to Certifying Authority
B13	<u>Structural Details</u>	Prior to the commencement of works, the Applicant must submit for the approval of the Certifying Authority structural drawings prepared and signed by a suitably qualified practicing Structural Engineer that demonstrates compliance with: a) the relevant clauses of the BCA; and b) this development consent.			Compliant. Drawings prepared by TTW engineers	Compliant. Drawings prepared by TTW engineers	Compliant. Drawings prepared by TTW engineers	Compliant. Drawings prepared by TTW engineers	Compliant. Drawings prepared by TTW engineers
B14	<u>Noise Management Measures</u>	Prior to commencement of works, the Applicant must incorporate all relevant noise mitigation recommendations in the letter <i>Hornsby Ku-ring-gai Hospital Stage 2 Redevelopment — Response to Planning NSW Queries</i> prepared by Acoustic Logic, dated 26 April 2018, in the detailed design drawings and submit for the approval of the Certifying Authority. These drawings must demonstrate that the noise impacts have been adequately mitigated to not exceed the project specific criteria identified in condition E2			Compliant. Provided to Certifying Authority	Compliant. Provided to Certifying Authority	Compliant. Provided to Certifying Authority	Compliant. Provided to Certifying Authority	Compliant. Provided to Certifying Authority
B14	<u>Noise Management Measures</u>	Part 2 of the above			Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above
B15	<u>Mechanical Ventilation</u>	All mechanical ventilation systems must be installed in accordance with Part F4.5 of the BCA and must comply with the AS 1668.2-2012 The use of ventilation and air-conditioning in buildings — Ventilation design for indoor air containment control and AS 3666.2:2011 Air-handling and water systems of buildings to ensure adequate levels of health and amenity to the occupants of the building and to ensure environment protection. Details must be submitted for the approval of the Certifying Authority prior to the commencement of the relevant works.			Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced. Installation and commissioning will occur in next	Compliant. Design only at present, as installation has not commenced. Installation and commissioning will occur in next
B16	<u>Warm Water Systems and Cooling Systems</u>	The installation, operation and maintenance of warm water systems and water cooling systems (as defined under the Public Health Act 2010) must comply with the Public Health Act 2010, Public Health Regulation 2012 and Parts 1 and 2 (or Part 3 if a Performance-based water cooling system) of AS/NZS 3666.2:2011 Air handling and water systems of buildings — Microbial control — Operation and maintenance and the NSW Health Code of Practice for the Control of Legionnaires' Disease.			Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced. Installation and commissioning will occur in next	Compliant. Design only at present, as installation has not commenced. Installation and commissioning will occur in next
B17	<u>Storage and Handling of Waste</u>	The building plans and specifications must demonstrate, for the approval of the Certifying Authority, that an appropriate area will be provided within the premises for the storage of garbage bins, recycling containers and all waste and recyclable material generated by the premises. Requirements of these storage areas must: a) ensure all internal walls of the storage area are rendered to a smooth surface, coved at the floor/wall intersection, graded and appropriately drained with a tap in close proximity to facilitate cleaning; b) include provision for the separation and storage, in appropriate categories, of material suitable for recycling; and c) include provision for separate storage and collection of organic/food waste.			Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced
B18	<u>Public Footpath</u>	The existing concrete footpath along the boundary of the subject site is to be reinstated where impacted by the proposed works to relevant Council specifications and standards.			Compliant. Nothing to note as yet, no damage to	Compliant. Nothing to note as yet, no damage to	Compliant. Nothing to note as yet, no damage to	Compliant. Nothing to note as yet, no damage to	Compliant. Nothing to note as yet, no damage to

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B19	<u>Stormwater and Drainage Works Design</u>	The stormwater drainage system for the development must be designed in accordance with Council's relevant specifications and standards and the following requirements: a) Connected to an existing Council piped drainage system with the following requirements: i) A separate Application must be made to Council for 'Approval To Connect Stormwater Drainage Outlet To Council's System' with all fees paid, prior to connecting to Council's drainage system; ii) The connection to Council's drainage pit or pipeline in accordance with Council's relevant design standard drawing must be inspected by a Council Engineer from Council's Planning Division; Note: An inspection booking can be made by calling Council on 9847 6760 quoting the Application reference number SSD 8647. iii) Connection to Council's drainage system shall include design and construction of Council's standard kerb inlet pit in accordance with Council's Design and Construction Specification 2005. The Applicant's Engineer must prepare the design of system including location of proposed work in the plan. Three (3) copies of the plan shall be submitted with lodgement and payment of the Application; iv) A Traffic Control Plan (TCP) must be prepared by a qualified traffic controller in accordance with the Roads & Traffic Authority's Traffic Control at WorksitesManual 1998 and Australian Standard 1742.3 for all work on a public road. The TCP is to be prepared in consultation with Council and must detail the following: a) Arrangements for public notification of the works; b) Where a drainage connection is proposed within a Classified Road, a copy of the relevant Road Occupation License approved by the Traffic Management Centre with dates and times of proposed Occupations; c) Temporary construction signage; d) Vehicle movement plans; e) Traffic management plans; and f) Pedestrian and cyclist access/safety. v) Where public assets and utilities are impacted by proposed works, the Applicant shall relocate or reconstruct the asset or utility in accordance with the relevant standard at the Applicant's cost; and vi) A Compliance Certificate must be obtained from Council for the connection to Council's drainage system prior to occupation of the development.			Compliant. Design & planning only at present, as installation has not commenced	Compliant. Design & planning only at present, as installation has not commenced	Compliant. Design & planning only at present, as installation has not commenced	Compliant. Derby Road works are progressing in accordance with condition B19.	Compliant. Derby Road works are progressing in accordance with condition B19.
B20	<u>On-Site Stormwater Detention and Water Quality</u>	An on-site stormwater detention system must be designed by a chartered civil engineer and constructed in accordance with the following requirements: a) the developing area of the site shall ensure its 5-year average recurrence interval (ARI) runoff reduced to the pre-development site cover rate. The volume of the on-site detention system shall ensure its capable of detaining the 20-year ARI post-development site cover storm; b) the water quality treatment system shall be designed and constructed to provide water quality outcomes as per Council's HDCP2013 Section 1C.1.2.i requirements; c) have a surcharge/inspection grate located directly above the outlet; d) discharge from the detention system must be controlled via 1 metre length of pipe, not less than 50 millimetres diameter or via a stainless plate with sharply drilled orifice bolted over the face of the outlet discharging into a larger diameter pipe capable of carrying the design flow to an approved Council system; e) where above ground and the average depth is greater than 0.3 metres, a 'pool type' safety fence and warning signs must be installed; and f) not be constructed in a location that would impact upon the visual or recreational amenity of residents.			Compliant. Design & planning only at present, as installation has not commenced	Compliant. Design & planning only at present, as installation has not commenced	Compliant. Design & planning only at present, as installation has not commenced	Compliant. Design & planning only at present, as installation has not commenced	Compliant. Design & planning only at present, as installation has not commenced
B21	<u>Road Works</u>	Kerb and gutter, stormwater drainage, full road width pavement including traffic facilities (vehicle crossings, if applicable) and paved footpaths must be constructed along the area where road works are to be undertaken. In relation to public roads or classified road (as defined under the Roads Act 1993), all roads and traffic facilities must be designed to meet the requirements of Council and RMS (if applicable) and obtain any necessary permits and approvals from the relevant road authority, prior to the commencement of road or pavement construction works.			Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced	Compliant. Design only at present, as installation has not commenced

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B22	<u>Construction Environmental Management Plan</u>	a) Prior to the commencement of construction works, a Construction Environmental Management Plan (CEMP) must be submitted for the approval of the Certifying Authority. The CEMP must address, but not be limited to, the following matters where relevant: i) hours of work; ii) 24 hour contact details of site manager; iii) traffic management, in consultation with Council and TfNSW; iv) construction noise and vibration management, prepared by a suitable qualified person; v) management of dust and odour to protect the amenity of the neighbourhood; vi) erosion and sediment control; vii) stormwater control and discharge; viii) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the Subject Site; ix) procedures for encountering groundwater during construction works; x) external lighting in compliance with AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting; xi) a protocol detailing appropriate procedures for identifying and dealing with unexpected finds of site contamination (including asbestos containing materials, Polycyclic aromatic hydrocarbons (PAHs), Total recoverable hydrocarbons (TRH) and lead-based paint); xii) a protocol detailing appropriate procedures for identifying and dealing with unexpected finds of archaeological heritage; xiii) waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site; and xiv) waste storage, recycling and litter control; b) The CEMP must not include works that have not been explicitly approved in this development consent. In the event of any inconsistency between the consent and the CEMP, the consent must prevail; and c) The Applicant must submit a copy of the CEMP to the Department and Council prior to commencement of work.			Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.
B23		The CEMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B24	<u>Construction Noise and Vibration Management Plan</u>	a) Prior to the commencement of works, a Construction Noise and Vibration Management Plan (CNVMP) must be submitted for the approval of the Certifying Authority. The CNVMP must address, but not be limited to, the following matters:i) i) be prepared by a suitably qualified expert; ii) be prepared in consultation with Council and all adjoining noise sensitive receivers where noise levels exceed the construction noise management levels, in accordance with EPA guidelines; iii) describe the measures that would be implemented to ensure: i. best management practice is being employed; ii. compliance with the relevant conditions of this consent; iv) describe the proposed noise and vibration management measures in detail; v) include strategies that have been developed to address impacts to noise sensitive receivers where noise levels exceed the construction noise management level, for managing high noise generating works; vi) describe the consultation undertaken to develop the strategies in v) above; vii) evaluate and reports on the effectiveness of the noise and vibration management measures; and viii) include a complaints management system that would be implemented for the duration of the construction works. b) The Applicant must submit a copy of the CNVMP to the Department and Council prior to commencement of work.			Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.
B25		The CNVMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B26	<u>Construction Waste Management Plan</u>	a) Prior to the commencement of works, a Construction Waste Management Plan (CWMP) must be submitted for the approval of the Certifying Authority. The CWMP must address, but not be limited to, the following matters where relevant: i) recycling of demolition materials including concrete; and ii) removal of hazardous materials and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works. b) Details demonstrating compliance with the relevant legislative requirements, associated with the removal of hazardous waste, particularly the method of containment and control of emission of fibres to the air, are to be submitted for the approval of the Certifying Authority prior to the removal of any hazardous materials; c) The Applicant must notify the RMS Traffic Management Centre of the truck route(s) to be followed by trucks transporting waste material from the Subject Site, prior to the commencement of the removal of any waste material from the Subject Site; and d) The Applicant must submit a copy of the plan to the Department and to the Council prior to the commencement of work.			Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.
B27		The CWMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.

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B28	<u>Construction Traffic and Pedestrian Management Plan</u>	a) Prior to the commencement of construction works, a Construction Traffic and Pedestrian Management Plan (CTPMP) must be prepared in consultation with Council and submitted to the satisfaction of the Certifying Authority. The CPTMP must specify, but not be limited to, the following: i) location of proposed work zones; ii) haulage routes; iii) construction vehicle access arrangements; iv) construction hours; v) construction program; vi) predicted construction traffic volumes and vehicle movements, types and routes including any known road closures and consideration of alternate routes; vii) assessment of road safety at key intersections and locations subject to heavy vehicle movements and high pedestrian activity; viii) details of construction vehicle movements including parking, dedicated vehicle turning areas and ingress and egress points; ix) details of anticipated peak hour and daily truck movements to and from the site; x) details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements; xi) details of temporary cycling and pedestrian access during construction; xii) details of proposed construction vehicle access arrangements at all stages; xiii) loading and unloading; xiv) details of management measures to minimise traffic impacts, including temporary road works and/or implementation of traffic control measures; xv) pedestrian and traffic management methods; xvi) any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the works; xvii) consideration of the cumulative construction traffic impacts of surrounding projects under construction, including those within the Hornsby Ku-ring-gai Hospital precinct. Existing CTPMPs for developments within or around the Subject Site should be referenced in the CTPMP to ensure that the coordination of work activities are managed to minimise impacts on the surrounding road network; and - xviii) traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, which must include vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/construction activities. b) The Applicant must submit a copy of the CTPMP to the Department and to the Council, prior to the commencement of works.			Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.	Compliant. Provided.
B29		The CTPMP (as revised from time to time) must be implemented by the Applicant for the duration of the construction works.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B30	<u>Complaints and Enquiries Procedure</u>	Prior to the commencement of construction works, or as otherwise agreed by the Secretary, the following must be made available for community enquiries and complaints for the duration of construction: a) a toll-free 24-hour telephone number(s) on which complaints and enquiries about the carrying out of any works may be registered; b) a postal address to which written complaints and enquires may be sent; and c) an email address to which electronic complaints and enquiries may be transmitted.			Compliant, albeit postal address not provided.	Compliant, albeit postal address not provided.	Compliant, albeit postal address not provided.	Compliant, albeit postal address not provided.	Compliant, albeit postal address not provided.
B31		A Complaints Management System must be prepared prior to the commencement of any construction works and be implemented and maintained for the duration of these works. The Complaints Management System must include a Complaints Register to be maintained recording information on all complaints received about the development during the carrying out of any works associated with the development. The Complaints Register must record the: a) number of complaints received; b) number of people affected in relation to a complaint; and c) nature of the complaint and means by which the complaint was addressed and whether resolution was reached, with or without mediation. The Complaints Register must be provided to the Secretary upon request, within the timeframe stated in the request.			Compliant. Register implemented and maintained.	Compliant. Register implemented and maintained.	Compliant. Register implemented and maintained.	Compliant. Register implemented and maintained.	Compliant. Register implemented and maintained.
B32	<u>Utility Services</u>	Prior to the commencement of construction work the Applicant is to negotiate (where necessary) with the utility authorities (e.g. Ausgrid and telecommunication carriers) in connection with the relocation and/or adjustment of the services affected by the construction of the building structure.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B33		Prior to the commencement of above ground works written advice must be obtained from the electricity supply authority, an approved telecommunications carrier and an approved gas carrier (where relevant) stating that satisfactory arrangements have been made to ensure provisions of adequate services.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B34	<u>External Walls and Cladding</u>	<i>The external walls of all buildings, including additions to existing buildings, must comply with the relevant requirements of the NCC. Prior to commencement of works, the Applicant must provide the Certifying Authority with documented evidence that the products and systems proposed for use external walls, including finishes and claddings such as synthetic or aluminium composite panels, comply with the requirements of the NCC. The Applicant must provide a copy of the documentation given to the Certifying Authority to the Secretary within seven days after the Certifying Authority accepts it.</i>			Compliant. All evidence and technical submissions provided to the satisfaction of the Certifying Authority and issued to the Secretary.	Compliant. All evidence and technical submissions provided to the satisfaction of the Certifying Authority and issued to the Secretary.	Compliant. All evidence and technical submissions provided to the satisfaction of the Certifying Authority and issued to the Secretary.	Compliant. All evidence and technical submissions provided to the satisfaction of the Certifying Authority and issued to the Secretary.	Compliant. All evidence and technical submissions provided to the satisfaction of the Certifying Authority and issued to the Secretary.
B35	<u>Compliance Reporting</u>	A Pre-Construction Compliance Report must be prepared for the development, and submitted to the Certifying Authority for approval before the commencement of construction works. A copy of the endorsed compliance report must be provided to the Department at compliance@planning.nsw.gov.au before the commencement of construction works.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.

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B36		The Pre-Construction Compliance Report must include: a) details of how the terms of this consent that must be addressed before the commencement of construction have been complied with; and b) the expected commencement date for construction.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B37		Construction Compliance Reports must be submitted to the Department at compliance@planning.nsw.gov.au for information every six months from the date of the commencement of construction, for the duration of construction. The Construction Compliance Reports must provide details on the compliance performance of the development for the preceding six months and must be submitted within one month following the end of each six-month period for the duration of construction of the development, or such other timeframe as required by the Secretary.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B38		The Construction Compliance Reports must include: a) a results summary and analysis of environmental monitoring; b) the number of any complaints received, including a summary of main areas of complaint, action taken, response given and proposed strategies for reducing the recurrence of such complaints; c) details of any review of the CEMP and the Environmental Management Strategy and associated sub-plans as a result of construction carried out during the reporting period; d) a register of any modifications undertaken and their status; e) results of any independent environmental audits and details of any actions taken in response to the recommendations of an audit; f) a summary of all incidents notified in accordance with this consent; and g) any other matter relating to compliance with the terms of this consent or requested by the Secretary.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B39	<u>Independent Environmental Audit</u>	No later than one month before the commencement of construction works or within another timeframe agreed with the Secretary, a program of independent environmental audits must be prepared for the development in accordance with the latest version of AS/NZS ISO 19011-2014: Guidelines for Auditing Management Systems (Standards Australia, 2014) and submitted to the Secretary for information. The scope of each audit must be defined in the program. The program must ensure that environmental performance of the development in relation to each compliance requirement that forms the audit scope is assessed at least once in each audit cycle. The environmental audit program prepared and submitted to the Secretary must be implemented and complied with for the duration of the development.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B40		All independent environmental audits of the development must be conducted by a suitably qualified, experienced and independent team of experts and be documented in an audit report which: a) assesses the environmental performance of the development, and its effects on the surrounding environment including the community; b) assesses whether the development is complying with the terms of this consent; c) reviews the adequacy of any document required under this consent; and d) recommends measures or actions to improve the environmental performance of the development, and improvements to any document required under this consent.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
B41		Within three months of commencing an Independent Environmental Audit, or within another timeframe agreed by the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary			Compliant. Aguas Audit Conducted 26/9/18	Compliant. Aguas Audit Conducted 26/9/18	Compliant. Aguas Audit Conducted 10/12/19	Compliant. Aguas Audit Conducted 23/06/20	Compliant. Aguas Audit Conducted 23/06/21
B42	<u>Tree Protection</u>	Prior to commencement and for the duration of works, the tree protection measures outlined in the Arboricultural Development Assessment Report, prepared by Moore Trees, dated October 2017, are to be implemented and maintained			Compliant. Note, no trees affected or protection identified for current phase of works (only latter phases)	Compliant. Note, no trees affected or protection identified for current phase of works (only latter phases)	Compliant. Note, T19 and T20 are currently under protection. Water Gum tree was removed due to stormwater works, it was replanted 18/02/2020	Compliant. Note, T19 and T20 are currently under protection.	Compliant. Note, T19 and T20 are currently under protection.
B43		A project arborist with AQF Level 5 qualifications must be appointed to provide monitoring and certification throughout the construction period.			Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above
B44		Tree protection fencing for the trees to be retained must be erected around trees to be retained at a minimum distance based on the trees structural root zone.			Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above
B45		To ensure that all tree protection measures are correctly installed, a certificate from the appointed project arborist must be submitted to the Certifying Authority confirming compliance with the tree protection requirements of this consent.			Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above	Compliant. As above

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B46	<u>Ecologically Sustainable Development</u>	Prior to the commencement of the construction, the Applicant must submit details of all design measures to the Certifying Authority demonstrating that the proposed new buildings incorporate ecologically sustainable development initiatives equivalent to Green Star Health Care 4 star equivalency rating, as outlined within the NSW Health Engineering Services Guideline dated 2016 and Consultant Advice Note - Mechanical and Electrical Environmental Sustainable Design prepared by Steensen Varming and dated 21 Feb 2018.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C. DURING CONSTRUCTION									
ITEM NO.	HEADING	SSD REQUIREMENT							
C1	<u>Approved Plans to be On-site</u>	A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification must be kept on the Subject Site at all times and must be readily available for perusal by any officer of the Department, Council or the Certifying Authority.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C2	<u>Construction Hours</u>	a) Construction, including the delivery of materials to and from the site, may only be carried out between the following hours: i) between 7 am and 6 pm, Mondays to Fridays inclusive; and ii) between 8 am and 1 pm, Saturdays. b) No work may be carried out on Sundays or public holidays. c) Activities may be undertaken outside of these hours: i) if required by the Police or a public authority for the delivery of vehicles, plant or materials; or ii) if required in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or iii) works are inaudible at the nearest sensitive receivers; or iv) if a variation is approved in advance in writing by the Secretary or her nominee. d) Notification of any activities undertaken pursuant to condition C2(c) must be given to affected residents before undertaking the activities or as soon as is practical afterwards			Compliant.	Compliant. Exceptions to the approved hours for extraordinary events i.e. large concrete pours have been notified to HI and the Department, as well as community / resident notifications	Compliant. Exceptions to the approved hours for extraordinary events i.e. large concrete pours have been notified to HI and the Department, as well as community / resident notifications	Compliant. Exceptions to the approved hours for extraordinary events i.e. large concrete pours have been notified to HI and the Department, as well as community / resident notifications	Compliant. Exceptions to the approved hours for extraordinary events i.e. large concrete pours have been notified to HI and the Department, as well as community / resident notifications
C3		Rock breaking, rock hammering, sheet piling, pile driving and other noisy works may only be carried out between the following hours: a) 9 am to 12 pm, Monday to Friday; b) 2 pm to 5 pm Monday to Friday; and c) 9 am to 12 pm, Saturday.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C4	<u>Construction Noise Management</u>	The development must be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009). All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the CNVMP required under condition B25.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C5		If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the Noise Policy for Industry, 5 dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise management levels.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C6		The Applicant must ensure construction vehicles do not arrive at the Subject Site or surrounding residential precincts outside of the construction hours of work outlined under condition C2.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C7		The Applicant must schedule intra-day 'respite periods' for construction activities identified in the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) as being particularly annoying or intrusive to noise sensitive receivers, including surrounding residents and nearby hospital buildings. These activities are to be carried out after 8 am only and over continuous periods not exceeding three hours (with at least a one hour respite every three hours).			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C8		Wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles. If driven piles are required they must only be installed where outlined in a CNVMP required under condition B25.			Compliant.	Compliant.	Not Triggered	Compliant.	Compliant.
C9		The Applicant must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of audible movement alarms of a type that would minimise noise impacts on surrounding noise sensitive receivers.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C10		Any noise generated during construction of the development must not be offensive noise within the meaning of the Protection of the Environment Operations Act 1997 or exceed approved noise limits for the Subject Site.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.

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C11	<u>Vibration Criteria</u>	Vibration caused by the construction works at any residence or structure outside the Subject Site must be limited to: a) for structural damage vibration, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; b) for human exposure to vibration, the evaluation criteria presented in British Standard BS 6472 — Guide to Evaluate Human Exposure to Vibration in Buildings (1 Hz to 80 Hz) for low probability of adverse comment; c) vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified above; and d) these limits apply unless otherwise outlined in the CNVMP required under condition B25 and submitted for the approval of the Certifying Authority.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C12	<u>Contamination</u>	Remediation works at the site are to be undertaken in accordance with the recommendations and findings of the Remediation Action Plan prepared by Douglas Partners and dated May 2018.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C13		Should any new information come to light during construction works which has the potential to alter previous conclusions about contamination, the Certifying Authority must be immediately notified and works must cease in the vicinity of the suspected contamination. The Certifying Authority will determine whether further investigation, or the need for remediation, is required before construction works can recommence.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C14	<u>Waste</u>	All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C15		The body of any vehicle or trailer used to transport waste or excavation spoil must be covered before leaving the premises to prevent any spillage or escape of any dust, waste of spoil. Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site must be removed before leaving the premises.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C16		The Applicant must ensure that concrete waste and rinse water are not disposed of on the Subject Site and are prevented from entering any natural of artificial watercourse.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C17	<u>Handling of Asbestos</u>	The Applicant is to consult with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction. The requirements of the <i>Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 — 'Transportation and management of asbestos waste'</i> must also be complied with.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C18	<u>Unexpected Finds — Non-Aboriginal Heritage</u>	If any unexpected archaeological deposits/relics are discovered during construction, then all works must cease immediately in that area and the OEH Heritage Division contacted in writing. Depending on the possible significance of the discovery, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the OEH Heritage Division.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C19	<u>Erosion and Sediment Control</u>	All erosion and sediment control measures, are to be effectively implemented and maintained at or above design capacity for the duration of the construction works and until such time as all ground disturbed by the works have been stabilised and rehabilitated so that it no longer acts as a source of sediment.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C20	<u>Disposal of Seepage and Stormwater</u>	Any seepage or rainwater collected on-site during construction or groundwater must not be pumped to the street stormwater system unless separate prior approval is given in writing by the relevant approval authority where necessary			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C21	<u>Construction Vehicles</u>	All construction vehicles associated with the proposed development are to be contained on site, unless otherwise approved through the approval for a construction zone on the Council roadway.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C22	<u>Demolition</u>	To protect the surrounding environment, all demolition work must be carried out in accordance with "Australian Standard 2601-2001 — The Demolition of Structures" and the following requirements: a) Demolition material must be disposed of to an authorised recycling and/or waste disposal site and/or in accordance with an approved waste management plan; b) Demolition works, where asbestos material is being removed, must be undertaken by a contractor that holds an appropriate licence issued by WorkCover NSW in accordance with Chapter 10 of the Occupational Health and Safety Regulation 2001 and Clause 29 of the Protection of the Environment Operations (Waste) Regulation 2005; and c) On construction sites where any building contain asbestos material, a standard commercially manufactured sign containing the words 'DANGER ASBESTOS REMOVAL IN PROGRESS' and measuring not less than 400mm x 300mm must be displayed in a prominent position visible from the street.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C23	<u>Site Notice</u>	a) A site notice(s) must be prominently displayed at the boundaries of the Subject Site for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifying Authority and Structural Engineer. b) The site notice(s) is to satisfy all but not be limited to, the following requirements: i) minimum dimensions of the notice are to measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30 point type size; ii) the notice is to be durable and weatherproof and is to be displayed throughout the works period; iii) the approved hours of work, the name of the site/ project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/ noise complaint are to be displayed on the site notice; and iv) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the Subject Site is not permitted.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C24	<u>Work Cover Requirements</u>	To protect the safety of work personnel and the public, the Subject Site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant Work Cover requirements.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.

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C25	<u>Hoarding/Fencing Requirements</u>	A temporary hoarding, fence or awning must be erected between the work site and adjoining lands before the works begin and must be kept in place until after the completion of the works if the works: a) could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic; b) could cause damage to adjoining lands by falling objects; and/or c) involve the enclosure of a public place or part of a public place.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C26		The following hoarding requirements must be complied with: a) no third party advertising is permitted to be displayed on the subject hoarding/ fencing; b) the construction site manager must be responsible for the removal of all graffiti from any construction hoardings or the like within the construction area within 48 hours of its application; and c) the Applicant must submit a hoarding application to Council for the installation of any hoardings over Council footways or road reserve.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C27	<u>Access to Information</u>	At least 48 hours before the commencement of construction until the completion of all works under this consent, or such other time as agreed by the Secretary, the Applicant must: a) make the following information and documents (as they are prepared, obtained or approved) publicly available on its website: i) the documents referred to in condition A2 of this consent; ii) all current statutory approvals for the development; iii) all approved strategies, plans and programs required under the conditions of this consent; iv) regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent; v) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; vi) a summary of the current stage and progress of the development; vii) contact details to enquire about the development or to make a complaint; viii) a complaints register, updated monthly; ix) audit reports prepared as part of any independent environmental audit of the development and the Applicant's response to the recommendations in any audit report; x) any other matter required by the Secretary; and b) keep such information up to date, to the satisfaction of the Secretary. <i>Note: This condition does not require any confidential information to be made available to the public.</i>			Partially-compliant. Website established, requires more regular updates and increased content	Compliant.	Compliant.	Compliant.	Compliant.
C28	<u>Incident Reporting</u>	Within 24 hours of the occurrence of an incident that causes (or may cause) significant harm to the environment, the Applicant must notify the Secretary and any other relevant agencies of the incident in accordance with condition A18.			Compliant. No incidents to report	Compliant.	Compliant.	Compliant.	Compliant.
C29		Within seven days of the detection of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested in accordance with condition A19.			Compliant. No incidents to report	Compliant.	Compliant.	Compliant.	Compliant.
C30	<u>Compliance Tracking and Reporting</u>	The Applicant must provide regular (six monthly) reporting on any environmental performance required by the development consent for the development on its project website, in accordance with the reporting arrangements in any plans or other documents approved under the conditions of this consent.			Partially-compliant. Website established, requires more	Compliant.	Compliant.	Compliant.	Compliant.
C31	<u>Compliance</u>	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.			Compliant. Inductions for all workers and	Compliant.	Compliant.	Compliant. Inductions for all workers and	Compliant. Inductions for all workers and
C32	<u>Building materials and Site Waste</u>	The filling or stockpiling of building materials, the parking of vehicles or plant, the disposal of cement slurry, waste water or other contaminants must be located outside the tree protection zones as prescribed in the conditions of this consent.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C33	<u>Council Property</u>	To ensure that the public reserve is kept in a clean, tidy and safe condition during construction works, no building materials, waste, machinery or related matter is to be stored on the road or footpath.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C34	<u>Excavated Material</u>	All excavated material removed from the site must be classified by a suitably qualified person in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to disposal to an approved waste management facility.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C35	<u>Storage of Flammable and Combustible Goods</u>	Flammable and combustible liquids must be stored in accordance with Australian Standard 1940 — The Storage and Handling of Flammable and Combustible Liquids. A bund wall must be constructed around all work and liquid storage areas to prevent any spillage entering into the stormwater system. The bunded area must provide a volume equal to 110 per cent of the largest container stored and graded to a blind sump so as to facilitate emptying and cleansing.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C36	<u>Trade Waste</u>	Liquid trade waste generated on the site must be discharged in accordance with a trade waste agreement with Sydney Water and by a licensed liquid trade waste contractor.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
C37	<u>Traffic Control Plan Compliance</u>	The development must be carried out in accordance with the Construction Management Plan prepared under this consent			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
D. PRIOR TO OCCUPATION OR COMMENCEMENT OF USE									
ITEM NO.	HEADING	SSD REQUIREMENT							

UNIQUE ID.		COMPLIANCE REQUIREMENT	DEVELOPMENT PHASE	MONITORING METHODOLOGY	EVIDENCE & COMMENTS STATUS JUL 2018 - JAN 2019	EVIDENCE & COMMENTS STATUS FEB 2019 - JUL 2019	EVIDENCE & COMMENTS STATUS AUG 2019 - FEB 2020	EVIDENCE & COMMENTS STATUS MAR 2020 - JUL 2020	EVIDENCE & COMMENTS STATUS AUG 2020 - FEB 2021
D1	<u>Stormwater Quality Management Plan</u>	A Stormwater Quality Management Plan (SQMP) is to be prepared to ensure proposed stormwater quality measures remain effective. The SQMP must contain the following: a) maintenance schedule of all stormwater quality treatment devices; b) record and reporting details; c) waste management and disposal; d) relevant contact information; e) renewal, decommissioning and replacement timelines and activities of all stormwater quality treatment devices; and f) Work Health and Safety requirements. Details demonstrating compliance are to be submitted for the approval of the Certifying Authority prior to occupation of the building.			Compliant.	Not Triggered	Not Triggered	Not Triggered	Compliant
D2	<u>Mechanical Ventilation</u>	Following completion, installation and testing of all the mechanical ventilation systems, the Applicant must provide evidence for the approval of the Certifying Authority, prior to occupation of the building, that the installation and performance of the mechanical systems complies with: a) the BCA; b) AS 1668.2-2012 The use of airconditioning in buildings — Mechanical ventilation in buildings and other relevant codes; c) the development consent and any relevant modifications; and d) any dispensation granted by the NSW Fire Brigade.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Compliant
D3	<u>Road Damage</u>	The cost of repairing any damage caused to Council or other Public Authority's assets as a result of construction works associated with the approved development is to be met in full by the Applicant prior to occupation of the building.			Note Only	Not Triggered	Not Triggered	Not Triggered. Due to occur in August 2020	Not Triggered. Due to occur in August 2021
D4	<u>Compliance Certificate</u>	A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation and submitted to the Certifying Authority prior to occupation of the building. Application must be made through an authorised Water Servicing Coordinator. Please refer to the "Your Business" section of the web site www.sydneywater.com.au then follow the "e-Developer" icon or telephone 13 20 92 for assistance.			Compliant.	Not Triggered	Not Triggered	Not Triggered	Compliant
D5	<u>Certification of WSUD Facilities</u>	Prior to occupation a certificate from a Civil Engineer is to be obtained stating that the WSUD facilities have been constructed and will meet the water quality targets as specified in the Council's Development Control Plan.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D6	<u>Public Domain Works</u>	Prior to the occupation of the building, the Applicant must submit to the Council works-as-executed plans of any public domain works. Prior to occupation of the building, the Applicant must also submit documentation to the Certifying Authority demonstrating that the works have been completed.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D7	<u>Post-construction Dilapidation Report</u>	Prior to occupation of the building: The Applicant must engage a suitably qualified person to prepare a Post-Construction Dilapidation Report at the completion of the construction works. The report is to ascertain whether the construction works created any structural damage to adjoining buildings or infrastructure. b) The report is to be submitted for the approval of the Certifying Authority. In ascertaining whether adverse structural damage has occurred to adjoining buildings or infrastructure, the Certifying Authority must: i) compare the Post-Construction Dilapidation Report with the Pre-Construction Dilapidation Report required by these conditions; and ii) where relevant, have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads. c) A copy of this report must be submitted to Council.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D8	<u>Completion of Landscaping</u>	A certificate must be submitted to the Certifying Authority by a practicing landscape architect, horticulturalist or person with similar qualifications and experience certifying that all required landscaping works have been satisfactorily completed in accordance with the approved landscape plans. Note: Advice on suitable species for landscaping can be obtained from Council's planting guide 'Indigenous Plants for the Bushland Shire', available at www.hornsby.nsw.gov.au			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D9	<u>Preservation of Survey Marks</u>	A certificate by a Registered Surveyor must be submitted to the Certifying Authority, certifying that there has been no removal, damage, destruction, displacement or defacing of the existing survey marks in the vicinity of the proposed development or otherwise the re-establishment of damaged, removed or displaced survey marks has been undertaken in accordance with the Surveyor General's Direction No.11 — "Preservation of Survey Infrastructure". A certificate by a Registered Surveyor must be submitted to the Certifying Authority			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered

UNIQUE ID.		COMPLIANCE REQUIREMENT	DEVELOPMENT PHASE	MONITORING METHODOLOGY	EVIDENCE & COMMENTS STATUS JUL 2018 - JAN 2019	EVIDENCE & COMMENTS STATUS FEB 2019 - JUL 2019	EVIDENCE & COMMENTS STATUS AUG 2019 - FEB 2020	EVIDENCE & COMMENTS STATUS MAR 2020 - JUL 2020	EVIDENCE & COMMENTS STATUS AUG 2020 - FEB 2021
D10	<u>Creation of Restrictions and Positive Covenants</u>	The following matter(s) must be nominated on title under s88E of the Conveyancing Act, 1919; Application to be made to Council for Execution of Legal Documents for the following; a) The creation of an appropriate "Positive Covenant" and "Restriction as to User" over the constructed on-site detention/retention/water quality treatment systems and outlet works, within the lots in favour of Council in accordance with terms available from Council. The position of the on-site detention system(s) is to be clearly indicated on the title with a Surveyor's Sketch to accompany Dealing documentation; b) To register the on-site detention/retention/water quality treatment systems Positive Covenant and restriction on the use of land "works-as-executed" details of the on-site detention system and water quality treatment system must be submitted verifying that the required storage and discharge rates have been constructed in accordance with the design requirements. The details must show the invert levels of the onsite system together with pipe sizes and grades. The details must be accompanied with electronic copies of all treatment systems' technical specifications and maintenance manuals. Any variations to the approved plans must be shown in red on the "works-as-executed" plan and supported by calculations. Note: Council must be nominated as the authority to release, vary or modify any easement, restriction or covenant.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D11	<u>Car Parking</u>	All car parking must be constructed and operated in accordance with Australian Standard AS/NZS 2890.1:2004 — Off-street car parking, and Australian Standard 2890.2 - 2002 — Off-street commercial vehicle facilities and the following requirement: a) All parking areas and driveways are to be sealed to an all-weather standard, line marked and signposted. b) Car parking, loading and manoeuvring areas to be used solely for nominated purposes. c) Vehicles awaiting loading, unloading or servicing shall be parked on site and not on adjacent or nearby public roads; and d) All vehicular entry on to the site and egress from the site shall be made in a forward direction.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D12	<u>Remediation</u>	The Applicant must submit to the Certifying Authority a Site Audit Report and Site Audit Statement prepared by an EPA accredited site auditor, prior to occupation of the building. The Site Audit Report and Site Audit Statement must verify that the land is suitable for the uses proposed as part of this consent.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Compliant
D13	<u>Fire Safety Certification</u>	Prior to occupation of the building and if required, a Fire Safety Certificate must be obtained for all the Essential Fire or Other Safety Measures forming part of this consent. A copy of the Fire Safety Certificate must be submitted to the relevant authority and Council. The Fire Safety Certificate must be prominently displayed in the building.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Compliant
D14	<u>Structural Inspection Certificate</u>	A Structural Inspection Certificate or a Compliance Certificate must be submitted for the approval of the Certifying Authority prior to occupation of the building. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the Secretary and Council after: a) the site has been periodically inspected and the Certifier is satisfied that the structural works are deemed to comply with the final design drawings; and b) the drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Compliant
D15	<u>Signage</u>	Wayfinding signage must be integrated at all entry and exit points and is to be installed prior to occupation of the building.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D16	<u>Surveillance</u>	CCTV and suitable lighting must be provided on the external perimeter of the building prior to occupation of the building.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
D17	<u>External Walls and Cladding</u>	The external walls of the building, including additions to existing buildings, must comply with the relevant requirements of the NCC. Prior to occupation, the Applicant must provide the Certifying Authority with documented evidence that the products and systems used in the construction of external walls, including finishes and claddings such as synthetic or aluminium composite panels, comply with the relevant requirements of the NCC as built. The applicant must provide a copy of the documentation given to the Certifying Authority to the Secretary within seven days after the Certifying Authority accepts it.			Compliant. Note relevant yet as construction not completed.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E. POST OCCUPATION									
ITEM NO.	HEADING	SSD REQUIREMENT							
E1	<u>Plant and Equipment</u>	All plant and equipment used on site, or to monitor the performance of the development must be: a) maintained in a proper and efficient condition; and b) operated in a proper and efficient manner.			Compliant, albeit not relevant at present as project is under construction.	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E2	<u>Noise Control — Operation</u>	Noise associated with the operation of the site, including any plant, machinery or other equipment, must not exceed: a) 40 dB LA eq (15 minute) when measured at the boundary of any sensitive receiver along Burdett Street, Hornsby; and b) 35 dBA LA eq (15 minute) when measured at the boundary of any sensitive receiver along Derby Road, Hornsby; and c) 39 dBA LA eq (15 minute) when measured at the boundary of any sensitive receiver along Palmerston Road, Hornsby.			Compliant, albeit not relevant at present as project is under construction. Noise output of plant and equipment has been considered in	Not Triggered	Not Triggered	Not Triggered	Not Triggered

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E3		The Applicant must undertake noise monitoring of mechanical plant and equipment, to collect valid data and provide a quantitative assessment of operational noise impacts following the occupation of the building. The noise monitoring must be carried out by an appropriately qualified person and a monitoring report must be submitted to the Secretary within three months of full occupation of the Subject Site to verify that operational noise levels comply with condition E2 and incorporate relevant measures as required by condition B15.			Compliant, albeit not relevant at present as project is under construction	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E4		Should the short-term noise monitoring required under condition E3 identify any exceedance of the project specific noise levels in condition E2, the Applicant must implement additional appropriate on-site noise attenuation measures to ensure operational noise levels do not exceed these levels and/or provide noise attenuation measures at the affected noise sensitive receivers. The implementation of noise attenuation measures, either on-site or at the affected receiver(s), must be provided within three months of the completion of the short-term noise monitoring required under condition E3, or other appropriate time period as agreed by the Secretary.			Compliant, albeit not relevant at present as project is under construction	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E5	<u>Green Travel Plan</u>	As part of the ongoing operation of the hospital, the actions and recommendations identified in the Green Travel Plan at Appendix N of the Environmental Impact Statement for Hornsby Ku-ring-gai Hospital Campus Stage 2, prepared by Taylor Thomson Whitting (NSW) Pty Ltd (24 October 2017), must be implemented accordingly and updated on a regular basis.			Compliant, albeit not relevant at present as project is under construction	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E6	<u>Public Way to be Unobstructed</u>	The public way must not be obstructed by any materials, vehicles, refuse, skips or the like under any circumstances.			Compliant, albeit not relevant at present as project is under construction	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E7	<u>Landscape Establishment</u>	The landscape works must be maintained until establishment and successful growth of plant material to meet the intent of the landscape design. This must include but not be limited to watering, weeding, replacement of failed plant material and promoting the growth of plants through standard industry practices.			Compliant, albeit not relevant at present as project is under construction	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E8	<u>External Lighting</u>	External Lighting must comply with AS 4282: 1997 <i>Control of Obtrusive Effects of Outdoor Lighting</i> . Upon installation of lighting, but before it is finally commissioned, the Applicant must submit to the Certifying Authority evidence from a qualified practitioner demonstrating compliance in accordance with this condition			Compliant, albeit not relevant at present as project is under construction	Not Triggered	Not Triggered	Not Triggered	Not Triggered
E9	<u>Loading and Unloading</u>	All loading and unloading of service vehicles in connection with these premises must be carried out within the designating loading and unloading areas at all times and between 7am and 6pm Monday to Saturday, and 8am and 6pm Sundays and public holidays			Compliant, albeit not relevant at present as project is under construction	Not Triggered	Not Triggered	Not Triggered	Not Triggered
ADVISORY NOTES									
ITEM NO.	HEADING	SSD REQUIREMENT							
AN1	<u>Appeals</u>	The Applicant has the right to appeal to the Land and Environment Court in the manner set out in the EP&A Act and the EP&A Regulation (as amended).			Note Only	Note Only	Note Only	Note Only	Note Only
AN2	<u>Other Approvals and Permits</u>	The Applicant must apply to the relevant authority for all necessary permits including crane permits, road opening permits, hoarding or scaffolding permits, footpath occupation permits and/or any other approvals under Section 68 (Approvals) of the <i>Local Government Act 1993</i> or Section 138 of the Roads Act 1993 .			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
AN3	<u>Responsibility for other consents / agreements</u>	The Applicant is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
AN4	<u>Use of Mobile Cranes</u>	The Applicant must obtain all necessary permits required for the use of mobile cranes on or surrounding the Subject Site, including from the Civil Aviation Safety Authority, prior to the commencement of works. In particular, the following matters must be complied with: a) For special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of on-site tower cranes which warrant the on street use of mobile cranes, permits must be obtained from Council: i) At least 48 hours prior to the works for partial road closures which, in the opinion of Council will create minimal traffic disruptions, and ii) At least four weeks prior to the works for full road closures and partial road closures which, in the opinion of Council, will create significant traffic disruptions. b) The use of mobile cranes must comply with the approved hours of construction and must not be delivered to the site prior to the approved construction hours without the prior approval of Council.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
AN5	<u>Temporary Structures</u>	Unless otherwise declared as exempt development under <i>State Environmental Planning Policy</i> (Educational Establishment and Child Care Facilities) 2017 or <i>State Environmental Planning Policy</i> (Exempt and Complying Development Codes) 2008: a) An approval under <i>State Environmental Planning Policy</i> (Temporary Structures) 2007 must be obtained from the Council for the erection of the temporary structures. The application must be supported by a report detailing compliance with the provisions of the BCA. b) Structural certification from an appropriately qualified practicing structural engineer must be submitted to the Council with the application under <i>State Environmental Planning Policy</i> (Temporary Structures) 2007 to certify the structural adequacy of the design of the temporary structures. c) Should the height of any temporary structure and/or equipment (including mobile cranes) be greater than 45.72 metres above existing ground level, approval must be sought in accordance with the Civil Aviation (Buildings Control) Regulation 1988, prior to the commencement of above ground works.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.

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AN6	<u>Disability Discrimination Act</u>	This application has been assessed in accordance with the EP&A Act. No guarantee is given that the proposal complies with the Disability Discrimination Act 1992. The Applicant is responsible to ensure compliance with this and other anti-discrimination legislation. The Disability Discrimination Act 1992 covers disabilities not catered for in the minimum standards called up in the BCA which references AS 1428.1 - Design for Access and Mobility. AS1428 Parts 2, 3 & 4 provides the most comprehensive technical guidance under the Disability Discrimination Act 1992 currently available in Australia.			Note Only	Note Only	Note Only	Note Only	Note Only
AN7	<u>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</u>	a) The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) provides that a person must not take an action which has, will have, or is likely to have a significant impact on a matter of national environmental significance matter; or Commonwealth land, without an approval from the Commonwealth Environment Minister b) This application has been assessed in accordance with the EP&A Act. The determination of this assessment has not involved any assessment of the application of the Commonwealth legislation. It is the Applicant's responsibility to consult the Department of Sustainability, Environment, Water, Population and Communities to determine the need or otherwise for Commonwealth approval and you should not construe this grant of approval as notification to you that the EPBC Act does not have application. The EPBC Act may have application and you should obtain advice about this matter. There are severe penalties for non-compliance with the Commonwealth legislation.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
AN8	<u>Asbestos Removal</u>	All excavation and demolition works involving the removal and disposal of asbestos must only be undertaken by contractors who hold a current WorkCover Asbestos or "Demolition Licence" and a current WorkCover "Class 2 (Restricted) Asbestos Licence and removal must be carried out in accordance with NOHSC: "Code of Practice for the Safe Removal of Asbestos".			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.
AN9	<u>Site contamination issues during construction</u>	Should any new information come to light during demolition or construction works which has the potential to alter previous conclusions about site contamination then the Applicant must be immediately notified and works must cease. Works must not recommence on site until the consultation is made with the Certifying Authority.			Compliant.	Compliant.	Compliant.	Compliant.	Compliant.

COMPLIANCE REPORT REQUIREMENTS

ITEM NO.	HEADING	SSD REQUIREMENT							
B38	<u>The Construction Compliance Reports must include:</u>	a) a results summary and analysis of environmental monitoring;			Weekly environmental site checklists conducted commencing July 2018 (23 inspections). Monthly waste recycling reports received, averaging in excess of 80% recycled content. Two environmental audits conducted.		Weekly environmental site checklists conducted commencing August 2019 (22 inspections). Monthly waste recycling reports received, averaging in excess of 94% recycled content. One environmental audit conducted.	Weekly environmental site checklists conducted commencing March 2020 (19 inspections). Monthly waste recycling reports received, averaging in excess of 88% recycled content. One environmental audit conducted.	Weekly environmental site checklists conducted commencing March 2020 (19 inspections). Monthly waste recycling reports received, averaging in excess of 88% recycled content. One environmental audit conducted.
		b) the number of any complaints received, including a summary of main areas of complaint, action taken, response given and proposed strategies for reducing the recurrence of such complaints;			Five (5). Primarily neighbouring residents regarding disturbance caused by workers (smoking, foul language, music etc.)		Four (4). Primarily neighbouring residents regarding disturbance caused by workers (smoking, foul language etc.)	Six (6). Primarily neighbouring residents regarding disturbance caused by workers (smoking, foul language etc.)	Six (6). Primarily neighbouring residents regarding disturbance caused by workers (smoking, foul language etc.)
		c) details of any review of the CEMP and the Environmental Management Strategy and associated sub-plans as a result of construction carried out during the reporting period			Environmental Management Plan updated to Revision #3 November 2018, following Independent Audit and general review to suit site status		Environmental Management Plan updated to Revision #6 December 2019, prior to the external Audit and general review to suit site status	Environmental Management Plan updated to Revision #6 December 2019, prior to the external Audit and general review to suit site status	Environmental Management Plan updated to Revision #6 December 2019, prior to the external Audit and general review to suit site status
		d) a register of any modifications undertaken and their status;			Nil	Nil	Nil	Nil	Nil

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		e) results of any independent environmental audits and details of any actions taken in response to the recommendations of an audit;			Refer Audit Report Aquas 26 September 2018	Refer Audit Reports dated 23 Jan 2019 and 26 June 2019 from Aquas.	Refer Audit Reports dated 10 December 2019 from Aquas.	Refer Audit Reports dated 23 June 2020 from Aquas.	Refer Audit Reports dated 14 December 2020 from Aquas.
		f) a summary of all incidents notified in accordance with this consent; and			Nil	Nil	Nil	Nil	Nil
		g) any other matter relating to compliance with the terms of this consent or requested by the Secretary.			Nil	Nil	Nil	Nil	Nil

Appendix B – Projects Complaints and Incident Register



PROJECT COMPLAINT AND INCIDENT REGISTER									
	Date	Complaint/Incident Description	Source / Contact	Action / Rectification	Client Advised	CAR Req'd	CAR Closed	Recorded By	Status
#001	4/07/2018	Phone call received by N Limbrey from Resident X of X Derby Road Hornsby at 10:03am. Resident of 53 years. 10 minute phone conversation regarding; 1. Low hanging aerial consumer cabling servicing her property - she is willing to take up with her providers if necessary, although reassurance was provided that the cabling was not struck during the STAR construction or other works. 2. Lack of consultation regarding the project, especially the appearance of the building from the eastern elevation / loss of sun and daylight 3. Parking and traffic concerns during construction 4. Various grievances regarding the STAR including; a. garbage smells, b. linen and food trucks and general loading dock activities c. her car was damaged by plastic jersey barriers during the STAR construction 5. Was querying whether a Helipad would be installed. She is generally disgruntled and feeling unconsulted. She would appreciate return contact and someone to come and see her regarding her grievances above and provide copies of plans / elevations of the eastern side of Stage 2 including materiality and setback from the road.	Resident X X Derby Road	Discussed with S. Jeffrey (APP) 10:15am. Noted and passed onto HI / LHD communications officer.	Yes 10:15am 4th July 2018.	No	-	NL	CLOSED 15/2/19 following discussion between HI Comms Manager and Resident
#002	14/09/2018	Alleged traffic accident off site involving truck (LandTrak) and other vehicle at Alexandria Pde Rail Bridge, Waitara. Lady attended site at 7:10am having followed truck to site after allegedly having had an accident with the truck, who failed to stop.	C Scott (WTP) Mick (Delta)	Details taken of both drivers and vehicles, and matter deferred to Police and insurers. Matter resolved via insurance between parties.	No	No		NL	CLOSED Resolved with insurers
#003	20/09/2018	Complaint received from Maternity Department via Anthony Pezzutto regarding alleged foul language and loud music playing adjacent to maternity dept windows.	Anthony Pezzutto (NSLHD)	Include prohibition of foul language and use of radios in daily prestart and toolbox talk. Put signs up in area reminding workers to be conscious of language and unnecessary noise. MATTER CLOSED - ONGOING MONITORING TO CONTINUE	Yes	No		NL	CLOSED Ongoing monitoring required
#004	27/11/2018	Phone call received at 9:33am from resident of X Derby Road, complaining that construction workers were smoking on her nature strip / out of the front of her property. Concerns raised regarding health of her asthmatic children, and leaving cigarette butts on the lawn / gutter	Resident X Derby Rd	Addressed immediately with Traffic Controllers, who will continue to police the situation and remind construction workers. Establish designated 'smoking' area on site side of the road (outside hospital campus), with butt-bin. Included in whole-site toolbox talk. MATTER CLOSED - MONITORING TO CONTINUE.	No	No		NL	CLOSED Ongoing monitoring required
#005	21/01/2019	Email received from Dept. Planning via Health Infrastructure regarding working hours, stating; The complainant stated, on 18 January 2019, that the "construction work commenced at 5:52 am, which is contrary to the condition of Consent. In accordance with Condition C2 of the Consent, construction hours, including the delivery of materials to and from the site, may only be carried out between 7 am and 6 pm Monday to Friday and between 8am and 1pm on Saturdays.	Josh Sharfegger - Health Infrastructure	Written response provided to Dept. Planning and HI 21 Jan 2019, stating that workers decided to commence works early due to forecast extreme heat conditions. Whole of site reminded via daily Pre-Start meeting and whole site toolbox talk. MATTER CLOSED.	Yes	No	-	NL	CLOSED
#006	12/02/2019	Concrete splatter concrete pumping and clean out activities on site were sprayed beyond the confines of the site perimeter fence, onto the adjacent roof of Building 54.	Anthony Pezzutto (NSLHD)	Detailed incident investigation and corrective actions, including consultation with workers, change in work method and cleaning of affected roof area	Yes			NL	CLOSED

#007	26/04/2019	1. Anonymous complainant: Builders are arriving on site by 5am. Noise from cars and radios and talking. Rubbish left all over road. Work is starting at 6 or 6:30. 2. Complainant: XXXX - Workers are leaving and arriving at the back of hospital at 4am making a lot of noise waking up residents across the road.	Jessica Addison Hornsby Shire Council p 02 9847 6829 e jaddison@hornsby.nsw.gov.au	Response provided to Council and Certifier; 1. Reponse provided, and workforce reminded about early arrival to site. Will continue to monitor and police the matter. 2. determined that likely cause of the complaint was not construction workers, but personnel coming to the hospital to refill bulk gas supply tanks and adjacent loading dock area.	Yes	No		NL	CLOSED
#008	25/07/2019	While undertaking routine 'street sweeping' at laydown area adjacent to Derby Road (wholly inside the site), a hydraulic hose from the street weeper had burst and dispersed hydraulic fluid below it. Approximately 100L had dispersed, presumably from wear and tear.		Tony Black (Traffic Control) and Rob Brewer (Foreman, Watpac) had immediately contained the spillage using the spill kit provided. Socks, white pads and saw dust were used to prevent further leaking. Both parties were trained in spill kit training. Due to the nature of the incident, toolbox talk debrief regarding the incident and any improvements with personnel involved or likely to be involved in future incidents.	Yes	No		HV	CLOSED
#009	2/09/2019	Complaint received through NSW Planning Industry & Environment. Re: SSD 5356 "The Department has received a complaint alleging tradespeople constructing the Hornsby Hospital development are littering food waste, coffee cups and rubbish in the streets surrounding the site, in particular in Jubilee Street Hornsby".	Brad Embury, APP bradley.embury@app.com.au	Undertook the following measures; 1. Comprehensive walk along Jubilee St to observe & pick-up any street litter. Noted that there was minimal litter along the street, gutters or nature strips. 2. Advised the whole Watpac Team at team mtg 4/9/19 to monitor & clean up any street rubbish on a routine and ongoing basis as we go about our work. 3 Whole site reminded about littering and this complaint at whole site toolbox talk 9/9/19 4. Raised at Subcontractors Meeting 5/9/19 Note: there is another construction site at the southern end of Jubilee St, Waitara Public School. It is known that workers from this site park in Jubilee St, as well as general hospital staff & public, thus without specific details of the alleged littering person or vehicle, we are unable to ascertain that it was someone directly relating to our site. Continue to monitor the matter on ongoing basis and regularly remind site and respond to any issues.	Yes	No		NL	CLOSED
#010	8/11/2019	Discovered car windscreen chipped on 05 or 06 of September - believed to be due to construction works. Car was parked out the front of property	Resident X at X Derby road via Alice Brodie, Health Infrastructure, <Alice.Brodie@health.nsw.gov.au>	Investigation of works at time of incident undertaken by reviewing works log, and environmental inspection records. Investigation determined that no debris caused by works directly or indirectly associated with the project was found on Derby Road during this time	Yes	No		MC	CLOSED
#011	10/01/2020	Project workers parking on residential street and using foul language when entering their cars in the afternoon	Phonecall to Watpac Head Office by Resident X at Herbert Avenue	Toolbox talk undertaken with all workers 13/01/2020 and site security guard sent to street in afternoon to keep an eye on behaviour. Workers from another construction project noted parking on road also.	Yes	No		MC	CLOSED
#012	15/01/2020	Project workers smoking outside residential properties and leaving cigarette butts on the grass verges.	Enquiry raised on Watpac Website by Resident X at X-X Derby Road	Grass verges in front of property cleaned twice to remove all cigarette butts. Toolbox talk undertaken with all workers 20/01/2020 and security guard positioned to ensure no loitering of workers smoking outside residential properties	Yes	No		MC	CLOSED

#013	5/04/2020	X Derby Road Resident filed a complaint regarding work being carried out work on Sunday 5/4.	Enquiry raised via Project Hotline, directed to Health Infrastructure	Resident was notified that planning regulations due to Covid-19 changed the week prior. This order allows construction work to proceed on Sundays. At 05/04/20, there is no further intention of working outside of the SSD approved working hours. Local residents will be advised if this is to change	Yes	No		MC / HV	CLOSED
#014	7/04/2020	Resident X, raised a complaint in relation to the active concrete pump at 7pm on Tuesday 7/4. Resident states the noise level reached 62dBA without traffic.	Complaint was lodged with Health Infrastructure.	Resident satisfied with the idea of having a Watpac representative to discuss the project. Meeting held with resident 09:30 15/04/20. Watpac have also agreed to monitor the noise adjacent to X Palmerston Road when conducting the final five pours of HKH2. It is noted that the resident will be notified. MATTER CLOSED - ONGOING MONITORING TO CONTINUE	Yes	No		MC / HV	CLOSED
#015	15/07/2020	X Derby Road Residents had filed a complaint regarding; noise, smoking, litter, out of hours work and dust / dirt. Residents were asking for compensation for installing air-conditioning and their inconvenience.	Complaint was received via the hospital's post facility.	Residents were advised that there is ongoing environmental management on this project. Any exceedances or issues thus far can be accessed via the Health Infrastructure website. It has been noted that the Principal Contractor will inspect the property at regular intervals to direct any personnel associated with the construction site, away from the property. Residents were also notified that planning regulations due to Covid-19 had changed on 1 April 2020. This order allows construction work to proceed on Sundays. It has been noted that there is no intention of working outside of working hours stated in the SSD.	Yes	No		MC	CLOSED
#016	22/07/2020	Complaint received by Herbert Avenue Resident regarding rubbish on his property and difficulty finding parking.	Complaint was received via Project Hotline and directed to Health Infrastructure.	Project Foremen and cleaners attended Herbert Avenue on Thursday 23/7. The area of concern will be reviewed under the weekly environmental inspections and mentioned in the daily pre-starts.	Yes	No		MC	CLOSED

Appendix C – AQUAS Environmental Audit No. 6 December 2020



Hornsby Ku-Ring-Gai Hospital Redevelopment Stage 2 Environmental Audit No. 6



Assessment of Watpac's Environmental Management System Compliance Against ISO14001: 2015 and Project Conditions of Consent

Audit Reference:	AQ1236.06
Audit Organisation:	Watpac Pty Ltd
Auditor:	Luis Garzon, AQUAS
Date of Audit:	14 December 2020
Draft Report Submitted:	19 January 2021
Final Report Submitted:	27 January 2021

Amendment, Distribution & Authorisation Record

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This report has been prepared and reviewed in accordance with our Quality control system.

This report has been prepared by:

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Environmental Auditor

Date: 27/01/2021

This report has been reviewed by:

Ana Maria Munoz
Environmental Auditor

Date: 27/01/2020

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AQUAS Pty Ltd
www.aquas.com.au

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1. Executive Summary

This independent environmental audit was conducted to review the implementation of Watpac's Environmental Management System against the requirements of the AS/NZS ISO 14001: 2015 Standard and the requirements of the Project Development Consent SSD 8647. The audit was conducted by AQUAS on 14th December 2020.

This report details the findings of the sixth Environmental audit of the construction works undertaken by Watpac for the Hornsby Ku-Ring-Gai Hospital Redevelopment Stage 2. Construction activities since the previous Environmental audit included:

Main Stage 2 Building South

- Level 1 Temp PECC area – FFE and handrail installation
- Level 3 – final patching and painting
- Level 4 – FFE installation and defects
- Level 5 – No works as site amenities are located here.
- Lifts C1 and C2 being commissioned
- Levels 2, 6 and Helipad are complete

Main Stage 2 Building North

- Level 3 – final patching and painting
- Level 4 – FFE installation and defects
- Level 5 – Ceiling tile installation
- Stair 4 trimming installation on top of steel structure
- Levels 0-2 and 6 are Complete

Milestone 3 – Front of House/ ED extension

- ED extension – wall sheeting
- Former Paediatrics – high level services install, wall sheeting and in ground services rectification
- Allied Paediatrics – Noggin install and rough-in
- ME offices – Wall sheeting and noggins install
- Main Entry – Roof install

Milestone 5

- HAZMAT removal in Building 13 and 43
- Soft demolition of Buildings 1 and 2

Watpac, as the nominated Principal Contractor for the project, has the responsibility for the management of environmental aspects associated with the construction works.

The audit confirmed that Watpac continues to address the requirements of the Conditions of Consent and implement the required environmental controls for current site activities. Compliance with the obligations was demonstrated through the availability of environmental documentation and records which included Crown Certificates, inspection reports, registers, correspondence, performance reports and other. Environmental documentation was available, including the Project Environmental Management Plan Rev. 6 (Dec 2019), Noise and Vibration, Erosion and Sedimentation, Waste, Traffic Management Plans, Asbestos Removal Control Plan and other sub-Plans. There was evidence of inductions and regular toolbox talks to maintain environmental awareness of all workers at the site.

Implementation of environmental controls was observed during the site inspection, which included erosion and sedimentation measures within construction areas, site signage in relevant locations, noise monitoring, waste bins in various locations, traffic controls, ongoing site monitoring and tree protection.

Communications continue to be in place with the Hospital, relevant stakeholders and the community, as required. Watpac has continued to prepare Construction Compliance Reports, with the latest submitted by HI to the Department of Planning on 22 September 2020.

No environmental incidents have occurred during the audited period, and no non-conformances have been raised. The audit identified two (2) opportunities for improvement regarding erosion and sedimentation controls and website project information. The details of the audit process and findings are detailed in the following sections of this report.

2. Audit Scope and Objectives

2.1 Objective and scope of this Audit

This audit was conducted to confirm compliance of the Watpac Project Environmental Management Plan and its implementation against the requirements of the Standard AS/NZS ISO 14001:2015 and applicable requirements of the Development Consent SSD 8647 for the Hornsby Ku-Ring-Gai Hospital Stage 2 Redevelopment Project.

2.2 Scope of Audit

The audit reviewed Watpac's implementation of their Environmental Management System for the construction activities currently taking place as part of the Hospital Stage 2 redevelopment project.

2.3 Date and Location of Audit

The audit was conducted on 14 December 2020 at the Hornsby Ku-Ring-Gai Hospital Stage 2 site office – Palmerston Rd, Hornsby NSW 2077.

3. Audit Methodology

3.1 Opening Meeting

An opening meeting was held with personnel from APP Corporation, Watpac and AQUAS as per the Audit Attendance Sheet (see **Appendix A**) on 14 December 2020 at 8:40am.

Key items were discussed as follows:

- Confirmation of the purpose and scope of the audit.
- Overview of the Project and current status of the works.
- Occurrence of Environmental incidents.
- Overview of the audit process in accordance with the proposed Audit Program.

3.2 Audit Process

The audit commenced with a site walk where status of construction works and relevant environmental controls in place were observed. The site walk was followed by review of records and general discussions with Watpac staff for verification of the Environmental Management System implementation on the project.

Name and position of persons interviewed:

Name	Organisation	Position
Mark Cahalin	Watpac	Project Manager
Helena Veljovic	Watpac	Building Cadet / PEO
Yianni Venetis	APP	Project Manager

Details of the outcomes of the review can be found in the completed Audit Checklist (see **Appendix B**).

3.3 Audit Criteria

The following audit criteria/ratings were used for the rating of audit findings.

Audit Findings Rating	
N-Major	– Major Non-Conformance
N-Minor	– Minor Non-Conformance
OFI	– Opportunity for Improvement
NA	– Not Triggered/Not Applicable

3.4 Closing Meeting

The closing meeting was held on 14 December 2020 at 2:20pm with representatives of APP Corporation, Watpac and AQUAS. General feedback and the findings of the audit were discussed during the closing meeting.

AQUAS auditors acknowledged the cooperation, openness and hospitality of Watpac staff during the conduct of this audit.

4. Audit Findings

4.1 Audit Overview

The audit determined that Watpac has well implemented controls for environmental management within the construction activities currently being undertaken. Two opportunities for improvement (OFI) were raised during this audit. The following is an overview of key Environmental areas reviewed in this audit:

4.1.1 Environmental Policy

- The HSEQ Policy is in place (last reviewed on 8 November 2019), has been communicated to all personnel and is available on the Watkins internal website and Watpac website.
- The Project Environmental Management Plan (PEMP) – December 2019 (Rev.6) has been implemented to minimise and control any harm to the environment. The Plan outlines environmental objectives and targets which are to be monitored through inspections and audits.

4.1.2 Leadership, Planning and Resources

- The organisational chart was included in the latest update of the Project Management Plan – Rev. 4 of August 2020.
- Roles and responsibilities are defined in the PEMP section 3.2.1.
- The contractor has generally maintained environmental controls onsite, as seen during the site walk. However, additional Erosion and Sediment controls could be added around a small stockpile that resulted from works on a retaining wall recently built close to the site office – **OFI-01**.
- The PEMP contains detailed information of the relevant environmental aspects, impacts and controls. The environmental risk assessment is still at the first revision (12 March 2017) and it gets reviewed at every milestone of the project. There have been changes in the work environment but the risks and controls outlined in the risk assessment are still deemed to be relevant.
- A legal requirements register continues to be in place, the aspects identified in the PEMP have a section where legal requirements are referenced. No major changes have been identified.
- There has been a new change in the SSD Conditions – Modification 4 (MOD 4) was approved by the Department on the 18 November 2020 with changes to the Emergency Department façade.
- Documentation for the cooling towers including tests and a Risk Management Plan has been registered with Council.

4.1.3 Support

- Project site inductions continue to be delivered to Watpac staff and subcontractors. Induction contains awareness of environmental measures to be considered during construction.
- Toolbox Talks and pre-starts continue to be conducted to maintain ongoing awareness of safety and environmental matters onsite. A contractor training was delivered on led and asbestos for Milestone 4.
- Internal and external communications continue to be managed through emails, subcontractor and client meetings, Aconex transmittals, etc. Community communications, e.g. letterbox drops have been delivered to neighbours for extended working hours.
- The current PEMP is Revision 6 of December 2019. Other sub-plans remain in place e.g. Noise and Vibration Management Plan, Waste Management Plan and Traffic and Pedestrian Management Plan.
- Relevant environmental records are maintained in different ways, e.g. hard copies in folders, stored in the Aconex System, Watkins and 3D safety App and/or filed in the office shared drive.

4.1.4 Operation

- Maintenance of plant and equipment used onsite continue to be controlled through the mobile 3D safety App. Service. Sighted documentation for the Merlo Telehandler YG 52 seen onsite.
- Site signage was installed in various locations with all the project required information.
- A dilapidation report by Cardno for the new access road (council access) was completed on 24th January 2020.
- Substation works are completed and the substation was handed over and became an Ausgrid asset. The deed of agreement for lease sent by Ausgrid on 17/07/20 was sighted.
- Protection for trees on Palmerston Road was observed.
- Noise monitoring readings continue to be undertaken as part of weekly inspections.
- Waste Diversion Report for Hornsby Hospital November 2020 was available – Recovered 92% of waste (target is above 80%).
- Bins and containers for different waste types were available throughout the site.
- Water discharges have not been required during the audited period, however the Water Meter Report Card template has been updated to include the location where the water is being taken from, as per previous audit improvement opportunity.
- Some inground services works were conducted in the Emergency Department extension site and samples were taken to review for asbestos, but results came back negative.
- Notification to SafeWork NSW “Notice of intention to remove asbestos” has been sent on 12/11/20 for buildings 1, 2, 13 & 43. Removal works will commence in the coming months.
- The perimeter of the project site is fenced and is monitored for graffiti and advertising material.
- Lay down area on Derby road has a caged area for jerry cans and there is a spill kit available within close proximity.
- TMPs have been developed for access to buildings 13, 43, Milestone 3 and Emergency Dept car park.
- Emergency Response Plan Rev. 10 of 3/12/20 was updated with staff changes. Fire warden training was conducted for Watpac staff by Pinnacle on 22/10/20.

4.1.5 Performance Evaluation

- Environmental inspections are conducted by the contractor weekly. Inspection reports were

available including photos of controls in place during each inspection. Sighted inspection conducted on 25/09/2020 and 14/12/2020.

- The Contractor's Monthly PCG Report for November 2020 was available. Section 8 has summary of environmental results.
- The latest Construction Compliance Report was prepared on the 17 September 2020 and submitted to the DPIE on 22/09/2020.
- Information about the HKH2 project is published in the HI Website. However, not all the information required by SSD condition C27 is included, e.g. the CEMP, the Complaints Register, Audit report for Independent Audit 5, and other – **OFI-02**.

4.1.6 Improvement

- The Non-conformance Register continue to be in place, corrective actions for quality, safety and environmental issues have been raised and actioned, as necessary.
- No environmental incidents or non-compliances have been identified so far in the project.
- A Project Complaint Register continue to be maintained and details about complaints have been recorded including resolution reached. Six new complaints have been recorded since the last independent audit.
- The 24-hour enquiries number and email address continue to be available for the community.

4.2 Review of Previous Audit Findings

Audit findings were reviewed in detail with Watpac and AQUAS confirmed that responses and actions were appropriate to close out the three opportunities for improvement raised during the audit conducted on 23 June 2020, as detailed below.

Finding No.	SSD Ref. No.	Finding	Comment/ Recommendation	Watpac Actions
OFI-01	ISO 14001 Section 7.1	<u>Resources, Roles and Responsibilities</u> The Contractor has identified and provided the resources required to implement the EMS for the project. Project Organisational Chart showing resources in place was updated on the 11 of October 2019.	It was noted that The Project Management Plan (PMP) had an old version of the Project Organisational Chart (Rev. 5 of January 2019). Watpac to update the PMP with latest version of the Organisation Chart.	The latest Organisation chart was updated in the PMP, as noted in PMP Rev. 4 of August 2020 – Appendix B. Closed
OFI-02	SSD Cl. A15	<u>Revision of Strategies Plans and Programs</u> Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.	The Project Environmental Management Plan (PEMP) was reviewed during December 2019 (Rev.6) and a copy was sent to the DPIE on 7 April 2020 (about 15 weeks after the review). Proponent needs to ensure that every time the PEMP is reviewed a copy is submitted to the DPIE within six weeks of the review.	Watpac agreed for this to be done when future revisions of the project related Plans are made. Closed

Finding No.	SSD Ref. No.	Finding	Comment/ Recommendation	Watpac Actions
OFI-03	SSD Cl. C36	<u>Trade Waste</u> Liquid trade waste generated on the site must be discharged in accordance with a trade waste agreement with Sydney Water and by a licensed liquid trade waste contractor.	A Water Meter Report Card for control of water quality was completed on the 17 March 2020. The water turbidity and pH were within limits and it was ok to discharge out to the stormwater. It was suggested that the Water Meter Report Card includes the location where the water was taken from.	Noted that water discharges have not recently been carried out. But the Water Meter Report Card template, has been updated to include location, as suggested. Closed
OFI-02 (Nov. 2019)	SSD Cl. C27	<u>Access to Information</u> Not all the project information required under Condition C27 a) iv) has been published in the HI website. The audit noted that condition C27 a) iv) regular reporting on environmental performance and monitoring results is missing.	Consider including the records of noise monitoring and water testing in the HI project website.	A Water discharge & Noise monitoring Register has been developed and included as part of the website listed documents. Closed

4.3 Identified Findings

The table below outlines the findings raised during the audit:

Finding No.	Ref.	Finding	Comment/ Recommendation
OFI-01	SSD Cl. A1 & C19 (Checklist Items 2.10 & 4.40)	<u>Erosion and Sediment Control</u> ErSed Controls were observed during site visit, e.g. sand bags around drains and slit fences. However, no controls were installed around a small stockpile close to the site office. It is noted that no live stormwater drains were close to the stockpile.	It is recommended that additional Erosion and Sediment controls are added around a small stockpile that resulted from retaining wall works recently built close to the site office. <u>Note:</u> Photo evidence was submitted by Watpac shortly after the audit showing environmental controls installed around the stockpile to address this issue.
OFI-02	SSD Cl. C27 (Checklist Item 5.9)	<u>Access to Information</u> Sighted in HI website for the HKH2 project – the noise and water monitoring results are now published. However, other information required is now not included, e.g. the CEMP and other sub-plans, the Complaints Register, Audit report for Independent Audit 5, and other.	It is recommended that all the information listed in SSD Clause C27 be published in the Project website as required.

5. Conclusion

This audit was completed to assess the environmental controls established by Watpac against the requirements of the Development Consent for the project. The audit confirmed that Watpac has implemented its Environmental Management System to a satisfactory level, with two opportunities for improvement identified as part of the review.

The following table summarises this audit findings by rating category:

Findings Rating	Findings
Major Non-Conformance	0
Minor Non-Conformance	0
Opportunity for Improvement	2

It is suggested Watpac takes the feedback from this audit as an opportunity to make improvements in Environmental performance during the progress of the Project.

Appendix A. [Audit Attendance Sheet]

Audit Attendance Sheet



PROJECT: Hornsby Hospital Stg 2 AUDIT No.: 6
 AUDITEE: Watpac LEAD AUDITOR: Luis Garzon
 MEETING LOCATION: Watpac Site office
 OPENING MEETING DATE AND TIME: 14/12/20 8:40am
 CLOSING MEETING DATE AND TIME: " 2:20 pm

NAME	ORGANISATION	POSITION	SIGNATURE	
			OPENING MEETING	CLOSING MEETING
Luis Garzon	AQUAS	Auditor	<i>LG</i>	<i>LG</i>
Helena Velyovic	BESIX Watpac	cadet	<i>HV</i>	<i>Helena</i>
Marie Canavan	BESIX WATPAC	Project Manager	<i>MCC</i>	<i>MCC</i>
Yianni Venetis	APP	Project Manager	<i>YV</i>	<i>YV</i>
AURÉLIE BOLLE	BESIX Watpac	Senior project engineer	<i>AB</i>	<i>AB</i>

Appendix B. [Audit Checklist]

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
1.0	Environmental Policy (5.2)			
1.1	5.2	The Contractor has an Environmental policy authorised by top management and is communicated to all persons working for or on behalf of the organisation and available to the public	HSEQ Policy reviewed – dated 8/11/19, signed by the CEO. Policy is displayed site office close to the induction room. Available in the Watpac webpage and site office.	Y
1.2	Environmental Objectives and planning to achieve them (6.2)			
1.3	6.2.1	The Contractor has documented and measurable environmental objectives and targets for the project. Objectives and targets are communicated	PEMP section 2.0 and 2.3 has KPIs for each of the environmental aspects. Objectives are communicated through the use of the PEMP. Sighted weekly environment inspection checklists dated 14/12/20, 25/09/2020, with some targets measured. Milestone 2 area nearly finished, milestone 3 is new focus. Has incorporated the area where complaints were received due to workers leaving rubbish (Herbert & Jubilee Ave.). Now it is better.	Y
1.4	6.2.2	The Contractor has established, implemented and maintained a plan(s) for achieving its objectives and targets	Objectives and targets are monitored during PCG meetings. Sighted Contractor's Monthly PCG Report for November 2020. Section 8 has summary of environmental results.	Y
2.0	Leadership (5.0), Planning (6.0) and Resources (7.1)			
2.1	Resources, roles, responsibility and authority (5.3)			
2.2	7.1	The Contractor has identified and provided the resources required to implement the EMS for the project, including: - human resources and specialised skills – Org Chart - technology & financial resources	Has Project Organisational Chart showing resources in place. Latest Organisation chart was updated in the PMP, as noted in PMP Rev. 4 of August 2020 – Appendix B.	Y
2.3	5.3	Roles, responsibility and authority have been defined, documented and communicated in order to facilitate environmental management.	Position descriptions available for each employee. PEMP Section 3.2.1 outlines environmental responsibilities for key roles, e.g. - Construction/Operations Manager - Quality and Environmental Manager - Project Manager - Project Environmental Coordinator	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Opportunity for Improvement; NA: Not Applicable/Not Triggered

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
			- Independent verification staff - Site Manager - Foreman - Contract Administrator - Direct labour - Subcontractors and suppliers.	
2.4	-	A management representative(s) has been appointed by the Contractor and has defined roles, responsibilities and the authority for: a) ensuring the EMS is established, implemented and maintained in accordance with the Standard b) reporting to top management on EMS performance for review, including recommendations for improvement	Representatives are the Project Manager / QSE Manager assisted by Project Cadet as required.	Y
2.5	Environmental aspects (6.1.2)			
2.6	6.1.2	The Contractor has identified the environmental aspects of its activities, products and services – and those with significant environmental impacts. This has considered planned or new developments, or new or modified activities, products and services.	Aspects outlined in PEMP Section 5.2 and 5.3 lists the most relevant aspects and controls. Environmental Risk Assessment C-FRM-018 in place. It analyses all possible risks, some standard for all projects, some specific, last reviewed on the date 12/03/2017 (version 1 - Appendix 6.2). There have been changes in the work environment, but the controls outlined in the Risk Assessment are the same.	Y
2.7	6.1.2	The Contractor has documented this information and kept it up to date – Aspects/Impacts Register	Documented in section 5.3. Environmental Risk Assessment (PEMP Appendix 6.2) dated 12/3/17 – contains generic aspects/impacts. That is still at the first revision and will be reviewed at every milestone of the project. No changes have been made as it is still relevant to the project at this time.	Y
2.8	Compliance Obligations (6.1.3)			
2.9	6.1.3 9.1.2	The Contractor has identified all legal and other requirements relevant to its environmental aspects and how they apply to the project. There is a procedure for periodically evaluating compliance and records are maintained?	Legal Requirements Register in place (Appendix 6.6) includes the general requirements for project - not specific; also, section 5, under each of the listed aspects has as legal reference. Last change to the SSD Conditions was MOD 4 of 18/11/2020.	Y

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
			Any legislation updates are provided by the Head Office. Sighted examples of email correspondence with legislation updates, mostly from WHS perspective.	
2.10	A1	All reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment than may result from the construction and operation of the development.	The contractor has generally maintained environmental controls onsite – as per the site walk. No environmental issues have occurred. Additional Erosion and Sediment controls could be added around a small stockpile resulting from a retaining wall recently built close to the site office – OFI	OFI-01
2.11	A2	The development may only be carried out: a) in compliance with the conditions of this consent; b) in accordance with all written directions of the Secretary; c) generally, in accordance with the EIS as amended by the RtS and RtS Addendum; d) generally, in accordance with HHR Stage 2 Statement of Environmental Effects Section 4.55(1A) Modification to Incorporate Extensions of the Vertical Circulation Structures and Roof Form to Accommodate a Future Helipad; e) generally, in accordance with HHR Stage 2 Statement of Environmental Effects Section 4.55(1A) Modification for the establishment and use of Helipad structure; and f) in accordance with the approved plans.	The development has generally been carried out in accordance with consent requirements and the approved plans. Had a MOD 4 dated 18/11/2020 – change to the Emergency Department façade – received updated design drawings. Sighted copy of the Statement of Environmental Effects, which was prepared in collaboration with Watpac.	Y
2.12	A9, A10	Applicability of Guidelines – If directed by the Planning Secretary, the Contractor has ensured compliance with updated or revised versions of applicable guidelines, protocols, Standards or policies referenced in the Conditions of Consent (otherwise compliance is required with any referenced guidelines, protocols, Standards or policies in the form they are in as at the date of this consent).	Has received a SSD MOD 4 (18th Nov. 20) – change to the Emergency Department façade – received updated drawings design. Sighted Aconex correspondence of 7th Dec WTPC-GCOR-021344. from Mark to BMG Certifier, sending the information and asking for any changes in Crown Certificates. Response not yet received.	Y
2.13	A8	Structural Adequacy – All new buildings and structures, and any alterations or additions that are part of the development, must be constructed in accordance with the relevant requirements of the BCA.	Crown Certificates CC1 - 12/07/2018 and CC2 - 11/10/2018.	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Opportunity for Improvement; NA: Not Applicable/Not Triggered

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			Crown Certificates received covers 30/4/19 for remaining works (CC3), including extension of Emergency Dept, front of house and others. Crown Certificate CC4 No. CRO-18155 dated 25/09/2019 for Helipad structural works. Includes: architectural design, lift design certificate, compliance statement, piling design statement and structural design statement. New evidence: Has CC5 CRO-20065 of 2 July – Balancing of the Helipad. Refers to BCA compliance. Sighted Aconex correspondence of 7th Dec WTPC-GCOR-021344. from M. Cahalin to BMG Certifier, sending the information and asking for any changes in Crown Certificates. Response not yet received.	
2.14	B9	The Contractor has ensured works are designed and constructed to provide access and facilities for people with a disability in accordance with the BCA. The Certifying Authority must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any certified plans.	iAccess consultants provided a report 25 September 2017 with all the provisions for DDA requirements. This forms part of submission to the certifying authority (Blackett Maguire) for certification. Crown Certificate 3 references the iAccess Report dated 25 February 2019 with design changes incorporated.	Y
2.15	B13	Structural Drawings Prior to commencement of works, the Applicant must submit for approval of the Certifying Authority structural drawings prepared and signed by a suitably qualified practising Structural Engineer that demonstrates compliance with: a) the relevant clauses of the BCA; and b) this development consent.	BCA Crown Certificate references the SSD 12/07/2018 Blackett Maguire and Goldsmith – drawings and other docs received (e.g. certifications) BCA Crown Certificate 2 of 11/10/2018 – sighted certificate with drawings and structural adequacy. Crown Certificate 3 of 30/4/19 includes any remaining drawings.	Y
2.16	B15	All mechanical ventilation systems must be installed in accordance with Part F4.5 of the BCA and must comply with the AS 1668.2-2012. Details must be submitted for approval of the Certifying Authority prior to commencement of the relevant works.	This is a permanent design item, done to BCA and relevant Australian Standards. - Item 19 of Crown Certificate - Item 7 of Crown Certificate Dewpoint Report of 6/2/2019 has references to SSD conditions B15, B16 and others (part of Crown Cert. 3).	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
2.17	B16	The installation, operation and maintenance of warm water systems and water-cooling systems must comply with the Public Health Act 2010, Public Health Reg. 2012 and Pts 1 and 2 (or Pt 3 if a Performance-based water-cooling system) of AS/NZS 3666.2:2011 Air handling and water systems of buildings - Microbial control - Operation and maintenance and the NSW Health Code of Practice for the Control of Legionnaires' Disease.	Dewpoint Group is the mechanical contractor. Sighted Certificate of Design Mechanical dated 6/2/2019 and revised on 22/3/2019. Cooling Towers have been put in place in March 2020. Presented registration with Council of documentation for the cooling towers, tests and Risk Management Plan – as per Aconex WTPC-GCOR-020735 of 4/11/20.	Y
2.18	A21	For work costing \$25,000 or more, a Long Service Levy must be paid.	Long Service Levy has been paid – Receipt No. 00399139 of 2 October 2019.	Y
2.19	C24	To protect the safety of work personnel and the public, the Subject Site must be adequately secured to prevent access by unauthorised personnel, and work must be conducted at all times in accordance with relevant Work Cover requirements.	The layout of the site has changed, e.g. the contractor has taken possession of new areas and there is a new site access. Inspections are conducted to ensure that the gates are locked. Sighted HI Inspection Form – 3 rd December 2020, always checks if the site is securely fenced. An issue with a missing panel was raised, then photo evidence was provided of rectification.	Y
3.0	Support (7.0)			
3.1	Competency, training and awareness (7.2, 7.3)			
3.2	7.2	The Contractor has ensured that employees and subcontractors are competent on the basis of appropriate education, training or experience. Relevant training and competency records have been retained.	HR recruitment process managed by head office. - Subcontractors competencies managed tendering process – selection of qualified personnel – questionnaire to be completed. - Workers go through a Watpac online induction (general) and then there is a site-specific induction.	Y
3.3	7.3	The Contractor has established a procedure to provide awareness to employees and subcontractors on: a) the importance of conformity with the environmental policy, procedures and requirements of the EMS b) the significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits of improved personal performance,	All staff go through project induction. This includes working hours, hazardous substances, emergencies, lighting, and other specific environmental elements. Sighted induction form including Environment section. Sighted example of induction #1560 dated 10/12/19 and re-induction for quick plumbing dated 19/7/2019.	Y

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		c) their roles and responsibilities in achieving conformity with the EMS d) the potential consequences of not following the relevant procedures.	Have some subcontractors providing training in other language e.g. partition and façade contractor delivered training in Chinese. Toolbox talks are conducted every Monday (whole site) and daily pre-start (3D safety app). Sighted attendance record of contractor's training conducted for led and asbestos – Milestone 4, Building 1, 13 & 43, done on 22/09/2020 at 9am.	
3.4	C31	The Contractor must ensure that all of its employees, contractors (and their subcontractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Apart from inductions and Toolbox Talks, Watpac provides to subcontractors the SSD conditions and the requirement to comply with all applicable project requirements. Toolbox talks were suspended during the Covid restrictions, but they've been resumed recently. Sighted TT for 14/12/20 – discussed demolition in M3 soft strip, hazmat removal, new shed, etc.	Y
3.5	Communication (7.4)			
3.6	7.4.2	Procedures are in place for ensuring internal communication with regard to the environmental aspects and the EMS	- Communications about updated forms and other system updates from Head Office are received via email. - Conduct internal team meetings – suspended for now but will resume in next year - Conduct meetings with APP and HI fortnightly - Disruption meetings with hospital weekly – e.g. sighted Disruptive Works Notices Register updated 10 December 2020.	Y
3.7	7.4.3	Procedures are in place for communications with external parties, e.g. a) EPA, Council, Hospital, others b) Community engagement – provision of information, sensitive receivers, follow up	Contractors meeting – every 2 weeks APP, HI and Watpac, go through design, HSE, program, construction. Any community communications are managed through HI – e.g. Notification of out of hours Works sent by HI for letter box drops 7/12/20. Sighted email 8/12 by the PM to Council with notification.	Y
3.8	A7	Evidence of Consultation – Where conditions of this consent require consultation with an identified party, the Applicant must: a) consult with the relevant party prior to submitting the subject document for approval; and	As above – there have been letter box drops delivered to neighbours. Extension of hours was approved by HI, per email 8/12/20 of H. Bell.	Y

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		b) provide details of the consultation undertaken, including: i) a description of how matters raised by those consulted have been resolved to the satisfaction of both the Applicant and the party consulted; and ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.		
3.9	B1	Notice of commencement of works If the construction or operation of the development is to be staged, the Contractor has notified the Department, Certifying Authority and Council, of the date of commencement and the development to be carried out in that stage. This is to be done in writing and at least 48 hours before commencement of each stage	Sighted letter of 28 th June – ‘Notification of Commencement’ A letter was dropped to neighbours for info +/- 130 residents. Next stage will be part of a different approval.	Y
3.10	Documentation (7.5)			
3.11	7.5	The Contractor has procedures for control of documents and records, which includes: a. approval of documents for adequacy prior to issue b. review and update and re-approval c. ensuring that changes and the current revision status of documents are identified d. ensuring that relevant versions of applicable documents are available at points of use e. ensuring that documents remain legible and readily identifiable f. ensuring that relevant documents of external origin for the planning and operation of the EMS are identified and their distribution controlled g. preventing the unintended use of obsolete documents and applying suitable identification to them if they are retained for any purpose	- Uses ‘Watkins’ system – has all current system documents, templates, forms, etc. - Aconex – project specific documentation e.g. the EMP + reports - Authorisation in the plan. - Documents are available in the server. - Have access to the NSW Gov. page for the project e.g. for SSD conditions. - Aconex docs – only have the current versions (older not shown) - G-Drive – have a ‘superseded docs’ folder - Some docs / records in G:/ Drive - Web FM – web-based portal for management of defects. - Evidence of reviews/ updates / approval, e.g. sighted transmittal from Watpac to APP of updated drawings on 27/11/19, then APP would circulate to others, as required.	Y
3.12	B22, B23	Construction Environmental Management Plan a. Prior to the commencement of construction works, a CEMP must be submitted for the approval of the Certifying Authority. The CEMP must address, but not be limited to, the following matters where relevant: i) hours of work;	Sighted PEMP dated December 2019 (Rev.6) authorised by PM. a) Transmittal to H/APP 20/03/2018 via Aconex – original plan Email of 19/09/2018 – sent updated plans to Planning NSW.	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		ii) 24-hour contact details of site manager; iii) traffic management, in consultation with Council and TfNSW; iv) construction noise and vibration management prepared by a suitable qualified person; v) management of dust and odour to protect the amenity of the neighbourhood; vi) erosion and sediment control; vii) stormwater control and discharge; viii) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the Subject Site; ix) procedures for encountering groundwater during construction works; x) external lighting in compliance with AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting; xi) a protocol detailing appropriate procedures for identifying and dealing with unexpected finds of site contamination (including asbestos containing materials, Polycyclic aromatic hydrocarbons (PAHs), Total recoverable hydrocarbons (TRH) and lead-based paint); xii) a protocol detailing appropriate proceed. for identifying and dealing with unexpected finds of archaeological heritage; xiii) waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site; xiv) waste storage, recycling and litter control; b. The CEMP must not include works that have not been explicitly approved in this development consent. In the event of any inconsistency between the consent and the CEMP, the consent must prevail; and c. The Applicant must submit a copy of the CEMP to the Department and Council prior to commencement of work. The CEMP must be implemented by the contractor for the duration of the construction works	Sighted Aconex email of 12/04/2018 to the Certifier; no comments have been received from either party. Aconex internal submission of CMP and WMP dated 17/12/19 was provided as supplementary evidence. Submission was made after the Independent Environmental Audit – Note. Aspects required in SSD Cl. B22 addressed generally in: - PEMP and Sub-Plans and Emergency Response Plan - Traffic mgt is an Appendix to the Safety Management Plan. - PEMP Aspects (Section 5) b) Has a Noise and Vibration for Hospital as a 'sensitive receiver' (not in the SSD) – but not been submitted to the client. c) Plan was submitted – as per item a) above. No recent updates.	

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
3.13	B24, B25	Construction Noise and Vibration Management Plan to be submitted for approval of the Certifying Authority, to be implemented for the duration of the project and to be revised from time to time. Plan to address the following: i) be prepared by a suitably qualified expert; ii) be prepared in consultation with Council and all adjoining noise sensitive receivers where noise levels exceed the construction noise management levels, in accordance with EPA guidelines; iii) describe the measures to be implemented to ensure > best management practice is being employed; > compliance with the relevant conditions of this consent; iv) describe the proposed noise and vibration management measures in detail; v) include strategies that have been developed to address impacts to noise sensitive receivers where noise levels exceed the construction noise management level, for managing high noise generating works; vi) describe the consultation undertaken to develop the strategies in v) above; vii) evaluate and report on the effectiveness of the noise and vibration management measures; and viii) include a complaints management system that would be implemented for the duration of the construction works. The Contractor must submit a copy of the plan to the Dept. and to the Council prior to commencement of work. B25 – The CNVMP must be implemented by the contractor for the duration of the construction works.	CNVMP in place Rev 0 by Acoustic Logic, Doc 20180872.1/0624A/ R0/TT of 24/06/18. Sighted submission to Blackett Maguire & Goldsmith, Aconex communication WTPC-GCOR-000647 of 29/6/18. No recent updates. Acoustic logic Report – has recommendations for noise & vibration controls. Baseline reference noise measured. The Council has copy of the Plan. Follow requirements for noise management, e.g. excavation works not to start before 8:00am. Strategies e.g. Acoustic logic did measurements/ monitoring to get info for preparation of the Plan. Consultation was not required specifically for the Plan at this stage. Any disruptions managed during the DW process, E.g. DW No. 144 dated 12/6/2020 for noisy works due to removal of trees to be conducted next week. The Plan includes recommendations for complaints management. There are 6 points for noise monitoring outlined in the Plan. The monitoring will be undertaken at the points as they become relevant through different milestones. There were 2 permanent vibration monitors during the demolition in April/May 2020. Exceedances were reported to the Hospital. Sighted report dated 14 May to 27 May 2020. No recent updates.	Y
3.14	B26, B27	Construction Waste Management Plan to be submitted for approval of the Certifying Authority, to be implemented for the duration of the project and to be revised from time to time. Plan to address the following: i) recycling of demolition materials including concrete; and ii) removal of hazardous materials and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.	CWMP in place, Rev. 01 27/June 2018 – Submitted to the Certifier via Aconex communication WTPC-GCOR-000647 of 29/6/18. Sighted Crown Cert. of 12/7/18 referencing the Plan. Plan was updated 30/10/19 (Rev.2) to change the template to reflect new branding and new Appendix 1. Use grasshopper as removal subcontractor. Purpose, Goal is to reuse / recycle 80% of waste. Has +/- 8 different waste streams: concrete, steel/ metal, timber, plastic/ paper/ cardboard.	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		Details demonstrating compliance with the relevant legislative requirements, associated with the removal of hazardous waste, particularly the method of containment and control of emission of fibres to the air, are to be submitted for the approval of the Certifying Authority prior to the removal of any hazardous materials; The Contractor must notify the RMS Traffic Management Centre of the truck route(s) to be followed by trucks transporting waste material from the Subject Site, prior to the commencement of the removal of any waste material from the Subject Site; and The Contractor must submit a copy of the plan to the Department and the Council prior to commencement of work. B27 – The CWMP must be implemented by the contractor for the duration of the construction works	Has identification and management of hazardous materials. Also, has tracking of vehicles transporting hazardous materials (take number plates) and they send dockets. Grasshopper would collect, and segregate waste offsite as required. Copy of the Plan submitted – as part of the Crown Certificate. No recent updates.	
3.15	B28, B29	Construction Traffic and Pedestrian Management Plan to be submitted for approval of the Certifying Authority, to be implemented for the duration of the project and to be revised from time to time. Plan to address the following: i) location of proposed work zones & haulage routes; iii) construction vehicle access arrangements; iv) construction hours & construction program; vi) predicted construction traffic volumes and vehicle movements, types and routes including any known road closures and consideration of alternate routes; vii) assessment of road safety at key intersections and locations subject to heavy vehicle movements and high pedestrian activity; viii) details of construction vehicle movements including parking, dedicated vehicle turning areas and ingress and egress points; ix) details of anticipated peak hour and daily truck movements to and from the site; x) details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements; xi) details of temporary cycling and pedestrian access during construction;	CTMP – Part of the Safety Management Plan (Appendix F) Rev. 1 March 2018. There are new TMPs submitted to APP on 4/12/19 to include a new entrance for Milestone 3 (demolition area). Plan was sent to Hornsby Council 12/12/19 approved by APP/HI on the 19/12/19. Plan was communicated to any other relevant parties. Plans are implemented. 3 main types of plans: 1. CTMP – overarching prepared by RMS - Approved routes - Not affected by peak hour traffic 2. TCPs – e.g. for general site entry and egress; for crane erection, delivery of equipment. Sighted TCP 084/01 dated 6/3/2020 for Milestone 3, vehicle access via Palmerston Road. 3. VMP (Vehicle Movement Plans) – e.g. delivery of tower crane equipment. Sighted VMP dated 06/12/19 for Milestone 3. Sighted permit for a temporary full/partial road closure at Palmerston Road dated 23/03/2020 from Hornsby Shire Council, (helping the trucks flow to the construction entrance). Permit was granted from 23/3/2020 to 23/9/2020 from 6.30am to 5.30pm.	Y

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		xii) details of proposed construction vehicle access arrangements at all stages; xiii) loading and unloading; xiv) details of management measures to minimise traffic impacts, including temporary road works and/or implementation of traffic control measures; xv) pedestrian and traffic management methods; xvi) any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the works; xvii) consideration of the cumulative construction traffic impacts of surrounding projects under construction, including those within the Hornsby Ku-ring-gai Hospital precinct. Existing CTPMPs for developments within or around the Site should be referenced in the CTPMP to ensure that the coordination of work activities is managed to minimise impacts on the surrounding road network; and xviii) traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, which must include vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/ construction activities. The Contractor must submit a copy of the CTPMP to the Department and to the Council, prior to the commencement of works. B29 – The CTPMP must be implemented by the contractor for the duration of the construction works	New Evidence: TMPs have been developed for access to buildings 13 and 43 - sighted. Also another showing access for Milestone 3 & Emergency Dept car park. Plans were prepared by OTMS Roads and Traffic Management Services.	
3.16	A15, A16	If necessary the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Secretary (e.g. after submission of a compliance report, or incident report, changes in the SSD conditions, or issue of a direction from the Secretary) Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.	The Project Environmental Management Plan (PEMP) was reviewed during December 2019 (Rev.6) and a copy was sent to the DPIE on the 7 April 2020 (about 15 weeks after the review). An opportunity for improvement was raised noting that every time the PEMP is reviewed a copy is to be submitted to the DPIE within six weeks of the review. Watpac agreed that this to be done for future revisions of the project related Plans.	Y
3.17	B2 C1	Certified Plans are to be submitted to the Certifying Authority and the Department prior to commencement of each stage.	Certified Plans (as per Mod 2 and Mod 3) were submitted to CA as part of the CC4 (25/9/2019) sighted drawings listed in the CC4.	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification must be kept onsite at all times and must be readily available.	Plans were sent to Department as part of Mod 3 and were approved on the 6/4/2020. Plans are available in site office and in Server (G: Drive). - 2 REFs - SSD - Certifications (e.g. Crown Cert) – G: Drive - Plans in Aconex.	
3.18	Control of records (7.5)			
3.19	7.5.3	The Contractor has established and maintained necessary records to demonstrate conformity to the requirements of its EMS and the Standard, and the results achieved.	PEMP Sec. 4.12. - Some are part of safety e.g. Inductions, Toolbox Talks (hard copies, kept in folder in Safety Advisor bookshelf) - Inspections, other environmental records – have a folder in shared drive e.g. complaints, waste diversion reports, meeting inspections - Reports – Aconex e.g. EIS, contamination, others within SSD, Drawings Specific records sighted as per further sections of this checklist.	Y
3.20	7.5.3	Procedures have been established for the identification, storage, protection, retrieval, retention and disposal of records.	Part of the Head Office Management System procedures – Document Control procedure. There is a document controller.	Y
4.0	Operation			
4.1	Operational controls (8.1)			
4.2	8.1	The Contractor has identified, and planned controls associated with the significant environmental aspects to ensure that operations are carried out under conditions that minimise harm to the environment.	All Aspects identified in the PEMP have Management Strategy and specific actions e.g. Noise controls: - Noise monitoring in specific sensitive points Sedimentation controls: - Socks around drains - Silt fences Washout drums Signage, etc.	Y
4.3	Conditions of Development Consent – Before Commencement of Works			

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4.4	A6	No consent is granted for the demolition of the 'Palmerston' building.	Not part of SoW. This was a provision under the submission, not approved at this point.	NA
4.5	A17	All plant and equipment used on site, or to monitor the performance of the development must be: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Plant and equipment are managed through 3D Safety app. Asbestos air monitoring done by EHO Consulting during the demolition, sighted 15/5/2020 and 20/4/2020 No vibration monitors are currently installed. Sighted air monitor outside the site office. A hygienist comes daily to inspect the monitor. Merlo Telehandler YG 52 seen onsite – has certificate of conditional registration 76200D, Exp 8/4/21, quarterly inspection dated 2/6/20, 250-hour service, etc.	Y
4.6	A19, EPA Reg. Cl 98A, C23	Prescribed conditions – Signage : 2) A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out: (a) showing the name, address and telephone number of the principal certifying authority for the work; (b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours; (c) stating that unauthorised entry to the work site is prohibited.	Signage sighted during site walk complies with this condition. Authorised hours of work are posted in a different site sign.	Y

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		Site Notice – to include certifying authority, structural engineer, the approved hours of work.		
4.7	B3, B4	Reflectivity, Outdoor lighting The building materials used on the facades of the structure and the all outdoor lighting must comply with requirements of B3 and B4.	Certifier has provided all the architectural drawings including exterior finishing schedule. Sighted: - Certificate of Design for reflectivity of 7/09/18 by Bonacci Group. - Electrical Design Cert. Wood & Grieve Eng. 15/8/18 Crown Certificate 11/10/2018 items 11, 12, 6, 17	Y
4.8	B5-B8	Hazards – design of oxygen supply The Contractor has ensured that: B5 The design and operation of the hospital's oxygen supply system (including the use of the liquid oxygen bulk storage tanks, any oxygen cylinders connected to the oxygen supply system and any temporary oxygen supply tanks) be in accordance with AS 1894 'The storage and handling of non-flammable cryogenic and refrigerated liquids' (AS 1894). B6 All control measures or safeguards described in the Preliminary Hazard Analysis (PHA, 9 February 2018) will be implemented. B7 As necessary and in accordance with AS 1894, the hospital's Emergency Plan and emergency procedures have been updated to include emergency situations involving the hospital's oxygen supply system, as described in the PHA (9 February 2018). B8 If temporary oxygen supply tanks are to be installed prior to demolition of existing liquid oxygen bulk storage tanks for the purpose of hospital oxygen supply prior to commissioning of new tanks, the design and operation of these temporary tanks must be verified with AS 1894 and/or other relevant Australian Standards.	HealthShare has coordinated the replacement of the oxygen tank. Logistics were coordinated with Watpac, as access had to be given through the worksite. The protection shed was lowered after the tank was replaced. There is signage indicating a minimum exclusion zone for hot works and clear access to the tanks at all times (in case access is required). Communications are in place when refilling. The Hospital presented their current emergency procedures, which refer to the old oxygen tank. The Project Manager has asked for them to be updated to reflect any changes with the new tank, e.g. provider is now Coregas. The emergency response procedure from LHD has been updated in section 6.2 'Medical Gases Supply – Engineering Response' to include the liquid oxygen and nitrous oxide. Procedure was approved 17/6/2018. No new evidence to review.	Y

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4.9	B10	The Contractor has submitted Plans demonstrating compliance with the following requirements for bicycle parking, to the satisfaction of the Certifying Authority: a) provision of a minimum of 18 bicycle parking spaces; b) layout, design and security to comply with all applicable minimum requirements of AS 2890.3:2015 Parking facilities - Bicycle parking, and be located in secure, convenient and accessible areas close to the main entries, incorporating adequate lighting and opportunities for passive surveillance; and c) provision of end-of-trip facilities for staff including showers, change room and lockers.	The initial design and architectural drawings have been submitted for certification. Part of Crown Certificate No.3. Final design is still in progress, as part of landscaping. Note: Construction of the bicycle parking will become relevant at the very end of the project.	Y
4.10	B12	Pre-Construction dilapidation reports Qualified structural engineer to prepare a Pre-Construction Dilapidation Report. Report submitted to the satisfaction of the Certifying Authority & copy to Council.	Email was sent on 19/09/2018 to Planning and Council with dilapidation reports. - Presented 4 reports: - Derby – Watpac - Star and Hope – Structural Engineer (Cardno) - Cottage 93 – Watpac - Little Learning School – Structural Eng. 04/09/18 Photographic report / condition of building A new dilapidation report by Cardno for the new access road (council access) was done 24/01/2020. This was not sent to Council or the Certifier, was from an internal perspective, to cover any potential issues.	Y
4.11	B18	Public Footpath The existing concrete footpath along the boundary of the site is to be reinstated where impacted by the proposed works to relevant Council specifications and standards	Not Triggered. Footpath not affected at the moment under this SSD. There has been an agreement with Council that they will reinstate the footpath after all the construction is completed (late 2021). Sighted email to Hornsby Council 29/11/19 from Nick Limbrey with summary of agreement – Note.	NA
4.12	B19	Stormwater and Drainage Works Designed in accordance with Council's relevant specifications and standards and other specific requirements. Water treatment system designed as per Council requirements	Crown Certificate – Hydraulic outside fence – covered by another works conditions (REF determination – approval 004/2018 – 04/04/2018) – Not relevant to this SSD. For internal stormwater drainage, the design would be approved as part of Crown Certs 1, 2.	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Opportunity for Improvement; NA: Not Applicable/Not Triggered

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
4.13	B20	On-site Stormwater detention and Water Quality An on-site stormwater detention system must be designed by a chartered civil engineer and constructed in accordance with the following requirements: a) the developing area of the site shall ensure its 5-year average recurrence interval (ARI) runoff reduced to the pre-development site cover rate. The volume of the onsite detention system shall ensure its capable of detaining the 20-year ARI post-development site cover storm; b) the water quality treatment system shall be designed and constructed to provide water quality outcomes as per Council's HDCP2013 Section 1 C.1.2.i requirements; c) have a surcharge/inspection grate located directly above the outlet; d) discharge from the detention system must be controlled via 1 metre length of pipe, not less than 50 millimetres diameter or via a stainless plate with sharply drilled orifice bolted over the face of the outlet discharging into a larger diameter pipe capable of carrying the design flow to an approved Council system; e) where above ground and the average depth is greater than 0.3 metres, a 'pool type' safety fence and warning signs must be installed; and f) not be constructed in a location that would impact upon the visual or recreational amenity of residents.	Civil Design Certificate (Crown Certificate, Item 4). The onsite stormwater detention system will be done in Milestone 4 (Sep 2020 to June 2021).	Y
4.14	B21	Road Works Kerb and gutter, stormwater drainage, full road width pavement including traffic facilities (vehicle crossings, if applicable) and paved footpaths must be constructed along the area where road works are to be undertaken. In relation to public roads or classified road (as defined under the Roads Act 1993), all roads and traffic facilities must be designed to meet the requirements of Council and RMS (if applicable) and obtain any necessary permits and approvals from the relevant road authority, prior to the commencement of road or pavement construction works.	There were some works on the Derby Road (from Dec 2019 to Feb 2020) to connect stormwater to the sewer. Council reinstated some footpaths and will upgrade the road in August 2020. Sighted site inspection 17/03/2020 with Watpac and Council. Road reinstatement as part of the REF determination, as per checklist item 4.12.	Y

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
4.15	B32, B33	Utility Services Prior to the commencement of construction work the Contractor is to negotiate (as necessary) with the utility authorities (e.g. Ausgrid and Telcos) in connection with the relocation and/or adjustment of the services affected by the construction of the building structure. Prior to the commencement of above-ground works written advice must be obtained from the electricity supply authority, an approved telco carrier and an approved gas carrier (as relevant) stating that satisfactory arrangements have been made to ensure provision of adequate services	Has communicated with Telcos, Ausgrid about low power lines. A new substation is being built. Ausgrid has come to check works progress. Sighted Chamber Substation – Civil Building Handover Certificate 21/02/2020. Correspondence with Ausgrid indicates that substation will be energised on the 13/07/2020 – sighted network access request No. 58506-T1 from Ausgrid. Sydney Water has been contacted, sighted copy of the notice of requirements 24/03/2020 – still in progress. Gas is with the existing Hospital. Update: The substation was built and handed over, so now it is an Ausgrid asset. Sighted Deed of agreement for lease sent by Ausgrid on 17/7/20.	Y
4.16	B34	External Walls and Cladding The external walls of all buildings, including additions to existing buildings, must comply with the relevant requirements of the NCC	Final Design has been submitted. Sighted various Certificates for Alcadex, Deco, Finesse, Terracade, etc. Will use composite, non-combustible panels, glass, aluminium. Covered in previous Crown Certificates. Sighted Façade Installation Certificate from Foxville (façade contractor) – for levels 0, 1 and 2 of Clinical Services building, dated 10/9/20. Additional certificate (not mandatory) was issued per Certifier's requirement, noting compliance of the materials.	Y
4.17	B42 B45	Tree Protection The tree protection measures outlined in the <i>Arboricultural Development Assessment Report</i> , prepared by Moore Trees, dated October 2017, are to be implemented and maintained. Certification from the arborist required.	Have a report from Moore Trees – provided a Tree Protection Plan There are trees to be removed as part of Milestone 3 (sighted during site visit), approved by Council. Retained trees are not near the construction site (map sighted from the Arborist Report Oct. 2017). Sighted Aconex correspondence of 13/9/18 from Watpac to BM+G with submission of package for Crown Certificate 2, which included Arborist certification. Also sighted CC2 Item 16.	Y

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
4.18	B43	A project arborist with AQF Level 5 qualifications must be appointed to provide monitoring and certification throughout the construction period.	Moore Trees is the project arborist	Y
4.19	B44, C32	Tree protection fencing for the trees to be retained must be erected around trees to be retained at a minimum distance based on the trees structural root zone C32. Building materials and Site Waste The filling or stockpiling of building materials, the parking of vehicles or plant, the disposal of cement slurry, waste water or other contaminants must be located outside the tree protection zones as prescribed in the conditions of this consent.	Not Triggered. Item may not become relevant (as per item 4.17) Two tress have been protected – sighted during site inspection. C32 – tree protection zones are outside if the site compound. Sighted trees to be protected during site walk – on Palmerston Road.	NA
4.20	B46	Ecologically sustainable development – details of design measures to be submitted, equivalent to Green Star Health Care 4-star rating	Steensen Varming (consultant) Energy Analysis Report dated 21/02/2018 has options regarding façade, ventilation, mechanical (design stage). Presented Design Certificate – BCA 2016 Section J from RENYi Australian Engineering Consultants certifying that the project is design with relevant Ecological Sustainable Design (ESD) standards including: Energy efficiency; external glazing and shading; artificial lighting; facility to monitor energy use, etc. Reference is made to RENYi BCA JV3 Verification Assessment Report Rev. A dated 12/7/2018.	Y
4.21	Conditions of Development Consent – During Construction			
4.22	C2, C3	Construction Hours Compliance with requirements for construction hours. Notification of any activities outside of these hours must be given to affected residents before undertaking the activities or as soon as is practical afterwards. Compliance with hours for noisy works (rock breaking, hammering, etc.)	7am – 6pm weekdays – usually end at 4pm 8am – 1pm Saturday No work on Sundays or Public Holidays. No extended hours are required for now. Planning regulations due to Covid-19 changed last week of March 2020 allowing construction work to proceed on Sundays. Works were carried out on Sunday 5/4/2020 (outside of normal hours) for façade and internal fit-out works.	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Opportunity for Improvement; NA: Not Applicable/Not Triggered

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			There was a complaint in relation to the active concrete pump at 7pm on Tuesday 7/4/2020. Has maintained same working hours. There was a notice sent to residents regarding out of hours works on 12-14 December 2020.	
4.23	B14	Construction Noise Management Contractor must incorporate all relevant noise mitigation recommendations in the letter <i>Hornsby Ku-ring-gai Hospital Stage 2 Redevelopment - Response to Planning NSW Queries</i> prepared by Acoustic Logic, dated 26 April 2018, in the detailed design drawings and submit for the approval of the Certifying Authority.	Some design elements for final building are included in Crown Certificates, e.g. generators insulation. – done. Crown Cert for Noise mitigation recommendations included in detail design drawings & sent for approval by the Cert. Authority. Noise management during construction is as per the CNVMP. Contractor follows the Plan which covers more detail than the Acoustic Logic report dated 24/6/2018. New Evidence: Not very noisy works currently taking place onsite. Continue to carry out the weekly inspections, where noise levels are monitored. Sighted Environmental Inspection Checklist dated 14/12/20 – readings conducted on Derby Rd and Palmerston Rd (61.3 DbA and 64.9 DbA).	Y
4.24	C4	All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the CNVMP required under condition B25.	Controls continue to be maintained as per Acoustic Logic Report: - Vehicles and machinery on site had flashing lights, some with squawkers (avoid use of reverse beep where possible). - Bored piles (rather than driven piles) – still in progress in Milestone 3 - Use of plywood panels Noise monitoring readings continue in place. Checked during weekly environmental inspections at the nominated monitoring points. Sighted results during inspection on the 10 February 2020, Derby Road entry (62.6dB) and Palmerston Rd (69.1dB) both within the noise limits. Inspection 24 April 2020 indicates 67.3dB at Palmerston Rd and 11/6/2020 75.3dB due to trucks coming in and out for backfilling taking the reading for 2 minutes. There are not very noisy works at the moment apart from Demo.	Y
4.25	C5	If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the Noise	This is generally in accordance with the Noise and Vibration Plan from Acoustic Logic. This is associated with checklist item 4.31.	Y

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		Policy for Industry, 5 dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise management levels.		
4.26	C6	The Contractor must ensure construction vehicles do not arrive at the Subject Site or surrounding residential precincts outside of the construction hours of work outlined under condition C2.	There is a specific area for construction vehicles to park to bring materials or load with waste. Vehicles only scheduled during working hours. Note: Sometimes workers arrive before 7am to get ready – there is a shuttle bus from 6am – 5pm taking them to the train, but this is generally is not an issue. There haven't been any issues related to trucks arriving to site outside construction hours.	Y
4.27	C7	The Contractor must schedule intra-day 'respite periods' for construction activities identified in the Interim Construction Noise Guideline	Some exceedances are expected – e.g. vibration during pouring. In these cases has communication with the hospital and/or other receivers. Respites taken during staff breaks (two breaks in the day, morning tea and lunch), but would consider others per communications with the Hospital. Currently no noise/ respite periods required – no noisy works. No noisy works currently taking place.	Y
4.28	C8	Wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles	Done, as per checklist item 4.24. Piling works to be completed – within compound, not too close to sensitive receivers and will only go 2-4 meters down.	Y
4.29	C9	The Contractor must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of audible movement alarms of a type that would minimise noise impacts on surrounding noise sensitive receivers.	Minimise use of reversing in vehicles – vehicles had squawkers. Have a regime for maintenance of equipment – records kept in hard copy in safety folder at the site office, e.g. sighted maintenance records of the Merlo Telehandler (see checklist item 4.5)	Y
4.30	C10	Any noise generated during construction of the development must not be offensive noise within the meaning of the Protection of the Environment Operations Act 1997 or exceed approved noise limits for the Subject Site	Noise monitoring devices in place, used in nominated locations. 75 – 80 dB(A) as per Noise & Vibration Management Plan, no more than 15min. Presented map with sensitive receivers and showing noise monitoring locations. Evidence of noise monitoring noted as part of environmental inspections. No exceedances as per inspections.	Y

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4.31	C11	Vibration Criteria Vibration caused by construction works to meet the established limitations.	Criteria to work to: 1mm/s. Current vibration works are: pilling	Y
4.32	C14	Waste All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014)	Sighted Waste Report as part of the monthly PCG report, e.g. waste data from Oct 2019 by Grass Hopper - 94% recycling for the month. Report for March 2020 91% recycled. Sighted EPA Licenses for: - Cleanaway Co Pty Ltd, license No. 12628 – 4 January/20 - Dial-A-Dump (EC) Pty Ltd, license No. 13426 – 2 March/20 - Kimbriki Environmental Enterprises Pty Ltd, license No. 13091 – 30 June/20 Waste managed by Grasshopper, they remove waste from site and do the classification offsite. The contractor sends monthly reports with results of recycling – e.g. sighted Waste Diversion Report for Hornsby Hospital November 2020 – Recovered 92% of waste.	Y
4.33	B17	Storage and Handling of Waste (end product) An appropriate area will be provided within the premises for the storage of garbage bins, recycling containers and all waste and recyclable material generated by the site.	Loading dock is the area being used for the waste storage and Grasshopper pick up the bins every 2 days. Waste gets segregated offsite, sighted inspection report 21/5/19 showing the process for segregation at Eastern Creek. Truck routes with EPL number sighted from Bingo, Auburn EPL No. 10935 and KLF Recycling, Asquith EPL No. 20582. Tipping and Greenstar report 17/08/2018. Acceptance letter for Genesis Landfill & recycle centre 9/3/2018. There will be waste storage facilities as per the "Modification of Development Consent" dated 8 th May 2019, where separate storage and collection of organics/food waste is no longer required, this is part of the Green Star Building.	Y
4.34	C15	The body of any vehicle or trailer used to transport waste or excavation spoil must be covered before leaving the premises to prevent any spillage or escape of any dust, waste of spoil. Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site must be removed before leaving the premises.	Trucks loads are covered coming out of a mast. Grass Hopper covers material, except steel bins. Drivers are liable if the trucks don't get covered. Truck routes with EPL number sighted from Bingo, Auburn EPL No. 10935 and KLF Recycling, Asquith EPL No. 20582. Dust suppression being used for demolition. Currently for Milestone 3 there is normal watering for dust suppression and street sweeper on the roads.	Y

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			New Evidence: Currently any vehicles access an area of the site that is clean and does not require cattle grid. All construction vehicles are required to have the load covered when they leave the site.	
4.35	C16	The Contractor must ensure that concrete waste and rinse water are not disposed of on the Subject Site and are prevented from entering any natural or artificial watercourse.	Sighted concrete washout bay during site walk.	Y
4.36	C34	Excavated Material All excavated material removed from the site must be classified by a suitably qualified person in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to disposal to an approved waste management facility.	There was no excavated material as part of the current works onsite. Asbestos material as a result of demo was removed. Sighted asbestos assessment completed by Douglas Partners 28/9/19 and Asbestos Removal Control Plan dated 25/11/19 (Issue 1) by ASP Australia. New evidence: Engaged Douglas Partners to prepare a report for all excavated material – Area 1. Senversa – Auditors, they audited the Douglas Partners report and prepared a subsequent report, which was submitted to the Certifier on 9/10 /20 (this covers Condition D12, to be reviewed in future audits).	Y
4.37	C36	Trade Waste Liquid trade waste generated on the site must be discharged in accordance with a trade waste agreement with Sydney Water and by a licensed liquid trade waste contractor.	Sighted Water Meter Report Card for control of water quality, last one done on the 17/3/2020. Water turbidity and pH were within limits. Ok to pumped out to stormwater after verification of measurements. Has not carried out any water discharges recently. Sighted the Water Meter Report Card template, which was updated to include Location as per OFI from previous audit.	Y
4.38	C21	All construction vehicles associated with the proposed development are to be contained on site, unless otherwise approved through the approval for a construction zone on the Council roadway	Approval letter from Hornsby Shire Council for the 'Work Zone' 5/6/18 – applied on 29/05/18. Ref No. F2004/09773. Vehicles load and unload within the site, the works zone is more for vehicles waiting, as necessary. There is currently no need to have vehicles outside the worksite.	Y
4.39	C22	Demolition	Demolition works (structural) started as part Milestone 3 in April 2020, demolition of building 2.	NA

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		To protect the surrounding environment, all demolition work must be carried out in accordance with "Australian Standard 2601-2001 - The Demolition of Structures" and the following requirements: - Demolition material must be disposed of to an authorised recycling and/or waste disposal site and/or in accordance with an approved waste management plan - Any asbestos to be removed by a licenced contractor - Meet signage requirements	Waste analysis and classification report by Geotesta by Delta Group 3/3/2020 No. NE596.3. Asbestos clearance inspection by EHO Consulting completed on the 6/3/2020. Certificate of analysis done by Douglas Partners 25/3/2020. Has sent notification to SafeWork NSW "Notice of intention to remove asbestos" – for 1, 2, 13 & 43, dated 12/11/20. Will commence removal works soon. This will be reviewed during next audit.	
4.40	B11, C19	Erosion and Sediment Control Soil erosion and sediment control measures must be designed in accordance with Blue Book & approved by certifying authority. Control measures to be effectively implemented and maintained for the duration of the works.	B11. TTW – civil consultants – provided a Sediment Control Plan – mostly from Blue Book – CIV-DNG-00-902 Rev. A 28/06/2018 issued for construction. Erosion and Sediment Control Plan has been reviewed 21/08/2019 and sighted the new revision issued 24/06/2020. Has periodic inspections with TTW. C19. ErSed Controls were observed during site visit, e.g. sand bags around drains and slit fence. However, Additional Erosion and Sediment controls could be added around a small stockpile resulting from a retaining wall recently built close to the site office – OFI.	OFI-01
4.41	C20	Disposal of Seepage and Stormwater Not to be pumped to the street stormwater system unless approved	Wastewater is tested. Sighted Water Meter Report Card for control of water quality, reading on 18/9/19, turbidity, pH within limits. Ok to discharge. No disposal of seepage or stormwater has been required within the last six months.	Y
4.42	C12, C13	Contamination Remediation works at the site are to be undertaken in accordance with the recommendations and findings of the Remediation Action Plan prepared by Douglas Partners and dated May 2018. C13 Should any new information come to light during construction works which has the potential to alter previous conclusions about contamination, the Certifying Authority must be immediately notified, and works must cease in the vicinity of the suspected contamination. The Certifying Authority will determine whether further investigation, or the	Demolition of Building 2 (structural) started in April 2020. Remediation works records sighted as part of the asbestos records. Sighted Remediation Action Plan 18 May 2020 (Rev.2 - amended) from Douglas Partners, to include Building 2 for the sub-floor. New evidence: For the Emergency Extension site some inground services works were conducted and took samples to review for asbestos, but all came back negative. – Sighted Envirolab Certificate of Analysis 256415 of 23/11/20 validation sampling 73224.19.	Y

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		need for remediation, is required before construction works can recommence		
4.43	C17	Handling of Asbestos The Applicant is to consult with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction	Remediation Action Plan 18 May 2020 (Rev.2) from Douglas Partners, to include Building 2 for the sub-floor. Asbestos Removal Control Plan by ASP Australia dated 25 November 2019 was sighted. ASP is the licenced removal contractor. Sighted Aconex communication of 6/12/19. Asbestos clearance inspection by EHO Consulting completed on the 6/3/2020. Certificate of analysis done by Douglas Partners 25/3/2020. New Evidence: Has sent notification to SafeWork NSW "Notice of intention to remove asbestos" – for 1, 2, 13 & 43, dated 12/11/20. Will commence removal works soon. This will be reviewed during next audit.	Y
4.44	C18	Unexpected Finds - Non-Aboriginal Heritage Procedure in place, cease works, contact OEH, assess, take action.	Not Triggered. No cultural / non-Aboriginal Heritage finds. Mentioned statues of lions, which have been saved and will be relocated.	NA
4.45	C25, C26	Hoarding/Fencing Requirements A temporary hoarding, fence or awning must be erected between the work site and adjoining lands before the works begin and must be kept in place until after the completion of the works; Other requirements: no advertising material, no graffiti. Permit for hoardings over council footways or road reserve.	Have a mixture of solid hoardings and fencing in the perimeter of the site. Condition monitored daily. No issues identified during the site walk. New fencing, in accordance with the areas recently handed over e.g. former main entry (building 1) and buildings 2, 13, 43.	Y
4.46	C33	Council Property – no building materials, waste, machinery or related matter is to be stored on the road or footpath	Site is well enclosed; no materials present on footpath as observed during site walk.	Y
4.47	C35	Storage of Flammable and Combustible Goods in banded area	Sighted Hazardous Chemicals register S08-04-10.01 with oxygen compressed from Sparten Steel expiry date 27/06/2022. Other flammable liquids were banded and diesel containers in place.	Y

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			Spill kits available on site. Note: Watpac to ensure that spills kits are accessible at all times with no obstructions around them. Lay down area on Derby road has a caged area for jerry cans and there is a spill kit available within close proximity.	
4.48	C37	Traffic Control Compliance The development must be carried out in accordance with the Construction Traffic Management Plan prepared under this consent.	Permanent traffic controllers were sighted at the site entry as per TMP. TMP prepared by RTMS (staff blue card). Will submit plans as required, e.g. Traffic control Plans have been approved for the new access on Palmerston Road. RTMS is the Traffic Management Contractor. Sighted email correspondence between RTMS and Council (10/12/19 & email trail below) regarding permit approval. Sighted Hornsby Shire Council Permit Ref. CLOSE/17/2019 of 9 December 2019. New Evidence: TMPs have been developed for access to buildings 13 and 43 - sighted. Also another showing access for Milestone 3 & Emergency Dept car park. Plans were prepared by OTMS Roads and Traffic Management Services.	Y
4.49	Emergency preparedness and response (8.2)			
4.50	8.2; B7	The Contractor has established procedures to: - identify potential emergency situations and potential accidents that can have an impact(s) on the environment - determine how it will respond to them	Have an Emergency Response Plan Rev.6 of 13/11/19 signed by the PM. Includes different scenarios of safety and environmental emergencies. Have flowcharts for: - Notifications; - Injuries; - Evacuation; - Medical emergencies; - Fire New evidence: Sighted Emergency Response Plan Rev 10 of 3/12/20 – updated with staff changes.	Y
4.51	8.2	The emergency response procedures include measures to prevent or mitigate associated adverse environmental impacts.	As above	Y

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4.52	8.2	Emergency preparedness and response procedures are periodically reviewed and revised, as necessary, in particular, after the occurrence of accidents or emergency situations. Emergency preparedness and response procedures are periodically tested, where practicable	The Emergency Plan is reviewed periodically, as the site layout changes. For Rev. 6 some roles were updated, and the Hospital St. evacuation plan was included. Has Emergency Contacts List in place. Sighted Emergency evac plans for the different areas, e.g. level 0, level 1, etc. – Dated 3/12/2020 Sighted Toolbox talk for awareness of evac plans. Sighted Fire warden training conducted by Pinnacle on 22/10/20 – e.g. for Aurelie Bolle. – Module: Operate as part of an emergency control organisation.	Y
5.0	Performance Evaluation (9.0)			
5.1	Monitoring and measurement (9.1)			
5.2	9.1	Documented procedures have been established to monitor and measure on a regular basis the key characteristics of operations that can have significant environmental impacts.	Conduct weekly Environmental Inspections – have a folder with inspections e.g. sighted environment Inspection checklist dated 10/02/2020; includes photos of controls in place during the inspection. The report was revamped and reduced to 1 page. E.g. sighted inspection for 14/12/20. Also Inspection for 25/9/2020 – checking spill kits, cleanliness, noise, etc.	Y
5.3	9.1.1	The procedures include: - the documenting of information to monitor performance - effectiveness of applicable operational controls - conformity with the organization's environmental objectives and targets	Monitoring is documented in the PEMP. Effectiveness to be assessed when preparing Performance Report for Planning. Conformity with environmental objectives and targets assessed. Monthly reports, e.g. Sighted Contractor's Monthly PCG Report for November 2020. Section 8 has summary of environmental results.	Y
5.4	9.1.1	Monitoring and measuring equipment is calibrated, maintained and stored as necessary. Records or calibration are maintained	Noise monitor self-calibrates – gets a new device each year. No vibration monitors required for this period.	Y
5.5	A11	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition	Environmental monitoring, e.g. Independent Environmental Audits (by AQUAS) – as per SSD Conditions B39, B40; Environmental inspections.	Y

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		requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, noncompliance notification and independent environmental auditing.	Last internal audit carried out by Watpac on 18/06/19 by Quality Manager, no other audits so far.	
5.6	B35, B36	Compliance Reporting A Pre-Construction Compliance Report must be prepared for the development and submitted to the Certifying Authority for approval before the commencement of construction works.	Report by Blackett and McGuire Goldsmith.	Y
5.7	B37, B38, C30	Construction Compliance Reports must be submitted to the Department at compliance@planning.nsw.gov.au for information every six months from the date of commencement of construction, for the duration of construction. The Construction Compliance Reports must provide details on the compliance performance of the development for the preceding six months and must be submitted within one month following the end of each six-month period for the duration of construction of the development, or such other timeframe as required by the Secretary. The Construction Compliance Reports must include: i. a results summary and analysis of environmental monitoring; ii. the number of any complaints received, including a summary of main areas of complaint, action taken, response given and proposed strategies for reducing the recurrence of such complaints; iii. details of any review of the CEMP and the Environmental Management Strategy and associated sub-plans as a result of construction carried out during the reporting period; iv. a register of any modifications undertaken and their status; v. results of any independent environmental audits and details of any actions taken in response to the recommendations of an audit; vi. a summary of all incidents notified in accordance with this consent; and vii. any other matter relating to compliance with the terms of this consent or requested by the Secretary.	Construction Compliance Report dated 1/02/2020 for August 2019 to February 2020 period has been submitted to the DPIE on 7/4/2020, sighted email dated 7/4/2020. Report was sent just few days outside of the timeframe requirement. Report includes: - Compliance status summary in section 4; - Complaints in section 8 – Appendix B; - Environmental Monitoring in section 3; - Authorities (SSD Approvals and Crown certificate) in section 2.5.1; - Non-compliances from independent environmental audits in section 5 and previous report actions in section 6; - Incidents section 7; - Appendices Sighted the Construction Compliance Report dated 17 September 2020, submitted to HI for submission to DPIE. Sighted email from Rachel Mitchell on 22/09/20 confirming that the Construction Compliance Report has been submitted to Planning. The email has attached form showing details of the submission to the Planning Portal.	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Opportunity for Improvement; NA: Not Applicable/Not Triggered

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
5.8	B39, B40, B41	Independent Environmental Audit No later than a month before the commencement of construction works or as agreed with the Secretary, a program of independent environmental audits must be prepared for the development in accordance with the latest version of ASINZS ISO 19011-2014: Guidelines for Auditing Management Systems (Standards Australia, 2014) and submitted to the Secretary for information. The scope of each audit must be defined in the program. The program must ensure that environmental performance of the development in relation to each compliance requirement that forms the audit scope is assessed at least once in each audit cycle. The environmental audit program prepared and submitted to the Secretary must be implemented and complied with for the duration of the development. > All independent environmental audits of the development must be conducted by a suitably qualified, experienced and independent team of experts and be documented in an audit report which: - assesses the environmental performance of the development, and its effects on the surrounding environment including the community; - assesses whether the development is complying with the terms of this consent; - reviews the adequacy of any document required under this consent; and - recommends measures or actions to improve the environmental performance of the development, and improvements to any document required under this consent. > Within three months of commencing an Independent Environmental Audit, or as agreed with the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The	Environmental Audits conducted by AQUAS in September 2018, January, June and December 2019, as per the Audit Program submitted to the client. Presented confirmation of receipt of the August 2019 to February 2020 Construction Compliance Report by DPIE on the 7/4/2020, which included submission of the December 2020 Audit Report. Notification was sent to HI on 12/2/2020 with a copy of the audit report for Dec 2019. Environmental audits conducted by AQUAS, last one done in June 2020. Audit report for the June 2020 audit was submitted with the latest Compliance Report on 17 September 2020.	Y

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		recommendations must be implemented to the satisfaction of the Secretary		
5.9	C27	At least 48 hours before commencement of construction until the completion of all works under this consent, or such other time as agreed by the Secretary, the Applicant must: - make the following information and documents (as they are prepared, obtained or approved) publicly available on its website: - the documents referred to in condition A2 of this consent; - all current statutory approvals for the development; - all approved strategies, plans and programs required under the conditions of this consent; - regular reporting on the environmental performance of the development in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent; - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; - a summary of the current stage and progress of the development; - contact details to enquire about the development or to make a complaint; - a complaints register, updated monthly; - audit reports prepared as part of any independent environmental audit of the development and the Applicant's response to the recommendations in any audit report; - any other matter required by the Secretary; and - keep such information up to date, to the satisfaction of the Secretary. Note: This condition does not require any confidential information to be made available to the public.	Information has been published to Infrastructure and NSLHD webpages. HI website includes a copy of the Compliance report for Feb 2020; However, no monitoring results/records have been published. Opportunity for Improvement from previous audit is not yet closed. Sighted in HI website for the HKH2 project – the noise and water monitoring results are now published. However, other information required is now not included, e.g. the CEMP and other sub-plans, the Complaints Register, Audit report for Independent Audit 5, and other – OFI.	OFI-02

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
5.10	Internal Audit (9.2)			
5.11	9.2	The Contractor has ensured that internal audits of the EMS are conducted at planned intervals to determine: a. whether it conforms to planned arrangements for environmental management including the requirements of the Standard b. whether it has been properly implemented and is maintained	An internal audit was carried out by Watpac H.O. on 18/06/19. No further internal audits, but maintains weekly WHSE Inspections. Will have a Quality audit Wednesday in late December 2020.	Y
5.12	Management Review (9.3)			
5.13	9.3	Top management reviews the EMS at planned intervals to ensure its continuing suitability, adequacy and effectiveness. Reviews include assessing opportunities for improvement and the need for changes to the EMS, including the environmental policy and environmental objectives and targets.	Happens at a Head Office level. Evidence not available onsite	NA
6.0	Improvement (10.0)			
6.1	Nonconformity, corrective and preventive action (10.2)			
6.2	10.2	Procedures are in place for: a. identifying and correcting nonconformities and taking actions to mitigate their environmental impacts b. investigating nonconformities, determining their causes and taking actions in order to avoid their recurrence c. evaluating the need for actions to prevent nonconformities or avoid their occurrence d. recording the results of corrective and preventive actions taken e. reviewing the effectiveness of corrective and preventive actions	Sighted Non-Conformance Register N206-FRM-003 Rev.01 (last one printed in May 2020). Register has actions for quality, safety environmental issues e.g. item WTPC-NCR-000023 refers to sedimentation controls requiring rectification, dated 8/7/19. Action closed out. Last Non-conformance was raised on the 6/6/2020. NCs 11 and 12 have been closed. Has the same non-conformance register. Latest was raised on 25/11/2020, however that was not environmental related.	Y
6.3	10.2	Any necessary changes arising from corrective and preventive actions are reflected in the EMS documentation.	None triggered by environmental NCRs. Reviews would be made as required.	NA

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Opportunity for Improvement; NA: Not Applicable/Not Triggered

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
6.4	A12 A13 A14	The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifying Authority must also notify the Department within seven days after they identify any non-compliance. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Not Triggered. No non-compliances identified so far that need to be notified.	NA
6.6	Complaints Management			
6.7	B30	Complaints and enquiries procedure The following must be made available for community enquiries and complaints for the duration of construction: a) a toll-free 24-hour number for complaints and enquiries about the works; b) a postal address to which written complaints and enquires may be sent; and c) an email address to which electronic complaints and enquiries may be transmitted.	Have a Complaints Register. 24-hour number and email address available in signage at worksite entrance.	Y
6.8	B31	A Complaints Management System must be implemented, including a Complaints Register to be maintained recording information about all complaints associated with the project, e.g. d) number of complaints received; e) number of people affected in relation to a complaint; f) nature of the complaint and means by which the complaint was addressed and whether resolution was reached, with or without mediation.	Sighted Complaints Register – Status date 21/11/20, 6 new complaints recorded since the last audit, e.g. 15/07/20 regarding noise, smoking, waste, another one on 22/07 regarding rubbish.	Y
6.9	Incident Management			

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Opportunity for Improvement; NA: Not Applicable/Not Triggered

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
6.10	A23, C28	The Department must be notified in writing to compliance@planning.nsw.gov.au within 24 hours after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.	Not Triggered. No notifiable environmental incidents have been reported.	NA
6.11	A24	a) A written incident notification must also be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant forms the view that an incident has not occurred. b) Written notification of an incident must: i) identify the development and application number; ii) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); iii) identify how the incident was detected; iv) identify when the Applicant became aware of the incident; v) identify any actual or potential non-compliance with conditions of consent; vi) describe what immediate steps were taken in relation to the incident; vii) identify further action(s) that will be taken in relation to the incident; and viii) identify a project contact for further communication regarding the incident.	As above.	NA
6.12	C29	Within seven days of the detection of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested in accordance with condition A 19.	As above.	

Appendix D – AQUAS Environmental Audit No. 5 dated 10 July 2020



Hornsby Ku-Ring-Gai Hospital Redevelopment Stage 2 Environmental Audit No. 5



Assessment of Watpac's Environmental Management System Compliance Against ISO14001: 2015 and Project Conditions of Consent

Audit Reference:	AQ1236.05
Audit Organisation:	Watpac Pty Ltd
Auditor:	Ana Maria Munoz, AQUAS
Date of Audit:	23 June 2020
Draft Report Submitted:	8 July 2020
Final Report Submitted:	10 July 2020

Amendment, Distribution & Authorisation Record

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This report has been prepared and reviewed in accordance with our Quality control system.

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Date: [9/7/2020](#)

This report has been reviewed by:

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Environmental Auditor

Date: [10/7/2020](#)

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AQUAS Pty Ltd
www.aquas.com.au

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1. Executive Summary

This audit was conducted to review the implementation of Watpac's Environmental Management System against the requirements of the AS/NZS ISO 14001: 2015 Standard and the requirements of the Project Development Consent SSD 8647. The audit was conducted by AQUAS on 23 June 2020.

This report details the findings of the fifth Environmental audit of the construction works undertaken by Watpac for the Hornsby Ku-Ring-Gai Hospital Redevelopment Stage 2. Construction activities since the previous Environmental audit included:

Milestone 2:

- Completed helipad concrete structure works;
- Completed scaffold removal on North East elevation;
- Completed Stair 4 structural steel and installation in progress;
- Progressing with completion of second lift (A2) which will be utilised for social distancing requirements;
- Substation fit out works complete, currently with Ausgrid to commission;
- Internal works such as painting and service installations progressing on the Intensive Care Units;
- Stripping of level 5, level 4 and level 3.

Milestone 3:

- Building 2 structural demolition was completed as well as remediation works;
- The Emergency Department extension works included: earth works, and ground slab poured; and
- Piling works are progressing and in-ground services trenching is to be completed.

Watpac as the nominated Principal Contractor for the project has the responsibility for the management of environmental aspects associated with the construction works.

The audit confirmed that Watpac continues to address the requirements of the Conditions of Consent and implement the required environmental controls for current site activities. Compliance with the obligations was demonstrated through the maintenance of the required environmental documentation and records including Crown Certificates, inspection reports, registers, correspondence, etc. Environmental documentation was available, including the Project Environmental Management Plan (Nov 2019), Noise and Vibration, Erosion and Sedimentation, Waste, Traffic Management Plans, Asbestos Removal Control Plan and other sub-Plans. There was evidence of inductions and regular toolbox talks to maintain environmental awareness of all workers at the site.

The implementation of environmental controls included suitable erosion and sedimentation measures within the construction area, site signage, noise and vibration monitoring, skip bins for waste and recycling in various locations, traffic controls, compliance with working hours and ongoing site monitoring.

Communications continue to be in place with the Hospital, relevant stakeholders and the community, as required. Watpac has submitted the latest Construction Compliance Report to the Department of Planning on the 17 February 2020.

No environmental incidents have occurred so far, and no non-conformances have been raised.

Three (3) opportunities for improvement were raised during the audit. The details of the audit process and findings are detailed in the following sections of this report.

2. Audit Scope and Objectives

2.1 Objective and scope of this Audit

This audit was conducted to confirm compliance of the Watpac Project Environmental Management Plan and its implementation against the requirements of the Standard AS/NZS ISO 14001:2015 and applicable requirements of the Development Consent SSD 8647 for the Hornsby Ku-Ring-Gai Hospital Stage 2 Redevelopment Project.

2.2 Scope of Audit

The audit reviewed Watpac's implementation of their Environmental Management System for the construction activities currently taking place as part of the Hospital Stage 2 redevelopment project.

2.3 Date and Location of Audit

The audit was conducted on 23 June 2020 at the Hornsby Ku-Ring-Gai Hospital Stage 2 site – Palmerston Rd, Hornsby NSW 2077.

3. Audit Methodology

3.1 Opening Meeting

An opening meeting was held with personnel from APP Corporation, Watpac and AQUAS as per the Audit Attendance Sheet (see **Appendix A**) on 23 June 2020 at 8:30am.

Key items were discussed as follows:

- Confirmation of the purpose and scope of the audit.
- Overview of the Project and current status of the works.
- Occurrence of Environmental incidents.
- Overview of the audit process in accordance with the proposed Audit Program.

3.2 Audit Process

The audit commenced with a site walk where status of construction works and relevant environmental controls in place were observed. The site walk was followed by review of records and general discussions with Watpac staff for verification of the Environmental Management System implementation on the project.

Name and position of persons interviewed:

Name	Organisation	Position
Mark Cahalin	Watpac	Project Manager
Helena Veljovic	Watpac	Building Cadet / PEO
Yianni Venetis	APP	Project Manager

Details of the outcomes of the review can be found in the completed Audit Checklist (see **Appendix B**).

3.3 Audit Criteria

The following audit criteria/ratings were used for the rating of audit findings.

Audit Findings Rating	
N-Major	– Major Non-Conformance
N-Minor	– Minor Non-Conformance
OFI	– Opportunity for Improvement
NA	– Not Triggered/Not Applicable

3.4 Closing Meeting

The closing meeting was held on 23 June 2020 at 2:00pm with representatives of APP Corporation, Watpac and AQUAS. General feedback and the findings of the audit were discussed during the closing meeting.

AQUAS auditors acknowledged the cooperation, openness and hospitality of Watpac staff during the conduct of this audit.

4. Audit Findings

4.1 Audit Overview

The audit determined that Watpac has well implemented controls for environmental management within the construction activities currently being undertaken. Three opportunities for improvement (OFI) were raised during this audit. The following is an overview of key Environmental areas reviewed in this audit:

4.1.1 Environmental Policy

- o The HSEQ Policy is in place (last reviewed on 8 November 2019), has been communicated to all personnel and is available on the Watkins internal website and Watpac website.
- o The Project Environmental Management Plan (PEMP) – December 2019 (Rev.6) has been implemented to minimise and control any harm to the environment. Plan outlines environmental objectives and targets which are been monitored and achieved through inspections and audits.

4.1.2 Leadership, Planning and Resources

- o The organisational chart was reviewed on 11 October 2019 - Revision 11; however it was noted that the Project Management Plan (Revision 3) refers to an old version of the chart (January 2019 – Revision 5). Watpac to update the PMP with latest version of the chart. **OFI-01.**
- o Responsibilities for the Construction/Operations Manager and Quality and Environment Manager have been defined in the PEMP section 3.2.
- o A number of trades are working on different project activities, e.g. concreting, internal services, earth works, waste removal, traffic controlling, etc.
- o The PEMP contains detailed information of the relevant environmental aspects, impacts and controls. It was noted that the environmental risk assessment is still at the first revision (12 March 2017) and it gets reviewed at every milestone of the project. No changes have been made as it is still relevant to the project at the time of the audit.
- o A legal requirements register continues to be in place, the aspects identified in the PEMP have a section where legal requirements are referenced. No major changes have been identified.
- o Modification 3 (MOD 3) was approved by the Department on the 6 April 2020 regarding the establishment and use of a helipad structure.

4.1.3 Support

- o Project site inductions continue to be delivered to Watpac staff and subcontractors. Induction contains awareness of environmental measures to be considered during construction.
- o Toolbox Talks and pre-starts continue to be conducted to maintain ongoing awareness of safety and environmental matters onsite. Due to Covid-19, the frequency of toolbox talks has been changed and it is now carried out periodically in the Darug Meeting room.
- o Internal and external communications continue to be managed through emails, subcontractor and client meetings, Aconex transmittals, etc. Community communications, e.g. letterbox drops delivered to neighbours for extended working hours.
- o The PEMP was reviewed during December 2019 (Rev.6) and a copy of the Plan was sent to DPIE on the 7 April 2020 along with the Construction Compliance Report completed on the 17 February 2020. The proponent (APP/ HI) needs to ensure that after a revision is made to the PEMP, a copy is submitted to DPIE within six weeks of the review. [OFI-02](#).
- o Relevant environmental records are maintained in different ways, e.g. hard copies in folders, stored in the Aconex System, Watkins and 3D safety App and/or filed in the office shared drive.

4.1.4 Operation

- o Maintenance of plant and equipment used onsite continue to be controlled through the mobile 3D safety App. Service. Sighted evidence of logbook check completed for the EWP on the 23 June 2020.
- o Site signage was in place with all the project required information.
- o Emergency Response Procedures were updated by the LHD with regards to the Medical Gas Supply after replacement of the bulk oxygen tank. Sighted correspondence 26 June 2019.
- o A new dilapidation report by Cardno for the new access road (council access) was completed on the 24 January 2020.
- o Substation fit out works were completed and currently with Ausgrid to commission.
- o Trees have been protected on Palmerston Road.
- o Noise monitoring readings continue to be undertaken as part of weekly inspection.
- o Waste data was sighted for April 2020 by Grass Hopper. In total 94.38% recycling was achieved for the month (target is above 80%).
- o Bins and containers for different waste types were available throughout the site.
- o Water has been tested and discharged to stormwater after verification of measurements. Sighted Water Meter Report Card on the 17 March 2020 for control of water quality, turbidity and pH within limits. It was suggested that the Water Meter Report Card includes the location where the water is being taken from. [OFI-03](#).
- o Demolition (structural) works started as part Milestone 3 in April 2020, demolition of Building 2 was completed. Dust suppression was used during the demolition works.
- o Asbestos air monitoring was done by EHO Consulting during the demolition, sighted records for the 20 April 2020 and 15 May 2020.
- o Erosion and sedimentation controls were in place around the site, including sandbags around drains and silt fencing.
- o The perimeter of the project site is fenced and is monitored for graffiti and advertising material.
- o Chemical storage and diesel containers were in place and flammable liquids were banded.
- o Spill kits were available in the site as well as First Aid Kits. Watpac to ensure that spill kits are accessible at all times with no obstructions around them - [Note](#).
- o Levels of communication with the Hospital in the event of an emergency continue in place.

4.1.5 Performance Evaluation

- o Environmental inspections are conducted by the contractor weekly. Inspection reports were available including photos of controls in place during each inspection. Sighted inspection

- conducted on the 10 February 2020 and 24 April 2020.
- o Noise monitor equipment was purchased on the 10 October 2019.
- o Vibration monitoring was carried out directly by Acoustic Logic.
- o Dust continue being monitored onsite. Sighted report from Prensa re. silica and respirable dust assessment on the 16 September 2019. Attached to the report there is the calibration certificates for the air-met scientific equipment – TSI Dusttrak 29 July 2019.
- o The Construction Compliance Report was prepared on the 17 February 2020 and submitted to the DPIE 7 April 2020. A letter was sighted from DPIE dated 2 June 2020 indicating the report was generally satisfactory to the Consent Conditions.
- o The project information required under Condition C27 a) iv) has been published in the NSLHD and Health Infrastructure websites. Regular reporting on environmental performance and monitoring results is still pending to be done - **Note**.

4.1.6 Improvement

- o The Non-conformance Register continue to be in place, corrective actions for quality, safety and environmental issues have been raised and actioned, as necessary.
- o No environmental incidents or non-compliances have been identified so far in the project.
- o A Project Complaint Register continue been maintained and details about complaints has been recorded including resolution reached. From January to June 2020, there have been 4 complaints raised and all of them have been properly addressed and closed out.
- o The 24-hour enquiries number and email address continue to be available for the community.

4.2 Previous Audit (December 2019) Recommendations

Audit findings were reviewed in detail with Watpac and AQUAS confirmed that responses and actions were appropriate to close out the one of the opportunities for improvement raised during the audit conducted on the 10 December 2019, as detailed below.

Finding No.	SSD Ref. No.	Finding	Comment/ Recommendation	Watpac Actions
OFI-01	SSD Cl. C23	Construction site signage does not include the authorised hours of work as per the requirement of Condition C23 (iii).	Consider including the authorised hours of work in the site signage.	Project signs are in place on site and include project information. Two different new signs were posted in December 2019, which included the construction hours of work. Closed
OFI-02	SSD Cl. C27	Not all the project information required under Condition C27 a) iv) has been published in the HI website. The audit noted that condition C27 a) iv) regular reporting on environmental performance and monitoring results is missing.	Consider including the records of noise monitoring and water testing in the HI project website.	Water Discharge Reports from 13/1/2020 and 18/09/2019 were presented. Noise monitoring results are part of the Environmental Inspections, sighted 10/2/2020. Project team is working towards creating a register and publishing the results in the website. In progress

4.3 Identified Findings

The table below outlines the findings raised during the audit:

Finding No.	Ref.	Finding	Comment/ Recommendation
OFI-01	ISO 14001 Section 7.1	<u>Resources, Roles and Responsibilities</u> The Contractor has identified and provided the resources required to implement the EMS for the project.	Project Organisational Chart showing resources in place was updated on the 11 of October 2019. It was noted that The Project Management Plan (PMP) has an old version of the Project Organisational Chart (January 2019 - Revision 5). Watpac to update the PMP with latest version of the Organisation Chart.
OFI-02	SSD Cl. A15	<u>Revision of Strategies Plans and Programs</u> Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.	The Project Environmental Management Plan (PEMP) was reviewed during December 2019 (Rev.6) and a copy was sent to the DPIE in 7 April 2020 (about 15 weeks after the review). Proponent needs to ensure that every time the PEMP is reviewed a copy is submitted to the DPIE within six weeks of the review.
OFI-03	SSD Cl. C36	<u>Trade Waste</u> Liquid trade waste generated on the site must be discharged in accordance with a trade waste agreement with Sydney Water and by a licensed liquid trade waste contractor.	A Water Meter Report Card for control of water quality was completed on the 17 March 2020. The water turbidity and pH were within limits and it was ok to discharge out to the stormwater. It was suggested that the Water Meter Report Card includes the location where the water was taken from.

5. Conclusion

This audit was completed to assess the environmental controls established by Watpac against the requirements of the Development Consent for the project. The audit confirmed that Watpac has implemented its Environmental Management System to a satisfactory level, with three opportunities for improvement identified as part of the review.

One of the previous audit opportunity for improvement regarding the reporting of environmental performance and monitoring results in the project website still in progress and will be followed-up in the next environmental audit.

The following table summarises this audit findings by rating category:

Findings Rating	Findings
Major Non-Conformance	0
Minor Non-Conformance	0
Opportunity for Improvement	3

It is suggested Watpac takes the feedback from this audit as an opportunity to make improvements in Environmental performance during the progress of the Project.

Appendix A. [Audit Attendance Sheet]

AUDIT ATTENDANCE SHEET 

PROJECT: Hornsby Hospital AUDIT No.: AQUAS AQ.1236.05

AUDITEE: Watpac LEAD AUDITOR: Ana Munoz

MEETING LOCATION: Project site office - Palmerston Rd.

OPENING MEETING DATE AND TIME: 23/06/20 8:30am

CLOSING MEETING DATE AND TIME: 23/06/20 2:00pm

NAME	ORGANISATION	POSITION	SIGNATURE	
			OPENING MEETING	CLOSING MEETING
Ana Munoz	AQUAS	Environmental Auditor	<i>[Signature]</i>	<i>[Signature]</i>
BRAD EMBURY	APP	P.M	<i>[Signature]</i>	-
Mark Canavan	WATPAC	P.M	<i>[Signature]</i>	-
Yianni Venetis	APP	P.M	<i>[Signature]</i>	<i>[Signature]</i>
Helena Veyounc	Watpac	ccdet / PEO	<i>[Signature]</i>	<i>[Signature]</i>
Auvelie Bolle	WATPAC	S.P.E	<i>[Signature]</i>	<i>[Signature]</i>

Date: 04.06.14 F-02 Audit Attendance Sheet Rev.1 Page: 1 of 1
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Appendix B. [Audit Checklist]

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
1.0	Environmental Policy (5.2)			
1.1	5.2	The Contractor has an Environmental policy authorised by top management and is communicated to all persons working for or on behalf of the organisation and available to the public	HSEQ Policy reviewed – dated 8/11/19, signed by new CEO. Policy is displayed site office close to the induction room. Available in the Watkins internal website, the Watpac webpage and site office.	Y
1.2	Environmental Objectives and planning to achieve them (6.2)			
1.3	6.2.1	The Contractor has documented and measurable environmental objectives and targets for the project. Objectives and targets are communicated	PEMP section 2.0 and 2.3 - KPIs for each of the aspects. Objectives are communicated through the use of the PEMP. Sighted weekly environment inspection checklists dated 10/2/20, 23/02/2020, 22/06/2020 and 11/6/2020 where some targets are measured.	Y
1.4	6.2.2	The Contractor has established, implemented and maintained a plan(s) for achieving its objectives and targets	Done through PCG Monthly Reports sighted May 2020 report. Waste data from April 2020 by Grass Hopper 94.38% recycling for the month (Target is above 80%).	Y
2.0	Leadership (5.0), Planning (6.0) and Resources (7.1)			
2.1	Resources, roles, responsibility and authority (5.3)			
2.2	7.1	The Contractor has identified and provided the resources required to implement the EMS for the project, including: - human resources and specialised skills – Org Chart - technology & financial resources	Project Organisational Chart showing resources in place was updated on the 11 of October 2019. It was noted that The Project Management Plan (PMP) has an old version of the Project Organisational Chart (January 2019 - Revision 5). OFI: Watpac to update the PMP with latest version of the Organisation Chart.	OFI-01
2.3	5.3	Roles, responsibility and authority have been defined, documented and communicated in order to facilitate environmental management.	Position descriptions available for each employee. PEMP Section 3.2.1 outlines environmental responsibilities for key roles, e.g. - Construction/Operations Manager - Quality and Environmental Manager - Project Manager - Project Environmental Coordinator - Independent verification staff - Site Manager - Foreman	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Observation for Improvement

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
			- Contract Administrator - Direct labour - Subcontractors and suppliers.	
2.4	-	A management representative(s) has been appointed by the Contractor and has defined roles, responsibilities and the authority for: a) ensuring the EMS is established, implemented and maintained in accordance with the Standard b) reporting to top management on EMS performance for review, including recommendations for improvement	Project Manager / QSE Manager assisted by Project Cadet as required.	Y
2.5	Environmental aspects (6.1.2)			
2.6	6.1.2	The Contractor has identified the environmental aspects of its activities, products and services – and those with significant environmental impacts. This has considered planned or new developments, or new or modified activities, products and services.	Aspects outlined in PEMP Section 5.2 and 5.3 lists the most relevant aspects and controls. Environmental Risk Assessment C-FRM-018 in place. It analyses all possible risks, some standard for all projects, some specific, last reviewed on the date 12/03/2017 (version 1 - Appendix 6.2).	Y
2.7	6.1.2	The Contractor has documented this information and kept it up to date – Aspects/Impacts Register	Documented in section 5.3. Environmental Risk Assessment (PEMP Appendix 6.2) dated 12/3/17 – contains generic aspects/impacts. That is still at the first revision and will be reviewed at every milestone of the project. No changes have been made as it is still relevant to the project at this time.	Y
2.8	Compliance Obligations (6.1.3)			
2.9	6.1.3 9.1.2	The Contractor has identified all legal and other requirements relevant to its environmental aspects and how they apply to the project. There is a procedure for periodically evaluating compliance and records are maintained?	Legal Requirements Register in place (Appendix 6.6) includes the general requirements for project - not specific; also, section 5, under each of the listed aspects has as legal reference. Last change to the SSD Conditions was MOD 3 regarding the Helipad fit-out dated 6/4/2020. This was communicated to Watpac via Aconex 7/4/2020. Compliance is documented within the Construction Compliance Report (last one 17/02/2020) and weekly environmental inspections. Changes are made in the PEMP when required.	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Observation for Improvement

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
2.10	A1	All reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimize, any material harm to the environment than may result from the construction and operation of the development.	There was no material harm reported to date. The site activities during this audit were scaffolding, framing, internal works and demolition of building 2. Sighted records for environmental inspection on 10/2/20, 23/02/2020, 22/06/2020 and 11/6/2020. No observations were raised during the site inspection.	Y
2.11	A2	The development may only be carried out: a) in compliance with the conditions of this consent; b) in accordance with all written directions of the Secretary; c) generally, in accordance with the EIS as amended by the RtS and RtS Addendum; d) generally, in accordance with HHR Stage 2 Statement of Environmental Effects Section 4.55(1A) Modification to Incorporate Extensions of the Vertical Circulation Structures and Roof Form to Accommodate a Future Helipad; e) generally, in accordance with HHR Stage 2 Statement of Environmental Effects Section 4.55(1A) Modification for the establishment and use of Helipad structure; and f) in accordance with the approved plans.	The development has been carried out in accordance with all written directions of the Department and the approved plans. Sighted MOD 3 Helipad Fit-out approved by the Department 6 April 2020. Approved plans (latest version as per MOD 3) have been posted in the Department of Planning website.	Y
2.12	A9, A10	Applicability of Guidelines – If directed by the Planning Secretary, the Contractor has ensured compliance with updated or revised versions of applicable guidelines, protocols, Standards or policies referenced in the Conditions of Consent (otherwise compliance is required with any referenced guidelines, protocols, Standards or policies in the form they are in as at the date of this consent).	Not Triggered. Note: Watpac consulted about compliance with newer requirements regarding cladding and were not required. Noted that the BCA Code 2016 has been updated, but project works to that one. Also noted amendment to SSD Conditions for inclusion of the helipad MOD 3.	NA
2.13	A8	Structural Adequacy – All new buildings and structures, and any alterations or additions that are part of the development, must be constructed in accordance with the relevant requirements of the BCA.	Crown Certificates CC1 - 12/07/2018 and CC2 - 11/10/2018. Crown Certificates received covers 30/4/19 for remaining works (CC3), including extension of Emergency Dept, front of house and others. * * * Crown Certificate CC4 No. CRO-18155 dated 25/09/2019 for Helipad structural works. Includes: architectural design, lift design	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Observation for Improvement

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
			certificate, compliance statement, piling design statement and structural design statement.	
2.14	B9	The Contractor has ensured works are designed and constructed to provide access and facilities for people with a disability in accordance with the BCA. The Certifying Authority must ensure that evidence of compliance with this condition from an appropriately qualified person is provided and that the requirements are referenced on any certified plans.	iAccess consultants provided a report 25 September 2017 with all the provisions for DDA requirements. This forms part of submission to the certifying authority (Blackett Maguire) for certification. Crown Certificate 3 references the iAccess Report dated 25 February 2019 with design changes incorporated.	Y
2.15	B13	Structural Drawings Prior to commencement of works, the Applicant must submit for approval of the Certifying Authority structural drawings prepared and signed by a suitably qualified practising Structural Engineer that demonstrates compliance with: a) the relevant clauses of the BCA; and b) this development consent.	BCA Crown Certificate references the SSD 12/07/2018 Blackett Maguire and Goldsmith – drawings and other docs received (e.g. certifications) BCA Crown Certificate 2 of 11/10/2018 – sighted certificate with drawings and structural adequacy. Crown Certificate 3 of 30/4/19 includes any remaining drawings.	Y
2.16	B15	All mechanical ventilation systems must be installed in accordance with Part F4.5 of the BCA and must comply with the AS 1668.2-2012. Details must be submitted for approval of the Certifying Authority prior to commencement of the relevant works.	This is a permanent design item, done to BCA and relevant Australian Standards. - Item 19 of Crown Certificate - Item 7 of Crown Certificate Dewpoint Report of 6/2/2019 has references to SSD conditions B15, B16 and others (part of Crown Cert. 3).	Y
2.17	B16	The installation, operation and maintenance of warm water systems and water-cooling systems must comply with the Public Health Act 2010, Public Health Reg. 2012 and Pts 1 and 2 (or Pt 3 if a Performance-based water-cooling system) of AS/NZS 3666.2:2011 Air handling and water systems of buildings - Microbial control - Operation and maintenance and the NSW Health Code of Practice for the Control of Legionnaires' Disease.	Dewpoint Group is the mechanical contractor. Sighted Certificate of Design Mechanical dated 6/2/2019 and revised on 22/3/2019. Cooling Towers have been put in place in March 2020 but have not been connected yet. Work in progress.	Y
2.18	A21	For work costing \$25,000 or more, a Long Service Levy must be paid.	Long Service Levy has been paid – Receipt No. 00399139 of 2 October 2019.	Y
2.19	C24	To protect the safety of work personnel and the public, the Subject Site must be adequately secured to prevent access	Site was secured, locked-up at the end of the day, for the construction site there is a security guard during the day, then at	Y

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		by unauthorised personnel, and work must be conducted at all times in accordance with relevant Work Cover requirements.	night the hospital has security guards. Wayfinding signage was clear. Carry out WHS walks, e.g. sighted Construction Work Site Checklist APP/HI/Watpac 15/6/2020 (weekly) and items that need to be rectified are documented in safety issues register. Sent via Aconex and any issues raised followed up (Aconex response by Watpac).	
3.0	Support (7.0)			
3.1	Competency, training and awareness (7.2, 7.3)			
3.2	7.2	The Contractor has ensured that employees and subcontractors are competent on the basis of appropriate education, training or experience. Relevant training and competency records have been retained.	HR recruitment process managed by head office. - Subcontractors competencies managed tendering process – selection of qualified personnel – questionnaire to be completed. - Workers go through a Watpac online induction (general) and then there is a site-specific induction.	Y
3.3	7.3	The Contractor has established a procedure to provide awareness to employees and subcontractors on: a) the importance of conformity with the environmental policy, procedures and requirements of the EMS b) the significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits of improved personal performance, c) their roles and responsibilities in achieving conformity with the EMS d) the potential consequences of not following the relevant procedures.	All staff go through project induction. This includes working hours, hazardous substances, emergencies, lighting, and other specific environmental elements. Sighted induction form including Environment section. Sighted example of induction #1560 dated 10/12/19 and re-induction for quick plumbing dated 19/7/2019. Have some subcontractors providing training in other language e.g. partition and façade contractor delivered training in Chinese. Toolbox talks are conducted every Monday (whole site) and daily pre-start (3D safety app).	Y
3.4	C31	The Contractor must ensure that all of its employees, contractors (and their subcontractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Apart from inductions and Toolbox Talks, Watpac provides to subcontractors the SSD conditions and the requirement to comply with all applicable project requirements. Changes to the SSD conditions were communicated to subcontractors, e.g. Aconex Ref. WTPC-RFI-002418 Variation (Mail No. WTPC-VDRCT-000254) of 15/11/19 to Westform Formwork regarding changes due to the new helipad.	Y

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			Toolbox talks continue being undertaken (due to covid-19 they are carried out periodically), sighted example on 8/5/2020 presented Discussed scaffold stripping and exclusion zones. Also sighted 9/9/19 toolbox talk re. rubbish being left on the road.	
3.5	Communication (7.4)			
3.6	7.4.2	Procedures are in place for ensuring internal communication with regard to the environmental aspects and the EMS	- Communications about updated forms and other system updates from Head Office are received via email. - Fortnightly team meetings continue in place, sighted for 3/6/2020: environmental item re. smoking around the site and the hospital. - Weekly subcontractor meetings: sighted minutes for 13/6/2020, 11/6/2020 discussion on street sweeper and keeping the site clean and tidy.	Y
3.7	7.4.3	Procedures are in place for communications with external parties, e.g. a) EPA, Council, Hospital, others b) Community engagement – provision of information, sensitive receivers, follow up	Contractors meeting – every 2 weeks APP, HI and Watpac, go through design, HSE, program, construction. Weekly DW Meeting to discuss any disruptive works. E.g. DW No. 144 dated 12/6/2020 for disruptive works due to hydrant pump being delivery on the 24/6/2020. Sighted Disruptive works notices register 18/6/2020. HI mostly deals with communications to Planning e.g. sent the Compliance Report for Feb 2020. With Council – No recent communications; there will be one for the traffic management (TCP) for when the tower crane will come down – 24-27 of July 2020 from 5pm-7.30pm. Community – nothing can be sent without APP/HI and Planning approval e.g. out of hours works. HI liaises with community.	Y
3.8	A7	Evidence of Consultation – Where conditions of this consent require consultation with an identified party, the Applicant must: a) consult with the relevant party prior to submitting the subject document for approval; and b) provide details of the consultation undertaken, including:	There have been letter box drops delivered to neighbours, e.g. 20/5/19 – extended hours for concrete pour. These have to be approved by HI. No recent ones. Has approval from Council for parking vehicles when required – paid a fee for that.	Y

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		i) a description of how matters raised by those consulted have been resolved to the satisfaction of both the Applicant and the party consulted; and ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.		
3.9	B1	Notice of commencement of works If the construction or operation of the development is to be staged, the Contractor has notified the Department, Certifying Authority and Council, of the date of commencement and the development to be carried out in that stage. This is to be done in writing and at least 48 hours before commencement of each stage	Sighted letter of 28 th June – 'Notification of Commencement' A letter was dropped to neighbours for info +/- 130 residents. Next stage will be part of a different approval.	Y
3.10	Documentation (7.5)			
3.11	7.5	The Contractor has procedures for control of documents and records, which includes: - approval of documents for adequacy prior to issue - review and update and re-approval - ensuring that changes and the current revision status of documents are identified - ensuring that relevant versions of applicable documents are available at points of use - ensuring that documents remain legible and readily identifiable - ensuring that relevant documents of external origin for the planning and operation of the EMS are identified and their distribution controlled - preventing the unintended use of obsolete documents and applying suitable identification to them if they are retained for any purpose	- Uses 'Watkins' system – has all current system documents, templates, forms, etc. - Aconex – project specific documentation e.g. the EMP + reports - Authorisation in the plan. - Documents are available in the server. - Have access to the NSW Gov. page for the project e.g. for SSD conditions. - Aconex docs – only have the current versions (older not shown) - G-Drive – have a 'superseded docs' folder - Some docs / records in G:/ Drive - Web FM – web-based portal for management of defects. - Evidence of reviews/ updates / approval, e.g. sighted transmittal from Watpac to APP of updated drawings on 27/11/19, then APP would circulate to others, as required.	Y
3.12	B22, B23	Construction Environmental Management Plan - Prior to the commencement of construction works, a CEMP must be submitted for the approval of the Certifying Authority. The CEMP must address, but not be limited to, the following matters where relevant: - hours of work; 24-hour contact details of site manager;	Sighted PEMP dated December 2019 (Rev.6) authorised by PM. a) Transmittal to HII/APP 20/03/2018 via Aconex – original plan Email of 19/09/2018 – sent updated plans to Planning NSW. Sighted Aconex email of 12/04/2018 to the Certifier; no comments have been received from either party.	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		iii) traffic management, in consultation with Council and TfNSW; iv) construction noise and vibration management prepared by a suitable qualified person; v) management of dust and odour to protect the amenity of the neighbourhood; vi) erosion and sediment control; vii) stormwater control and discharge; viii) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the Subject Site; ix) procedures for encountering groundwater during construction works; x) external lighting in compliance with AS4282:1997 Control of the Obtrusive Effects of Outdoor Lighting; xi) a protocol detailing appropriate procedures for identifying and dealing with unexpected finds of site contamination (including asbestos containing materials, Polycyclic aromatic hydrocarbons (PAHs), Total recoverable hydrocarbons (TRH) and lead-based paint); xii) a protocol detailing appropriate proceed. for identifying and dealing with unexpected finds of archaeological heritage; xiii) waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site; xiv) waste storage, recycling and litter control; b. The CEMP must not include works that have not been explicitly approved in this development consent. In the event of any inconsistency between the consent and the CEMP, the consent must prevail; and c. The Applicant must submit a copy of the CEMP to the Department and Council prior to commencement of work. The CEMP must be implemented by the contractor for the duration of the construction works	Aconex internal submission of CMP and WMP dated 17/12/19 was provided as supplementary evidence. Submission was made after the Independent Environmental Audit – Note. Aspects required in SSD Cl. B22 addressed generally in: - PEMP and Sub-Plans and Emergency Response Plan - Traffic mgt is an Appendix to the Safety Management Plan. - PEMP Aspects (Section 5) b) Has a Noise and Vibration for Hospital as a 'sensitive receiver' (not in the SSD) – but not been submitted to the client. c) Plan was submitted – as per item a) above.	
3.13	B24, B25	Construction Noise and Vibration Management Plan to be submitted for approval of the Certifying Authority, to be	CNVMP in place Rev 0 by Acoustic Logic, Doc 20180872.1/0624A/R0/TT of 24/06/18. Sighted submission to Blackett Maguire &	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		implemented for the duration of the project and to be revised from time to time. Plan to address the following: i) be prepared by a suitably qualified expert; ii) be prepared in consultation with Council and all adjoining noise sensitive receivers where noise levels exceed the construction noise management levels, in accordance with EPA guidelines; iii) describe the measures to be implemented to ensure > best management practice is being employed; > compliance with the relevant conditions of this consent; iv) describe the proposed noise and vibration management measures in detail; v) include strategies that have been developed to address impacts to noise sensitive receivers where noise levels exceed the construction noise management level, for managing high noise generating works; vi) describe the consultation undertaken to develop the strategies in v) above; vii) evaluate and report on the effectiveness of the noise and vibration management measures; and viii) include a complaints management system that would be implemented for the duration of the construction works. The Contractor must submit a copy of the plan to the Dept. and to the Council prior to commencement of work. B25 – The CNVMP must be implemented by the contractor for the duration of the construction works.	Goldsmith, Aconex communication WTPC-GCOR-000647 of 29/6/18. No recent updates. Acoustic logic Report – has recommendations for noise & vibration controls. Baseline reference noise measured. The Council has copy of the Plan. Follow requirements for noise management, e.g. excavation works not to start before 8:00am. Strategies e.g. Acoustic logic did measurements/ monitoring to get info for preparation of the Plan. Consultation was not required specifically for the Plan at this stage. Any disruptions managed during the DW process, E.g. DW No. 144 dated 12/6/2020 for noisy works due to removal of trees to be conducted next week. The Plan includes recommendations for complaints management. There are 6 points for noise monitoring outlined in the Plan. The monitoring will be undertaken at the points as they become relevant through different milestones. There were 2 permanent vibration monitors during the demolition in April/May 2020. Exceedances were reported to the Hospital. Sighted report dated 14 May to 27 May 2020.	
3.14	B26, B27	Construction Waste Management Plan to be submitted for approval of the Certifying Authority, to be implemented for the duration of the project and to be revised from time to time. Plan to address the following: i) recycling of demolition materials including concrete; and ii) removal of hazardous materials and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works. Details demonstrating compliance with the relevant legislative requirements, associated with the removal of hazardous waste, particularly the method of containment and control of	CWMP in place, Rev. 01 27/June 2018 – Submitted to the Certifier via Aconex communication WTPC-GCOR-000647 of 29/6/18. Sighted Crown Cert. of 12/7/18 referencing the Plan. Plan was updated 30/10/19 (Rev.2) to change the template to reflect new branding and new Appendix 1. Use grasshopper as removal subcontractor. Purpose, Goal is to reuse / recycle 80% of waste. Has +/- 8 different waste streams: concrete, steel/ metal, timber, plastic/ paper/ cardboard.	Y

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		emission of fibres to the air, are to be submitted for the approval of the Certifying Authority prior to the removal of any hazardous materials; The Contractor must notify the RMS Traffic Management Centre of the truck route(s) to be followed by trucks transporting waste material from the Subject Site, prior to the commencement of the removal of any waste material from the Subject Site; and The Contractor must submit a copy of the plan to the Department and the Council prior to commencement of work. B27 – The CWMP must be implemented by the contractor for the duration of the construction works	Has identification and management of hazardous materials. Also, has tracking of vehicles transporting hazardous materials (take number plates) and they send dockets. Grasshopper would collect, and segregate waste offsite as required. Copy of the Plan submitted – as part of the Crown Certificate.	
3.15	B28, B29	Construction Traffic and Pedestrian Management Plan to be submitted for approval of the Certifying Authority, to be implemented for the duration of the project and to be revised from time to time. Plan to address the following: i) location of proposed work zones & haulage routes; iii) construction vehicle access arrangements; iv) construction hours & construction program; vi) predicted construction traffic volumes and vehicle movements, types and routes including any known road closures and consideration of alternate routes; vii) assessment of road safety at key intersections and locations subject to heavy vehicle movements and high pedestrian activity; viii) details of construction vehicle movements including parking, dedicated vehicle turning areas and ingress and egress points; ix) details of anticipated peak hour and daily truck movements to and from the site; x) details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements; xi) details of temporary cycling and pedestrian access during construction; xii) details of proposed construction vehicle access arrangements at all stages; xiii) loading and unloading;	CTMP – Part of the Safety Management Plan (Appendix F) Rev. 1 March 2018. There are new TMPs submitted to APP on 4/12/19 to include a new entrance for Milestone 3 (demolition area). Plan was sent to Hornsby Council 12/12/19 approved by APP/Hi on the 19/12/19. Plan was communicated to any other relevant parties. Plans are implemented. 3 main types of plans: 1. CTMP – overarching prepared by RMS - Approved routes - Not affected by peak hour traffic 2. TCPs – e.g. for general site entry and egress; for crane erection, delivery of equipment. Sighted TCP 084/01 dated 6/3/2020 for Milestone 3, vehicle access via Palmerston Road. 3. VMP (Vehicle Movement Plans) – e.g. delivery of tower crane equipment. Sighted VMP dated 06/12/19 for Milestone 3. Sighted permit for a temporary full/partial road closure at Palmerston Road dated 23/03/2020 from Hornsby Shire Council, (just helping the trucks flow to the construction entrance). Permit was granted from 23/3/2020 to 23/9/2020 from 6.30am to 5.30pm.	Y

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		xiv) details of management measures to minimise traffic impacts, including temporary road works and/or implementation of traffic control measures; xv) pedestrian and traffic management methods; xvi) any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the works; xvii) consideration of the cumulative construction traffic impacts of surrounding projects under construction, including those within the Hornsby Ku-ring-gai Hospital precinct. Existing CTPMPs for developments within or around the Site should be referenced in the CTPMP to ensure that the coordination of work activities is managed to minimise impacts on the surrounding road network; and xviii) traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrian, cyclists, parking and public transport, which must include vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/ construction activities. The Contractor must submit a copy of the CTPMP to the Department and to the Council, prior to the commencement of works. B29 – The CTPMP must be implemented by the contractor for the duration of the construction works		
3.16	A15, A16	If necessary the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Secretary (e.g. after submission of a compliance report, or incident report, changes in the SSD conditions, or issue of a direction from the Secretary) Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.	The Project Environmental Management Plan (PEMP) was reviewed during December 2019 (Rev.6) and a copy was sent to the DPIE on the 7 April 2020 (about 15 weeks after the review). OFI: Proponent needs to ensure that every time the PEMP is reviewed a copy is submitted to the DPIE within six weeks of the review. Relevant changes in the SSD conditions, e.g. for the construction of a helipad were discussed with the Department.	OFI-02
3.17	B2 C1	Certified Plans are to be submitted to the Certifying Authority and the Department prior to commencement of each stage. A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and	Certified Plans (as per Mod 2 and Mod 3) were submitted to CA as part of the CC4 (25/9/2019) sighted drawings listed in the CC4. Plans were sent to Department as part of Mod 3 and were approved on the 6/4/2020. Plans are available in site office and in Server (G: Drive).	Y

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		certification must be kept onsite at all times and must be readily available.	- 2 REFs - SSD - Certifications (e.g. Crown Cert) – G: Drive - Plans in Aconex.	
3.18	Control of records (7.5)			
3.19	7.5.3	The Contractor has established and maintained necessary records to demonstrate conformity to the requirements of its EMS and the Standard, and the results achieved.	PEMP Sec. 4.12. - Some are part of safety e.g. Inductions, Toolbox Talks (hard copies, kept in folder in Safety Advisor bookshelf) - Inspections, other environmental records – have a folder in shared drive e.g. complaints, waste diversion reports, meeting inspections - Reports – Aconex e.g. EIS, contamination, others within SSD, Drawings - Sighted Water Report Card 18/09/19 and 13/01/2020 (Turbidity test failed, so water was not discharged) Specific records sighted as per further sections of this checklist.	Y
3.20	7.5.3	Procedures have been established for the identification, storage, protection, retrieval, retention and disposal of records.	Part of the Head Office Management System procedures – Document Control procedure. There is a document controller.	Y
4.0	Operation			
4.1	Operational controls (8.1)			
4.2	8.1	The Contractor has identified, and planned controls associated with the significant environmental aspects to ensure that operations are carried out under conditions that minimise harm to the environment.	All Aspects identified in the PEMP have Management Strategy and specific actions e.g. Noise controls: - Noise monitoring in specific sensitive points Sedimentation controls: - Socks around drains - Silt fences - Washout drums. - Signage, etc.	Y
4.3	Conditions of Development Consent – Before Commencement of Works			

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4.4	A6	No consent is granted for the demolition of the 'Palmerston' building.	Not part of SoW. Was a provision under the submission, not approved at this point.	-
4.5	A17	All plant and equipment used on site, or to monitor the performance of the development must be: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Plant and equipment are managed through 3D Safety app, sighted: - Logbook check completed on 23/6/2020 for EWP. - Sighted equipment use for noise monitoring - IC1592 Pro Sound Level Meter Calibrator, it was purchased on the 10 October 2019 from Instruments Choice. A new one will be purchasing this year in October. - Vibration is carried out directly by Acoustic Logic. - Dust is monitored onsite – sighted report from Prensa re. silica and respirable dust assessment 16 Sep 2019. Attached to the report there is the calibration certificates for the air-met scientific equipment – TSI Dusttrak 29/7/2019. - Asbestos air monitoring done by EHO Consulting during the demolition, sighted 15/5/2020 and 20/4/2020.	Y
4.6	A19, EPA Reg. Cl 98A, C23	Prescribed conditions – Signage : 2) A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out: (a) showing the name, address and telephone number of the principal certifying authority for the work; (b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours; (c) stating that unauthorised entry to the work site is prohibited. Site Notice – to include certifying authority, structural engineer, the approved hours of work.	Signage sighted during site walk complies with this condition. Authorised hours of work are posted in a different site sign. Previous OFI now closed. Resident complaint due to work being carried out on Sunday 5/4. Resident was notified that planning regulations due to Covid-19 changed the week prior. This order allows construction work to proceed on Sundays.	
4.7	B3, B4	Reflectivity, Outdoor lighting	Certifier has provided all the architectural drawings including exterior finishing schedule. Sighted:	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Observation for Improvement

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		The building materials used on the facades of the structure and the all outdoor lighting must comply with requirements of B3 and B4.	- Certificate of Design for reflectivity of 7/09/18 by Bonacci Group. - Electrical Design Cert. Wood & Grieve Eng. 15/8/18 Crown Certificate 11/10/2018 items 11, 12, 6, 17	
4.8	B5-B8	Hazards – design of oxygen supply The Contractor has ensured that: B5 The design and operation of the hospital's oxygen supply system (including the use of the liquid oxygen bulk storage tanks, any oxygen cylinders connected to the oxygen supply system and any temporary oxygen supply tanks) be in accordance with AS 1894 'The storage and handling of non-flammable cryogenic and refrigerated liquids' (AS 1894). B6 All control measures or safeguards described in the Preliminary Hazard Analysis (PHA, 9 February 2018) will be implemented. B7 As necessary and in accordance with AS 1894, the hospital's Emergency Plan and emergency procedures have been updated to include emergency situations involving the hospital's oxygen supply system, as described in the PHA (9 February 2018). B8 If temporary oxygen supply tanks are to be installed prior to demolition of existing liquid oxygen bulk storage tanks for the purpose of hospital oxygen supply prior to commissioning of new tanks, the design and operation of these temporary tanks must be verified with AS 1894 and/or other relevant Australian Standards.	HealthShare has coordinated the replacement of the oxygen tank. Logistics were coordinated with Watpac, as access had to be given through the worksite. The protection shed was lowered after the tank was replaced. There is signage indicating a minimum exclusion zone for hot works and clear access to the tanks at all times (in case access is required). Communications are in place when refilling. The Hospital presented their current emergency procedures, which refer to the old oxygen tank. The Project Manager has asked for them to be updated to reflect any changes with the new tank, e.g. provider is now Coregas. The emergency response procedure from LHD has been updated in section 6.2 'Medical Gases Supply – Engineering Response' to include the liquid oxygen and nitrous oxide. Procedure was approved 17/6/2018.	Y
4.9	B10	The Contractor has submitted Plans demonstrating compliance with the following requirements for bicycle parking, to the satisfaction of the Certifying Authority: a) provision of a minimum of 18 bicycle parking spaces; b) layout, design and security to comply with all applicable minimum requirements of AS 2890.3:2015 Parking facilities -	The initial design and architectural drawings have been submitted for certification. Part of Crown Certificate No.3. Final design is still in progress, as part of landscaping. Note: Construction of the bicycle parking will become relevant at the very end of the project.	Y

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Observation for Improvement

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		Bicycle parking, and be located in secure, convenient and accessible areas close to the main entries, incorporating adequate lighting and opportunities for passive surveillance; and c) provision of end-of-trip facilities for staff including showers, change room and lockers.		
4.10	B12	Pre-Construction dilapidation reports Qualified structural engineer to prepare a Pre-Construction Dilapidation Report. Report submitted to the satisfaction of the Certifying Authority & copy to Council.	Email was sent on 19/09/2018 to Planning and Council with dilapidation reports. - Presented 4 reports: - Derby – Watpac - Star and Hope – Structural Engineer (Cardno) - Cottage 93 – Watpac - Little Learning School – Structural Eng. 04/09/18 Photographic report / condition of building A new dilapidation report by Cardno for the new access road (council access) was done 24/01/2020.	Y
4.11	B18	Public Footpath The existing concrete footpath along the boundary of the site is to be reinstated where impacted by the proposed works to relevant Council specifications and standards	Not Triggered. Footpath not affected at the moment under this SSD. There has been an agreement with Council that they will reinstate the footpath after all the construction is completed (late 2021). Sighted email to Hornsby Council 29/11/19 from Nick Limbrey with summary of agreement – Note.	NA
4.12	B19	Stormwater and Drainage Works Designed in accordance with Council's relevant specifications and standards and other specific requirements. Water treatment system designed as per Council requirements	Crown Certificate – Hydraulic outside fence – covered by another works conditions (REF determination – approval 004/2018 – 04/04/2018) – Not relevant to this SSD. For internal stormwater drainage, the design would be approved as part of Crown Certs 1, 2.	Y
4.13	B20	On-site Stormwater detention and Water Quality An on-site stormwater detention system must be designed by a chartered civil engineer and constructed in accordance with the following requirements: a) the developing area of the site shall ensure its 5-year average recurrence interval (ARI) runoff reduced to the pre-development	Civil Design Certificate (Crown Certificate, Item 4). The onsite stormwater detention system will be done in Milestone 4 (Sep 2020 to June 2021).	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		site cover rate. The volume of the onsite detention system shall ensure its capable of detaining the 20-year ARI post-development site cover storm; b) the water quality treatment system shall be designed and constructed to provide water quality outcomes as per Council's HDCP2013 Section 1 C.1.2.i requirements; c) have a surcharge/inspection grate located directly above the outlet; d) discharge from the detention system must be controlled via 1 metre length of pipe, not less than 50 millimetres diameter or via a stainless plate with sharply drilled orifice bolted over the face of the outlet discharging into a larger diameter pipe capable of carrying the design flow to an approved Council system; e) where above ground and the average depth is greater than 0.3 metres, a 'pool type' safety fence and warning signs must be installed; and f) not be constructed in a location that would impact upon the visual or recreational amenity of residents.		
4.14	B21	Road Works Kerb and gutter, stormwater drainage, full road width pavement including traffic facilities (vehicle crossings, if applicable) and paved footpaths must be constructed along the area where road works are to be undertaken. In relation to public roads or classified road (as defined under the Roads Act 1993), all roads and traffic facilities must be designed to meet the requirements of Council and RMS (if applicable) and obtain any necessary permits and approvals from the relevant road authority, prior to the commencement of road or pavement construction works.	There were some works on the Derby Road (from Dec 2019 to Feb 2020) to connect stormwater to the sewer. Council reinstated some footpaths and will upgrade the road in August 2020. Sighted site inspection 17/03/2020 with Watpac and Council. Road reinstatement as part of the REF (see checklist item 4.12).	Y
4.15	B32, B33	Utility Services Prior to the commencement of construction work the Contractor is to negotiate (as necessary) with the utility authorities (e.g. Ausgrid and Telcos) in connection with the relocation and/or adjustment of the services affected by the construction of the building structure.	Has communicated with Telcos, Ausgrid about low power lines. A new substation is being built. Ausgrid has come to check works progress. Sighted Chamber Substation – Civil Building Handover Certificate 21/02/2020. Correspondence with Ausgrid indicates that substation will be energised on the 13/07/2020 – sighted network access request No. 58506-T1 from Ausgrid.	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		Prior to the commencement of above-ground works written advice must be obtained from the electricity supply authority, an approved telco carrier and an approved gas carrier (as relevant) stating that satisfactory arrangements have been made to ensure provision of adequate services	Sydney Water has been contacted, sighted copy of the notice of requirements 24/03/2020 – still in progress. Gas is with the existing Hospital.	
4.16	B34	External Walls and Cladding The external walls of all buildings, including additions to existing buildings, must comply with the relevant requirements of the NCC	Final Design has been submitted. Sighted various Certificates for Alcadex, Deco, Finesse, Terracade, etc. Will use composite, non-combustible panels, glass, aluminium.	Y
4.17	B42 B45	Tree Protection The tree protection measures outlined in the <i>Arboricultural Development Assessment Report</i> , prepared by Moore Trees, dated October 2017, are to be implemented and maintained. Certification from the arborist required.	Have a report from Moore Trees – provided a Tree Protection Plan There are trees to be removed as part of Milestone 3 (sighted during site visit), approved by Council. Retained trees are not near the construction site (map sighted from the Arborist Report Oct. 2017). Sighted Aconex correspondence of 13/9/18 from Watpac to BM+G with submission of package for Crown Certificate 2, which included Arborist certification. Also sighted CC2 Item 16	Y
4.18	B43	A project arborist with AQF Level 5 qualifications must be appointed to provide monitoring and certification throughout the construction period.	Moore Trees is the project arborist	Y
4.19	B44, C32	Tree protection fencing for the trees to be retained must be erected around trees to be retained at a minimum distance based on the trees structural root zone C32. Building materials and Site Waste The filling or stockpiling of building materials, the parking of vehicles or plant, the disposal of cement slurry, waste water or other contaminants must be located outside the tree protection zones as prescribed in the conditions of this consent.	Not Triggered. Item may not become relevant (as per item 4.17) Two trees have been protected – sighted during site inspection. C32 – tree protection zones are outside of the site compound.	NA
4.20	B46	Ecologically sustainable development – details of design measures to be submitted, equivalent to Green Star Health Care 4-star rating	Steensen Varming (consultant) Energy Analysis Report dated 21/02/2018 has options regarding façade, ventilation, mechanical (design stage).	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
			Presented Design Certificate – BCA 2016 Section J from RENYi Australian Engineering Consultants certifying that the project is design with relevant Ecological Sustainable Design (ESD) standards including: Energy efficiency; external glazing and shading; artificial lighting; facility to monitor energy use, etc. Reference is made to RENYi BCA JV3 Verification Assessment Report Rev. A dated 12/7/2018.	
4.21		Conditions of Development Consent – During Construction		
4.22	C2, C3	Construction Hours Compliance with requirements for construction hours. Notification of any activities outside of these hours must be given to affected residents before undertaking the activities or as soon as is practical afterwards. Compliance with hours for noisy works (rock breaking, hammering, etc.)	7am – 6pm weekdays – usually end at 4pm 8am – 1pm Saturday No work on Sundays or Public Holidays. No extended hours are required for now. Planning regulations due to Covid-19 changed last week of March 2020 allowing construction work to proceed on Sundays. Works were carried out on Sunday 5/4/2020 (outside of normal hours) for façade and internal fit-out works. There was a complaint in relation to the active concrete pump at 7pm on Tuesday 7/4/2020.	Y
4.23	B14	Construction Noise Management Contractor must incorporate all relevant noise mitigation recommendations in the letter <i>Hornsby Ku-ring-gai Hospital Stage 2 Redevelopment - Response to Planning NSW Queries</i> prepared by Acoustic Logic, dated 26 April 2018, in the detailed design drawings and submit for the approval of the Certifying Authority.	Some design elements for final building are included in Crown Certificates, e.g. generators insulation. – done. Crown Cert for Noise mitigation recommendations included in detail design drawings & sent for approval by the Cert. Authority. Noise management during construction is as per the CNVMP. Contractor follows the Plan which covers more detail than the Acoustic Logic report dated 24/6/2018.	Y
4.24	C4	All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the CNVMP required under condition B25.	Controls continue to be maintained as per Acoustic Logic Report: - Vehicles and machinery on site had flashing lights, some with squawkers (avoid use of reverse beep where possible). - Bored piles (rather than driven piles) – still in progress in Milestone 3 - Use of plywood panels	Y

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			Noise monitoring readings continue in place. Checked during weekly environmental inspections at the nominated monitoring points. Sighted results during inspection on the 10 February 2020, Derby Road entry (62.6dB) and Palmerston Rd (69.1dB) both within the noise limits. Inspection 24 April 2020 indicates 67.3dB at Palmerston Rd and 11/6/2020 75.3dB due to trucks coming in and out for backfilling taking the reading for 2 minutes. There are not very noisy works at the moment apart from Demo.	
4.25	C5	If the noise from a construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the Noise Policy for Industry, 5 dB(A) must be added to the measured construction noise level when comparing the measured noise with the construction noise management levels.	This is generally in accordance with the Noise and Vibration Plan from Acoustic Logic. This is associated with checklist item 4.31.	Y
4.26	C6	The Contractor must ensure construction vehicles do not arrive at the Subject Site or surrounding residential precincts outside of the construction hours of work outlined under condition C2.	There is a specific area for construction vehicles to park to bring materials or load with waste. Vehicles only scheduled during working hours. Watpac has monitored the noise adjacent to Palmerston Road when conducting concrete pouring of HKH2. Email sent to HI about the noise complaint 1/5/2020 showing noise reading 69.1dB. Note: Sometimes workers arrive before 7am to get ready – there is a shuttle bus from 6am – 5pm taking them to the train, but this is generally is not an issue.	Y
4.27	C7	The Contractor must schedule intra-day 'respite periods' for construction activities identified in the Interim Construction Noise Guideline	Some exceedances are expected – e.g. vibration during pouring – in these cases has communication with the hospital and/or other receivers. Respite taken during staff breaks (two breaks in the day, morning tea and lunch), but would consider others per communications with the Hospital. Currently no noise/ respite periods required – no noisy works. One noise complaint was received regarding active concrete pump at 7pm on Tuesday 7/4. Resident states the noise level reached 62dBA without traffic. Meeting held with resident on 5/04/20. Watpac have been monitoring the noise adjacent to Palmerston Road during the final five pours of HKH2.	Y

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4.28	C8	Wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles	Done, as per checklist item 4.24. Piling works are progressing, about 20% of the work is completed to be finished on the second week of July 2020.	Y
4.29	C9	The Contractor must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of audible movement alarms of a type that would minimise noise impacts on surrounding noise sensitive receivers.	Minimise use of reversing in vehicles – vehicles had squawkers. Have a regime for maintenance of equipment – records kept in hard copy in safety folder at the site office.	Y
4.30	C10	Any noise generated during construction of the development must not be offensive noise within the meaning of the Protection of the Environment Operations Act 1997 or exceed approved noise limits for the Subject Site	Noise monitoring devices in place, used in nominated locations. 75 – 80 dB(A) as per Noise & Vibration Management Plan, no more than 15min. One noise complaint was received regarding active concrete pump at 7pm on Tuesday 7/4. Address by meeting resident and ongoing monitoring during the pours. Presented map with sensitive receivers and showing noise monitoring locations. Evidence of noise monitoring noted as part of environmental inspections.	Y
4.31	C11	Vibration Criteria Vibration caused by construction works to meet the established limitations.	Criteria to work to: 1mm/s. Current vibration works are: piling	Y
4.32	C14	Waste All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014)	Sighted Waste Report as part of the monthly PCG report, e.g. waste data from Oct 2019 by Grass Hopper - 94% recycling for the month. Report for March 2020 91% recycled. Sighted EPA Licenses for: - Cleanaway Co Pty Ltd, license No. 12628 – 4 January - Dial-A-Dump (EC) Pty Ltd, license No. 13426 – 2 March - Kimbriki Environmental Enterprises Pty Ltd, license No. 13091 – 30 June	Y
4.33	B17	Storage and Handling of Waste (end product) An appropriate area will be provided within the premises for the storage of garbage bins, recycling containers and all waste and recyclable material generated by the site.	Loading dock is the area being used for the waste storage and Grass Hopper pick up the bins every 2 days. Waste gets segregated on site, sighted inspection report 21/5/19 showing the process for segregation at Easter Creek. Truck routes with EPL number sighted from Bingo, Auburn EPL No. 10935 and KLF Recycling, Asquith EPL No. 20582. Tipping and Greenstar report 17/08/2028. Acceptance letter for Genesis Landfill & recycle centre 9/3/2018.	Y

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			There will be waste storage facilities as per the "Modification of Development Consent" dated 8 th May 2019, where separate storage and collection of organics/food waste is no longer required, this is part of the Star Building.	
4.34	C15	The body of any vehicle or trailer used to transport waste or excavation spoil must be covered before leaving the premises to prevent any spillage or escape of any dust, waste of spoil. Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site must be removed before leaving the premises.	Trucks loads are covered coming out of a mast. Grass Hopper covers material, except steel bins. Drivers are liable if the trucks don't get covered. Truck routes with EPL number sighted from Bingo, Auburn EPL No. 10935 and KLF Recycling, Asquith EPL No. 20582. Dust suppression being used for demolition. Currently for Milestone 3 there is normal watering for dust suppression and street sweeper on the roads.	Y
4.35	C16	The Contractor must ensure that concrete waste and rinse water are not disposed of on the Subject Site and are prevented from entering any natural or artificial watercourse.	Concrete washout will be in place within building, as necessary.	Y
4.36	C34	Excavated Material All excavated material removed from the site must be classified by a suitably qualified person in accordance with the Department of Environment, Climate Change and Water NSW Waste Classification Guidelines prior to disposal to an approved waste management facility.	There was no excavated material as part of the current works onsite. Asbestos material as a result of demo was removed. Sighted asbestos assessment completed by Douglas Partners 28/9/19 and Asbestos Removal Control Plan dated 25/11/19 (Issue 1) by ASP Australia.	Y
4.37	C36	Trade Waste Liquid trade waste generated on the site must be discharged in accordance with a trade waste agreement with Sydney Water and by a licensed liquid trade waste contractor.	Sighted Water Meter Report Card for control of water quality, last one done on the 17/3/2020. Water turbidity and pH were within limits. Ok to pumped out to stormwater after verification of measurements. OFI: It was suggested that the Water Meter Report Card includes the location where the water is being taken from.	OFI-03
4.38	C21	All construction vehicles associated with the proposed development are to be contained on site, unless otherwise approved through the approval for a construction zone on the Council roadway	Approval letter from Hornsby Shire Council for the 'Work Zone' 5/6/18 – applied on 29/05/18. Ref No. F2004/09773. Vehicles load and unload within the site, the works zone is more for vehicles waiting, as necessary.	Y
4.39	C22	Demolition	Demolition works (structural) started as part Milestone 3 in April 2020, demolition of building 2.	NA

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		To protect the surrounding environment, all demolition work must be carried out in accordance with "Australian Standard 2601-2001 - The Demolition of Structures" and the following requirements: - Demolition material must be disposed of to an authorised recycling and/or waste disposal site and/or in accordance with an approved waste management plan - Any asbestos to be removed by a licenced contractor - Meet signage requirements	Waste analysis and classification report by Geotesta by Delta Group 3/3/2020 No. NE596.3. Asbestos clearance inspection by EHO Consulting completed on the 6/3/2020. Certificate of analysis done by Douglas Partners 25/3/2020.	
4.40	B11, C19	Erosion and Sediment Control Soil erosion and sediment control measures must be designed in accordance with Blue Book & approved by certifying authority. Control measures to be effectively implemented and maintained for the duration of the works.	B11. TTW – civil consultants – provided a Sediment Control Plan – mostly from Blue Book – CIV-DNG-00-902 Rev. A 28/06/2018 issued for construction. Erosion and Sediment Control Plan has been reviewed 21/08/2019 and the new revision will be issued 26/06/2020. C19. Controls observed during site visit, e.g. sand bags around drains and slit fence.	Y
4.41	C20	Disposal of Seepage and Stormwater Not to be pumped to the street stormwater system unless approved	Wastewater is tested. Sighted Water Meter Report Card for control of water quality, reading on 18/9/19, turbidity, pH within limits. Ok to discharge. From heavy rains, the stormwater runoff was collected within the site.	Y
4.42	C12, C13	Contamination Remediation works at the site are to be undertaken in accordance with the recommendations and findings of the Remediation Action Plan prepared by Douglas Partners and dated May 2018. C13 Should any new information come to light during construction works which has the potential to alter previous conclusions about contamination, the Certifying Authority must be immediately notified, and works must cease in the vicinity of the suspected contamination. The Certifying Authority will determine whether further investigation, or the	Demolition of Building 2 (structural) started in April 2020. Remediation works records sighted as part of the asbestos records. Sighted Remediation Action Plan 18 May 2020 (Rev.2 - amended) from Douglas Partners, to include Building 2 for the sub-floor.	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		need for remediation, is required before construction works can recommence		
4.43	C17	Handling of Asbestos The Applicant is to consult with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction	Remediation Action Plan 18 May 2020 (Rev.2) from Douglas Partners, to include Building 2 for the sub-floor. Asbestos Removal Control Plan by ASP Australia dated 25 November 2019 was sighted. ASP is the licenced removal contractor. Sighted Aconex communication of 6/12/19. Asbestos clearance inspection by EHO Consulting completed on the 6/3/2020. Certificate of analysis done by Douglas Partners 25/3/2020.	Y
4.44	C18	Unexpected Finds - Non-Aboriginal Heritage Procedure in place, cease works, contact OEH, assess, take action.	Not Triggered. No cultural / non-Aboriginal Heritage finds. Mentioned statues of lions, which have been saved and will be relocated.	NA
4.45	C25, C26	Hoarding/Fencing Requirements A temporary hoarding, fence or awning must be erected between the work site and adjoining lands before the works begin and must be kept in place until after the completion of the works; Other requirements: no advertising material, no graffiti. Permit for hoardings over council footways or road reserve.	Have a mixture of solid hoardings and fencing in the perimeter of the site. Condition monitored daily. No issues identified during the site walk. Some fencing changes in accordance with the site layout changes, modifications were made as part of the possession of Building 2 – old Medical Imaging.	Y
4.46	C33	Council Property – no building materials, waste, machinery or related matter is to be stored on the road or footpath	Site is well enclosed; no materials present on footpath as observed during site walk.	Y
4.47	C35	Storage of Flammable and Combustible Goods in bunded area	During the site walk 2 gas tanks were sighted in the helipad construction area, they were locked up and worker next to them. Sighted Hazardous Chemicals register S08-04-10.01 with oxygen compressed from Sparten Steel expiry date 27/06/2022. Other flammable liquids were bunded and diesel containers in place. Spill kits available on site. Note: Watpac to ensure that spill kits are accessible at all times with no obstructions around them.	Y Note

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4.48	C37	Traffic Control Compliance The development must be carried out in accordance with the Construction Traffic Management Plan prepared under this consent.	Permanent traffic controllers were sighted at the site entry as per TMP. TMP prepared by RTMS (staff blue card). Will submit plans as required, e.g. Traffic control Plans have been approved for the new access on Palmerston Road. RTMS is the Traffic Management Contractor. Sighted email correspondence between RTMS and Council (10/12/19 & email trail below) regarding permit approval. Sighted Hornsby Shire Council Permit Ref. CLOSE/17/2019 of 9 December 2019.	Y
4.49	Emergency preparedness and response (8.2)			
4.50	8.2; B7	The Contractor has established procedures to: - identify potential emergency situations and potential accidents that can have an impact(s) on the environment - determine how it will respond to them	Have an Emergency Response Plan Rev.6 of 13/11/19 signed by the PM. Includes different scenarios of safety and environmental emergencies. Have flowcharts for: - Notifications; - Injuries; - Evacuation; - Medical emergencies; - Fire	Y
4.51	8.2	The emergency response procedures include measures to prevent or mitigate associated adverse environmental impacts.	As above	Y
4.52	8.2	Emergency preparedness and response procedures are periodically reviewed and revised, as necessary, in particular, after the occurrence of accidents or emergency situations. Emergency preparedness and response procedures are periodically tested, where practicable	The Emergency Plan is reviewed periodically, as the site layout changes. For Rev. 6 some roles were updated, and the Hospital St. evacuation plan was included. Has Emergency Contacts List in place.	Y
5.0	Performance Evaluation (9.0)			
5.1	Monitoring and measurement (9.1)			
5.2	9.1	Documented procedures have been established to monitor and measure on a regular basis the key characteristics of operations that can have significant environmental impacts.	Conduct weekly Environmental Inspections – have a folder with inspections e.g. sighted environment Inspection checklist dated 10/02/2020; includes photos of controls in place during the inspection. The report was revamped and reduced to 1 page.	Y
5.3	9.1.1	The procedures include: - the documenting of information to monitor performance - effectiveness of applicable operational controls	Monitoring is documented in the PEMP.	Y

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		- conformity with the organization's environmental objectives and targets	Effectiveness to be assessed when preparing Performance Report for Planning. Conformity with environmental objectives and targets assessed. Monthly reports, e.g. PCG for April or May? 2020 sighted.	
5.4	9.1.1	Monitoring and measuring equipment is calibrated, maintained and stored as necessary. Records or calibration are maintained	Noise monitor self-calibrates – gets a new device each year. No vibration monitors required for this period.	Y
5.5	A11	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, noncompliance notification and independent environmental auditing.	Environmental monitoring, e.g. Independent Environmental Audits (by AQUAS) – as per SSD Conditions B39, B40; Environmental inspections. Last internal audit carried out by Watpac on 18/06/19 by Quality Manager, no other audits so far.	Y
5.6	B35, B36	Compliance Reporting A Pre-Construction Compliance Report must be prepared for the development and submitted to the Certifying Authority for approval before the commencement of construction works.	Report by Blackett and McGuire Goldsmith.	Y
5.7	B37, B38, C30	Construction Compliance Reports must be submitted to the Department at compliance@planning.nsw.gov.au for information every six months from the date of commencement of construction, for the duration of construction. The Construction Compliance Reports must provide details on the compliance performance of the development for the preceding six months and must be submitted within one month following the end of each six-month period for the duration of construction of the development, or such other timeframe as required by the Secretary. The Construction Compliance Reports must include: a) a results summary and analysis of environmental monitoring; b) the number of any complaints received, including a summary of main areas of complaint, action taken, response given and	Construction Compliance Report dated 1/02/2020 for August 2019 to February 2020 period has been submitted to the DPIE on 7/4/2020, sighted email dated 7/4/2020. Report was sent just few days outside of the timeframe requirement. Report includes: - Compliance status summary in section 4; - Complaints in section 8; - Environmental Monitoring in section 3; - Authorities (SSD Approvals and Crown certificate) in section 2.5.1; - Non-compliances from independent environmental audits in section 5 and previous report actions in section 6; - Incidents section 7; - Appendices	Y

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		proposed strategies for reducing the recurrence of such complaints; c) details of any review of the CEMP and the Environmental Management Strategy and associated sub-plans as a result of construction carried out during the reporting period; d) a register of any modifications undertaken and their status; e) results of any independent environmental audits and details of any actions taken in response to the recommendations of an audit; f) a summary of all incidents notified in accordance with this consent; and g) any other matter relating to compliance with the terms of this consent or requested by the Secretary.		
5.8	B39, B40, B41	Independent Environmental Audit No later than a month before the commencement of construction works or as agreed with the Secretary, a program of independent environmental audits must be prepared for the development in accordance with the latest version of AS/NZS ISO 19011-2014: Guidelines for Auditing Management Systems (Standards Australia, 2014) and submitted to the Secretary for information. The scope of each audit must be defined in the program. The program must ensure that environmental performance of the development in relation to each compliance requirement that forms the audit scope is assessed at least once in each audit cycle. The environmental audit program prepared and submitted to the Secretary must be implemented and complied with for the duration of the development. > All independent environmental audits of the development must be conducted by a suitably qualified, experienced and independent team of experts and be documented in an audit report which: a. assesses the environmental performance of the development, and its effects on the surrounding environment including the community;	Environmental Audits conducted by AQUAS in September 2018, January, June and December 2019, as per the Audit Program submitted to the client. Presented confirmation of receipt of the August 2019 to February 2020 Construction Compliance Report by DPIE on the 7/4/2020, which included submission of the December 2020 Audit Report. Notification was sent to HI on 12/2/2020 with a copy of the audit report for Dec 2019.	Y

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		b. assesses whether the development is complying with the terms of this consent; c. reviews the adequacy of any document required under this consent; and d. recommends measures or actions to improve the environmental performance of the development, and improvements to any document required under this consent. > Within three months of commencing an Independent Environmental Audit, or as agreed with the Secretary, a copy of the audit report must be submitted to the Secretary, and any other NSW agency that requests it, together with a response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary		
5.9	C27	At least 48 hours before commencement of construction until the completion of all works, the Contractor must make the following information and documents publicly available on its website: - statutory approvals - approved strategies, plans and programs - performance reporting & monitoring results - project status - complaints register Information must be kept up to date.	Information has been published to Infrastructure and NSLHD webpages. HI website includes a copy of the Compliance report for Feb 2020; However, no monitoring results/records have been published. Previous Opportunity for Improvement (OFI-02): Still in progress. Project team is working towards creating a register and put the results in the website.	OFI (Nov 2019) OFI-02
5.10	Internal Audit (9.2)			
5.11	9.2	The Contractor has ensured that internal audits of the EMS are conducted at planned intervals to determine: a. whether it conforms to planned arrangements for environmental management including the requirements of the Standard b. whether it has been properly implemented and is maintained	An internal audit was carried out by Watpac H.O. on 18/06/19	Y
5.12	Management Review (9.3)			

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Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
5.13	9.3	Top management reviews the EMS at planned intervals to ensure its continuing suitability, adequacy and effectiveness. Reviews include assessing opportunities for improvement and the need for changes to the EMS, including the environmental policy and environmental objectives and targets.	Happens at a Head Office level. Evidence not available onsite	-
6.0	Improvement (10.0)			
6.1	Nonconformity, corrective and preventive action (10.2)			
6.2	10.2	Procedures are in place for: - identifying and correcting nonconformities and taking actions to mitigate their environmental impacts - investigating nonconformities, determining their causes and taking actions in order to avoid their recurrence - evaluating the need for actions to prevent nonconformities or avoid their occurrence - recording the results of corrective and preventive actions taken - reviewing the effectiveness of corrective and preventive actions	Sighted Non-Conformance Register N206-FRM-003 Rev.01 (last one printed in May 2020). Register has actions for quality, safety environmental issues e.g. item WTPC-NCR-000023 refers to sedimentation controls requiring rectification, dated 8/7/19. Action closed out. Last Non-conformance was raised on the 6/6/2020. NCs 11 and 12 have been closed.	Y
6.3	10.2	Any necessary changes arising from corrective and preventive actions are reflected in the EMS documentation.	None triggered by environmental NCRs. Reviews would be made as required.	NA
6.4	A12 A13 A14	The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of any non-compliance. The Certifying Authority must also notify the Department within seven days after they identify any non-compliance. The notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Not Triggered. No non-compliances identified so far that need to be notified.	NA

Audit Compliance Codes: Y: Compliance achieved; N-Major: Major non-conformance; N-Minor: Minor non-conformance; OFI: Observation for Improvement

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
6.6	Complaints Management			
6.7	B30	Complaints and enquiries procedure The following must be made available for community enquiries and complaints for the duration of construction: a) a toll-free 24-hour number for complaints and enquiries about the works; b) a postal address to which written complaints and enquires may be sent; and c) an email address to which electronic complaints and enquiries may be transmitted.	Have a Complaints Register. 24-hour number and email address available in signage at worksite entrance.	Y
6.8	B31	A Complaints Management System must be implemented, including a Complaints Register to be maintained recording information about all complaints associated with the project, e.g. d) number of complaints received; e) number of people affected in relation to a complaint; f) nature of the complaint and means by which the complaint was addressed and whether resolution was reached, with or without mediation.	Sighted Complaints Register: 14 complaints recorded so far. Last on 7/4/2020 - complaint in relation to the active concrete pump at 7pm on Tuesday 7/4. Resident states the noise level reached 62dBA without traffic; a meeting was held with resident on the 15/04/20. Watpac have also agreed to monitor the noise adjacent to Palmerston Road when conducting the final five pours of HKH2. It is noted that the resident will be notified. All complaints have been closed out and available on website.	Y
6.9	Incident Management			
6.10	A23, C28	The Department must be notified in writing to compliance@planning.nsw.gov.au within 24 hours after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.	Not Triggered. No notifiable environmental incidents have been reported.	NA
6.11	A24	a) A written incident notification must also be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after the Applicant becomes aware of an incident.	As above.	NA

Item	Part	Audit Criteria	Documentation Reference	Compliance Rating
		Notification is required to be given under this condition even if the Applicant forms the view that an incident has not occurred. b) Written notification of an incident must: i) identify the development and application number; ii) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident); iii) identify how the incident was detected; iv) identify when the Applicant became aware of the incident; v) identify any actual or potential non-compliance with conditions of consent; vi) describe what immediate steps were taken in relation to the incident; vii) identify further action(s) that will be taken in relation to the incident; and viii) identify a project contact for further communication regarding the incident.		
6.12	C29	Within seven days of the detection of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested in accordance with condition A 19.	As above.	

Appendix E – SSD 8647 Modifications Register

SSD 8647 Modification Register

Modification Number	Condition Modified	Modification Title	Modification Description	Date of Approval	Status
SSD 8647 MOD 1	B17	Deletion of 'c' - Separate Storage and Collection of Organic waste	Storage and Handling of Waste, to delete requirement 'c' to provide separate storage and collection of organics/food waste.	8-May-19	Approved
SSD 8647 MOD 2	A2	Modification To Incorporate Extensions of the Vertical Circulation Structures and Roof Form to Accommodate a non-operational Helipad	The modification seeks to modify the approved Stage 2 redevelopment to provide the structural elements for a non-operational helipad. The modifications include: • Extension of the lift shaft to serve Level 7 to provide future access to the concrete landing platform, including the overruns (C1 and the adjacent future lift core); • Extension of fire stair 3 to provide access to Level 7 (the roof); • Construction of the lift lobbies; • All associated façade and cladding works linked to the extensions of the lift and stair cores; and • Replacement of the existing approved metal roof above Level 6 with a concrete roof to accommodate a future helipad landing platform. A steel metal frame is to be constructed around the perimeter of the concrete roof to accommodate a non-operational helipad safety net.	25-Jul-19	Approved
SSD 8647 MOD 3	A3	Modification to allow for the establishment of a Helicopter Landing Surface (HLS) on the previously approved rooftop structure.	The proposal seeks to modify the approved Stage 2 redevelopment to establish the use of the approved helipad structure. The modification relates primarily to the use of the structure as HLS; however, minor physical changes are required and include: • Construction of access stairs; • New line markings and signal lights; • Installation of handrails; • Safety mesh system; • New directional signage; and • Installation of a windsock.	6-Apr-20	Approved
SSD 8647 MOD 4	A2	Modification to reconfigure internal areas within the Emergency and PECC departments and minor façade changes	The proposal seeks to modify the approved Stage 2 Redevelopment to reconfigure internal areas within the ED and PECC, alter elements of the building facades, including changes to window and door openings and revisions to façade materials and finishes and undertake other minor changes. The modifications are detailed in the supporting architectural plans prepared by STH Architects attached in Appendix A and include: • Internal reconfigurations to the Level 1 Emergency Department (ED) building and Level 1 of the Psychiatric Emergency Care Centre (PECC). • External alterations to the southern, western and northern facades of ED and PECC including changes to window and door openings and revisions to façade materials and finishes and repaint the retained existing ED signage. • External location of decontamination shower facility which was previously approved within the ED building. • New Ambulance awning structure and screen to ambulance entry and PECC courtyard. • New balustrade design to the Level 2 Paediatrics courtyard.	18-Nov-20	Approved
SSD 8647 MOD 5	A2	Modification to Stage 2 Site Boundaries, replacement Landscaping and realignment of Tunnel Link with new First Floor Corridor Link above	The proposed modifications made under Section 4.55(1A) of the Environmental Planning and Assessment Act 1979 (the Act) broadly include: • Changes to the approved Stage 2 site boundary, including removal of a small 830m² portion of the landscaped courtyard on the northern side of the Stage 2 Main Building and addition of 40m² expanded landscape (refer to Figure 1). • Introduction of new landscaped open space in the centre of the site in place of Building 5 'George Lumby Building' (to be demolished) and improved landscape scheme within the courtyard north of the Stage 2 Main Building. • Realignment of approved tunnel link between Stage 2 Main Building and the covered walkway connecting to the Mental Health Facility with new partial first floor level corridor to be constructed above the tunnel. The modification also seeks updates to Condition A2 pertaining to replacement of approved plans (refer to section 4 of this SEE).		Submitted

**Appendix F – BESIX Watpac Project Environmental Management Plan (Rev.06
– November 2019)**



Project Environmental Management Plan

[N206]

Hornsby Ku-Ring-Gai Hospital Stage 2 and
Medical Imaging Building

November 2019

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Revision History

Issue	Date	Revision Description	Authorised by
1	March 2018	Contract Issue	Tim Williams (Construction Manager)
2	25 June 2018	SSD	Nick Limbrey (Project Manager)
3	November 2018	General review / update, incorporating recommendations from Independent Audit (Aquas) 26/9/19 and report 17/10/18	Nick Limbrey (Project Manager)
4	January 2019	General review and update, incorporating recommendations from Audit (Morasey) 12/12/18 and review of objectives & targets	Nick Limbrey (Project Manager)
5	July 2019	General update in accordance with requirements of REF 004/2018	Nick Limbrey (Project Manager)
6	December 2019	General Review and Update, including change to template to reflect new branding and new Appendix 1	Nick Limbrey (Project Manager)

Abbreviations

Abbreviation	Meaning
AASS	Actual Acid Sulfate Soil
ARMP	Approved Risk Management Plan
ASS	Acid Sulfate Soil
CAR	Corrective Action Request
CEMP	Construction Environmental Management Plan
CMS	Construction Management System
DAF	Department of Agriculture and Fisheries
DEHP	Department of Environment and Heritage Protection
ECC	Environmental Clearance Certificate
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	Environmental Protection Act
EPBC	Environmental Protection Biodiversity Conservation Act
ESC	Erosion and Sediment Control
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically Sustainable Development
HMP	Heritage Management Plan
HOTO	Handover Takeover
HSEQ	Health, Safety, Environment and Quality
IECA	International Erosion Control Association
KPI	Key Performance Indicator
MSDS	Material Safety Data Sheet
NCR	Non-conformance Report
NEPM	National Environmental Protection Measure
NGER	National Greenhouse and Energy Reporting
NPI	National Pollutant Inventory
NSMS	National Safety Management System
PASS	Potential Acid Sulfate Soil
PEMP	Project Environmental Management Plan
PERP	Project Emergency Response Plan
PFC	Perfluorinated Compound
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane Sulfonate
PMCA	Project Manager / Contract Administrator
PPE	Personal Protective Equipment
QMS	Quality Management System
RDO	Rostered Day Off
REO	Regional Environmental Officer
RI	Restricted Items
RIFA	Red Imported Fire Ant
SDS	Safety Data Sheet
UXO	Unexploded Ordnance
WOL	Whole Of Life

1. System Application and Authorisation

1.1. Planning Environmental Management

Watpac is committed to safely construct the project, on time and on budget, without harm to the environment.

In particular Watpac will:

- Comply with the ESD and environmental requirements of the Contract and Contract Specifications
- Comply with relevant regulatory and legislative requirements governing the protection of the environment
- Identify environmental issues, opportunities and potential adverse impacts arising from the project and identify appropriate prevention and or mitigation measures that will be applied to minimise any adverse effects
- Ensure all personnel who work on the project receive a site specific induction, which will include relevant environmental aspects / items.

Watpac also commits to managing the construction of the project in conformance with the Company's broader environmental vision, goals and objectives as documented in the Watpac Environmental Policy.

Specific project performance targets have been documented for each of the key environmental aspects in Section 5 of this Project Environmental Management Plan (PEMP).

1.2. Principal Requirements

The Principal requirements of environmental management for the construction phase of this project are as set out in the Contract documents, various development consents and specifications.

The Principal's Environmental objectives expressed in the Conditions of Contract have been addressed within this PEMP.

The Principal's requirements regarding notification of disruptive works have also been addressed; the notification procedure and templates for the Disruptive Works Notice (DWN) and Watpac's register of DWNs are provided in Appendix 6.7.

1.3. Watpac HSEQ Policy

The Watpac HSEQ Policy is:

Watpac considers excellence in health, safety and environmental performance, our quality of service and client satisfaction, essential components to the long term sustainability of its business.

Our goal is to achieve a high level of HSEQ performance for the benefit of all stakeholders, including employees, subcontractors, suppliers, clients, shareholders and the local communities in which we work.

Our Values

Watpac promotes an organisational culture in which the principles of HSEQ are highly valued and upheld through the Watpac core values:

- **COMMITMENT:** Delivering on promises, safely
- **ONE TEAM:** Collaborating to accomplish a shared purpose
- **INSPIRATION:** Leading by example in everything we do
- **INNOVATION:** Achieving solutions that make a difference
- **CANDOUR:** Acting with authenticity, integrity and respect

Our Commitments

Watpac is committed to:

- providing a high standard of service.
- conducting our activities in a safe and sustainable manner which includes protection of the environment.
- mitigating foreseeable hazards through proactive risk management practices.
- continual improvement of our health, safety, environmental and quality management systems.
- consistently meeting stakeholder expectations.
- compliance to applicable legal and other requirements and voluntary commitments.
- providing effective HSEQ information, instruction and training to our employees and sub-contractors.

Our Actions

Watpac will achieve this by:

- providing visible support and leadership, with clear accountabilities and expectations that encourages employee, subcontractor and supplier participation in achieving our HSEQ goal.
- establishing and maintaining documented and communicated HSEQ management systems certified to AS/NZS 4801, ISO 14001 and ISO 9001.
- providing and maintaining a proactive HSEQ risk management framework across all aspects of our business.
- ensuring effective consultation and communication strategies and processes are in place which allows all stakeholders to have input and provide feedback on HSEQ matters.
- setting clear, achievable and measurable objectives and targets that promote continual improvement of our HSEQ management systems and performance.

Watpac empowers, promotes and supports all personnel in making the necessary decisions to ensure the intent of this policy is upheld.

1.4. Application

This Project Environmental Management Plan has been prepared by the Watpac Project Team, in consultation with the Watpac Quality and Environment Manager, to document the company's environmental commitments, objectives and procedures for the project. The PEMP is the key environmental management document that the Project Manager and Site Manager relies on to ensure appropriate environmental management practices are followed during construction.

The PEMP has been developed to conform with and satisfy the requirements of:

- AS/NZS ISO 14001: 2015 - Environmental Management Systems
- The environmental performance requirements of the Principal as set out in the Contract and Contract specifications
- The Watpac Environment Management System
- NSW Government Environmental Management System Guidelines (2013), Part 3
- Applicable legal and other requirements
- The broader community's general expectations of an environmentally responsible organisation.
- The Review of Environmental Factors 037/2017 (dated 11 December 2017) prepared by APP for the Medical Imaging Building
- The Review of Environmental Factors 004/2018 (dated 3 April 2018) prepared by APP for the Early Works 1 & 2 (Sewer and Stormwater Infrastructure Works)
- The State Significant Development (SSD) Consent for the Stage 2 Redevelopment (main works) SSD 8647 (dated 30th May 2018).

The PEMP is intended for use on the project and is based on the management systems and procedures currently in place at Watpac.

This PEMP applies to all Watpac Construction personnel, visitors, subcontractors, consultants, Principal Representatives, authority representatives and suppliers involved in the project.

1.5. Scope of Works

The Stage 2 Redevelopment project will deliver the following:

- A new 5-storey building, including:
 - Combined Intensive Care and High Dependency Unit
 - Combined Coronary Care and Cardiac Investigations Unit
 - Cardiorespiratory Inpatient Unit
 - Medical Inpatient Unit (including Dementia / Delirium and Stroke Beds)
 - Rehabilitation Inpatient Units (cold shell). Fit out of each IPU (option).
 - Ambulatory Care Centre providing a centralised location for all Ambulatory Care services
 - Combined Education space with the University of Sydney
 - Main Entry with Retail and Front of House (FoH) area located adjacent to the high-traffic Ambulatory Care Centre and the main Hospital Street.
- A refurbished and expanded Emergency Department within the HOPE Building
- PECC Refurbishment to be tendered as an option.
- Demolition of PECC as a tendered option which may be exercised.
- Fit-out of the co-located Paediatrics Inpatient Unit and Paediatric Allied Health clinics on the second floor of the new Medical Imaging building
- Associated civil and landscaping works throughout the campus
- Sewer main upgrade and Stormwater Infrastructure along Derby Road, this is in order to support the Hospital Building Works.

The Hornsby Ku-ring-gai Hospital is located about 25 kilometres north-west of the Sydney CBD. The hospital is within the local government area of Hornsby Shire and is bounded by Palmerston Road to the west, Burdett Street to the south, Derby Road to the east and Lowe Road to the north.

The hospital campus comprises of Lot 2 in DP14774, Lot 3 in DP14774, Lot B in DP363790, Lot 23 in DP814181, Lot 1 in DP232290 and Lot 189 in DP752053.

Refer to the overarching Project Management Plan for more information.

1.6. Site Contact

Craig Scott (Site Manager)	
Mobile Phone	0431 308 944
Work Phone	02 6561 3301
Email	cscott@watpac.com.au

1.7. Environmental Risk Assessment Process

Watpac implements the following systems on all projects:

- Watpac Quality Management System (QMS)
- Watpac National Safety Management System (NSMS)
- Watpac Environmental Management System (EMS)

This PEMP is consistent with and where applicable directly references Watpac Quality, Environmental and OH&S Procedures.

As documented in its Environment Management System, Watpac adopts a systematic approach to environmental management that is designed to ensure potential environmental risks through all phases of project delivery are:

- Identified
- Evaluated and ranked
- Mitigated and controlled
- Subject to ongoing review and assessment.

Following award of the Contract, Watpac has conducted a comprehensive review of Contractual Conditions; Permit conditions; recommendations documented in environmental specialist reports, applicable environmental laws and regulations; Contract Specifications; and site conditions.

Our project team has conducted a number of pre-start meetings addressing environmental issues and have undertaken a detailed environmental risk assessment for the project. The Risk and Opportunity Assessment process incorporates the development of risk profiles, Risk and Opportunity Assessment, mitigation strategies, the identification of opportunities and the development of project specific procedures.

The Watpac Management Plans are dynamic documents that will be reviewed and revised as warranted to ensure they remain current throughout all phases of the project.

Environmental elements have been integrated where applicable into project documents including:

- Site specific inductions
- Safety Plan
- Quality Plan
- Emergency Plan

Our comprehensive and systematic approach will ensure the Principal and community that Watpac will:

- Employ best environmental practice
- Harmonise safety and environment in planning work
- Exceed required quality and performance criteria without compromising the environment
- Satisfy ESD and environmental objectives

1.8. Watpac EMS

Watpac's Environmental Management System (EMS) has maintained third party Certification status for over 20 years, embracing the current Environment Management Standard AS/NZS ISO 14001:2004 without exception. The system has successfully been applied across a variety of projects with no limit as to the value and variability of the project. Our Environmental Management System has delivered high quality projects across diverse ranges of work including multi-residential, commercial, industrial, infrastructural, medical, Defence, and refurbishment projects.

The key EMS aspects that will be applied on this project include:

- Scheduled inspections, monitoring and maintenance
- Auditing
- Education, training and awareness
- Feedback loop of environmental legislation and continual improvement
- Community Consultation
- Environmental Risk Assessments (C-FRM-018)
- Environmental Legal and Statutory Requirements Register (C-REG-007)

Watpac's core business is separated into modules into which each relevant procedure or form is grouped:

Module	Description
Pre-Contracts	Principal relations, tender opportunities, scoping and pricing tenders
Project Start-Up	Effective planning and coordination
Procurement	Subcontractor assessment for effective safety and quality capabilities
Administration	Financial administration of the project, EOT's, RFI's
Control	Control of the project encompassing quality, environment requirements
Project Completion	Defect management, commissioning, certification and handover
Quality	QMS procedures including document control, record management, audit
Environment	EMS procedures including Aspects, Risk Assessment, Compliance

All elements of AS/NZS ISO 14001 will be required, without exception, in the delivery of our projects and services. Our system is managed into tiers, which inform our integrated approach:

Tier	Type	Description
01	Environmental Policy	Watpac's policy on Environmental Management informs our approach when documenting procedures.
02	Environmental Management System Manual	Outlines Watpac's structure and general principles of the Environmental Management System.
03	Environmental Procedures	These procedures describe how activities within the company are performed. Each Environmental Procedure includes what, how, and when steps are performed; what materials, equipment and documentation are used and, where applicable, how processes are controlled.
04	Environmental Documentation and Records (forms, registers)	These documents prompt the detailed information, work, inspection and review processes. Changes are accommodated with reference to the correct Control of Documents and Data procedures. They will also act as records to document that all due diligence was performed.

1.9. Confidentiality

This PEMP and any attachments shall not be copied or reproduced without the express written permission of the Watpac's Quality and Environment Manager.

1.10. PEMP Authorisation

The issue and use of this PEMP is approved in accordance with the revision history table at the front of this document.

Commitment to implement Watpac's EMS as per this PEMP and internal procedures is made by the **Project Manager**.

Approved by



Date 26 July 2019

1.11. Precedence

Where an ambiguity is detected between the PEMP and the procedures in the Watpac Environmental Management System Manual, the procedures in the Project Environmental Plan shall take precedence.

1.12. Specific Exclusions

Any specific exclusions relative to the requirements of ISO 14001 will be noted in the relevant sections of this PEMP. The works covered by this PEMP are limited to the scope of work as defined by the Contract, drawings, and specification.

1.13. Validity

The currency of this PEMP remains valid from the date of issue until Practical Completion or approved revision and amendment. Construction work cannot commence until this PEMP has been authorised by the HSE Manager. This plan is subject to regular review, generally at minimum 6-monthly increments.

2. Project Environmental Objectives

2.1. Watpac Environment Objectives

Watpac's main environmental objective is to conduct project activities in full consideration of the environmental conditions and requirements of Client Contracts, and environmental legal and other requirements as an environmentally responsible organisation of the broader community.

Watpac will comply with its EMS to control and minimise environmental impacts and preserve the environment through the following: -

- The control and minimisation of contaminate discharges or disturbances to air, land and water
- The control and minimisation of waste
- To review and re-source component materials, as opportunity presents
- Undertake regular review of the EMS against performance targets with the view toward continual improvement and the prevention of pollution.

The objectives of this PEMP are as follows:

- To ensure compliance with environmental legislative requirements
- To ensure the Project Team (including subcontractors) are aware of their environmental responsibilities and are proactive in their approach to environmental management
- To ensure environmental commitments are implemented
- To prevent environmental incidents through the establishment and maintenance of environmental control measures, work practices and the supervision of construction activities
- To minimise environmental, community and system impacts

Proper adherence to the EMS objectives and awareness of environmental issues pertinent to Watpac's activities is a requirement of all Watpac personnel and those entities engaged by Watpac in the delivery of projects.

2.2. Project Environment Commitment

The Watpac Project Team is committed to the implementation of a comprehensive and effective EMS for the design and construction of this project.

Our Project Environmental Management Plan will comply with all elements of the Watpac Environmental System, certified to ISO 14001. The PEMP addresses all environmental elements of managing the design and construction of the Project to ensure full compliance with the requirements of the current legislation and expectations of the Principal and neighbouring community.

The Project Environmental Management Plan and its application will be continuously assessed and improved through processes of review and audit.

All participants in the project are responsible for implementing the PEMP and contributing to its improvement to ensure we meet our objective of providing a project which meets agreed requirements in terms of its construction and operational performance.

2.3. Key Performance Indicators

The environmental performance of the Watpac Project Team is assessed by two Key Performance Indicators (KPIs):

Policy	Objective	Measurement Basis	Target	Responsibility	Compliance Review (WTP)*		
					Dec 2018	Jul 2019	Dec 2019
Minimise Impacts	Minimise the impact of the site works to the receiving environment	Internal audits conducted by Management	No more than 5 environmental Corrective Action items issued to a single project from an internal audit.	Project Manager	✓	✓	✓
			Zero Non-Conformances issued to a single project from an internal audit.	Project Manager	✓	✓	✓
			Project is audited within 6 months of being established on site.	Project Manager	✓	✓	✓
			Receipt of written positive feedback from local stakeholders etc. regarding environmental performance or positive experience.	Project Manager	✓	✓	✓
			No major negative formal complaints received pertaining to poor environmental management or performance.	Project Manager	✓	✓	✓
Compliance	Comply with all Statutory Requirements	Commonwealth, State and Local Council regulation	Zero Penalty Infringement Notices issued by Local Council or State EPA	Project Manager	✓	✓	✓
			Zero Prosecutions issued by Local Council or State EPA	Project Manager	✓	✓	✓

Note *: evidentiary documentation to substantiate review rating available in the project environmental records.

Compliance with KPI's, objectives and targets should be reviewed and self-assessed by the project team at 6-monthly intervals (aligning with PEMP reviews). Any corrections or adjustments to the indicators, objectives or targets shall be incorporated into subsequent revisions.

3. Project Organisation

3.1. Project Organisation Chart

Refer to Appendix B of the overarching *Project Management Plan*.

3.2. Roles and Responsibilities

3.2.1. Construction/Operations Manager

The Construction/Operations Manager has responsibility to:

- Ensure construction activities are undertaken in accordance with Watpac's HSEQ Policy and the objectives and provisions of the PEMP
- Ensure all personnel carrying out activities which may have a significant impact on the environment are appropriately trained to a level commensurate with their role and responsibilities in the project.

3.2.2. Quality and Environment Manager

The Quality and Environment Manager is responsible for establishing and maintaining the Company's Environment Management System and represents Watpac on all environmental matters pertinent to the EMS.

The Quality and Environment Manager is responsible for:

- Ensuring that approval conditions and environmental specialist recommendations made during the design phase are incorporated into the PEMP
- Assisting the Project Manager with the implementation of the PEMP
- Providing support and technical assistance to the Project Environmental Coordinator
- Manage the implementation of the EMS during the project
- Monitoring the effectiveness of the EMS
- Coordinating environmental audits during the project in accordance with KPIs
- Ensuring record keeping is undertaken as required to demonstrate compliance with the EMS, PEMP, and legal requirements
- Ensuring the Project Team (including subcontractors) receive the appropriate environmental induction (including site-specific environmental requirements)
- Coordinating environmental accident/incident investigations
- Issuing external authority notification regarding environmental incidents (following confirmation with the Client)
- Assessing the environmental capabilities of subcontractors during procurement and review/approve their environmental management documentation (if not working under the Watpac PEMP)

The Quality and Environment Manager is authorised to require all employees to comply with the provisions of the documented Environmental Management System and may issue directions to that effect. The Quality and Environment Manager has the authority to stop work in the event of potential or actual environmental damage.

3.2.3. Project Manager

The Project Manager is responsible to the State Manager through the Construction Manager to ensure effective environmental controls are implemented for the duration of the project.

Specifically, the Project Manager shall be responsible for:

- Implementing and maintaining the PEMP
- Ensuring all works comply with environmental legislative requirements and conditions of any statutory approvals
- Reviewing the environmental aspects at project start-up and ensuring the PEMP addresses all requirements
- Providing guidance, motivation and resources to achieve the provisions of the PEMP

- Ensuring that subcontractors and suppliers are aware of Watpac's environmental policy and objectives, through conditions of contract, tender interviews, scopes of work and site environmental inductions as applicable
- Establishing monitoring records and ensuring the scope and frequency of monitoring activities satisfies the requirements of the PEMP. Ensure that site environmental management information (e.g. records, reports, checklists etc) is maintained and accessible.
- Provide adequate equipment, facilities and training (if required) to the Site Manager
- Plan construction activities to minimise environmental impact and to comply with site environmental management requirements
- Assist the Environment Manager with the investigation of environmental incidents
- Assist the Environment Manager with the close out of "non-conformances" and "action requests" arising from audits, site inspections and incident investigations
- Report all environmental incidents to the Environment Manager

The Project Manager shall have sufficient authority and independence to:

- Identify and record any environmental problems
- Initiate solutions to the environmental problem
- Stop the works, if such a decision becomes necessary, in order to prevent or mitigate adverse environmental conditions, or if corrective measures recommended are not being carried out. The Project Manager must notify the Environment Manager as soon as possible regarding any stop work orders relating to environmental management.
- Provide recommendations for EMS and operational improvements to the Quality and Environment Manager

3.2.4. Project Environmental Coordinator

The Project Environmental Coordinator is responsible to the Project Manager for the maintenance of the Project Environmental Management system.

The Project Environmental Coordinator is the document controller for the PEMP and shall prepare/compile registers, records, plans and forms necessary for the implementation of environmental controls. The Project Environmental Coordinator shall review these as necessary and ensure timely distribution to all relevant parties in the Project.

Responsibilities of the Project Environmental Coordinator shall include:

- Monitor the construction processes to ensure that appropriate environmental protection/procedures are in place. Apply EMS procedures as applicable during the project.
- Identify and record any environmental issues
- Recommend and initiate solutions to environmental problems and verify the implementation of solutions
- Investigate all environmental complaints (which shall be recorded on the project records)
- Control and maintain project environmental records, including indexing records, prior to archiving
- Implement any environmental checklists, field records and procedures as applicable to the works
- Maintenance the PEMP and control of distribution
- Conduct site inspections and audits as required
- Provide recommendations to the Quality and Environment Manager for EMS and operational improvements.

The Project Environmental Coordinator has the authority to stop work in the event of pollution or actual environmental damage. The Project Environmental Coordinator must notify the Site Manager and Project Manager as soon as possible regarding any stop work orders relating to environmental management.

3.2.5. Independent Verification Staff

Individual employees or consultants may be appointed to assist the Project Manager to carry out audits, environmental testing and inspection duties. This testing and inspection may be in addition to and separate from any testing and inspection required for Environmental Management purposes.

Independent Verification staff will not be drawn from personnel who are performing or directly supervising the activities being inspected.

3.2.6. Site Manager

The Site Manager is responsible to the Project Manager to:

- Ensure all work under the Site Manager's control is undertaken in accordance with statutory environmental requirements and the PEMP.
- Identify, recommend and initiate solutions to any project environmental issues
- Ensure that site environmental management information (e.g. records, reports, checklists etc) are maintained and accessible
- Seek advice regarding environmental management issues (if in doubt) from the following: Project Manager, HSE Manager, environmental specialist
- Respond to environmental incidents as per the Incident Management Plan and directions provided by Project Manager
- Report all environmental incidents to the Project Manager
- Ensure all workers and subcontractors under the Site Manager's control are properly inducted in the requirements of the Watpac HSEQ Policy and objectives and the PEMP, and are instructed in the following:
 - The role and environmental responsibilities of the project/works for which they are engaged
 - The use and understanding of any environmental documentation for the work
 - Specific environmental procedures for the project/works.

The Site Manager has the authority to stop work in the event of pollution or actual environmental damage, or non-compliance with contractual requirements. The Site Manager must notify the Project Manager as soon as possible regarding any stop work orders relating to environmental management.

3.2.7. Foremen

The Foremen are responsible to the Site Manager to:

- Ensure all work under the Foreman's control is undertaken in accordance with statutory environmental requirements and the PEMP
- Attend environmental inductions and toolbox meetings
- Undertake remedial action as required to ensure environmental controls are maintained in good working order
- Immediately report all environmental incidents (including near misses) to the Site Manager
- Ensure plant/equipment is maintained in good working order
- Identify, recommend and initiate solutions to any project environmental problem.

3.2.8. Contract Administrator

The Contract Administrator shall be responsible to the Project Manager for:

- Ensuring proper procedures are followed for the procurement of goods and services to ensure that Watpac's HSEQ Policy and objectives and the requirements of the PEMP are achieved.

3.2.9. Direct Labour

Each tradesperson, trades assistant, operator and employee shall be responsible for carrying out their work in accordance with Watpac's stated HSEQ Policy and objectives, the PEMP and as instructed by their supervisor.

3.2.10. Subcontractors and Suppliers

Watpac will ensure all subcontractors and suppliers are responsible for conducting their activities in an environmentally sensitive manner and in compliance with the requirements of this PEMP. While it is envisaged that subcontractors will work under the requirements of this PEMP, there are potentially two situations where this may not be the case:

- Subcontractor requests to perform works under their own EMP
- Watpac requests that subcontractor perform works under their own EMP

In both situations, the approval of approach and EMP documentation is required from the Watpac Project Manager and/or HSE Manager.

Site inductions will include detailed and site specific environmental information. Activities conducted by any trade likely to have a significant impact on the environment is required to submit their own EMP, which is assessed using the Subcontractor EMP assessment checklist to ensure it is comprehensive.

All personnel shall notify the Watpac Site Manager of any activity or incident, or any deviations from work place practices and procedures set out in this PEMP.

Subcontractor audits can be conducted. The checklist C-FRM-082 Environment Audit 100 includes environmental criteria which can be adapted to the nature of the trade work. C-FRM-082 Environment Audit 100 is available on the Watpac intranet.

Contractors shall ensure their personnel working at the site:

- Have the appropriate environmental awareness training and / or qualification for the task undertaken
- Are aware of the potential environmental impacts of their activities on the site and the procedures by which such impacts are to be minimised or prevented.
- Attend environmental inductions and toolbox meetings
- Undertake remedial action as required to ensure environmental controls are maintained in good working order
- Immediately report all environmental incidents (including near misses) to the Site Manager
- Ensure plant/equipment is maintained in good working order

4. Implementation

4.1. Legal and Other Requirements

All activities associated with the Project must comply with the relevant environmental legislative requirements. The Watpac Environmental Legal and Statutory Requirements Register (C-REG-007) provides an overview of existing legislation that is related to environmental matters enacted by the Federal and NSW Governments that could be directly or indirectly related to project activities. A copy of the Watpac Environmental Legal and Statutory Requirements Register can be obtained via request from the Watpac HSE Manager.

The construction activities do not require any State Government licensing arrangements, control approvals or permits for environmental protection at this stage.

The development will be undertaken in accordance with the NCC / Building Code of Australia and relevant Australian Standards, in accordance with the various Development Consents for the project and contract plans and documentation noted therein. Pursuant to the Development Consents, the hours of work shall be:

- Monday to Friday (inclusive): 7.00am to 6.00pm;
- Saturdays: 8.00am to 1.00pm;
- Sundays and Public Holidays: No work permitted.

The Quality and Environment Manager is responsible for identifying and assessing amendments to statutory and regulatory requirements potentially applicable to the project (such as State Government licensing arrangements, control approvals or permits for environmental protection) and initiating a review of the PEMP as warranted.

4.2. Monitoring

The responsibility for general environmental monitoring rests with all personnel engaged in the project.

More specifically the Project Environmental Coordinator shall:

- Monitor each element of the construction process to ensure that appropriate environmental protection/procedures are in place
- Undertake daily monitoring of the implementation and effectiveness of environmental controls
- Conduct and record weekly site inspections of environmental controls and direct such action as may be considered necessary to protect, minimise or rectify any environmental concerns.

The Project team shall undertake random site inspections and direct such action as may be considered necessary to protect, minimise or rectify any environmental concerns.

Before the commencement of works and at the conclusion of works, dilapidation reports shall be undertaken of areas adjacent to the works that may be affected by the works. Such areas may include public roads, internal roads, the exterior of hospital buildings, and the interior of hospital buildings.

4.3. Consultation

Watpac undertakes to advise adjacent property owners/managers of the timing and duration of activities likely to give rise to environmental concerns e.g. ground works or proposed out of normal hours activities.

Where applicable a list of adjoining building managers with their business and out-of-hours contact numbers will be maintained on the project records together with notations of pertinent advices.

4.4. Environmental Complaints

The Project Manager and/or the Project Environmental Coordinator will investigate all environmental complaints. Details of complaints and the remedial action taken will be recorded in the project records.

Watpac will notify the Principal of all applicable complaints received.

Any complaints received by the Principal will be investigated and recorded by Watpac as appropriate.

4.5. Environmental Incidents

Should an environmental incident occur during the course of the works, Watpac shall take prompt action to minimise any impact and inform the Principal or the Principal's Representative accordingly in accordance with the HI Stakeholder Management Procedure. Procedures to respond to an emergency incident have been documented in the Project Emergency Plan.

Subcontractors who become aware of an environmental incident shall report the matter immediately to the Site Manager.

All incidents will be:

- Addressed as expeditiously as possible to minimise the potential environmental impacts
- Investigated; where necessary Watpac will seek the advice of relevant Authorities and comply with their instructions
- Recorded on the Environmental Complaint and Incident Report Form (C-FRM-060).

If the incident has the potential to cause material environmental harm, there is a legal obligation to notify the NSW EPA. As with any environmental incident, the following process should be followed:

- Complete the Environmental Complaint and Incident Report Form (C-FRM-060).
- Send report to your State Environmental Manager.
- Environmental Manager will advise if the incident is a notifiable event, at which point the report form should be issued to the Principal with the recommendation that the incident be reported to the State Environmental Protection Agency.

4.6. Reporting

The Client will be notified of applicable environmental incidents and complaints, as soon as possible thereafter, including notification of the proposed corrective action.

Project Reports submitted to the Client will report on all applicable environmental matters including environmental incidents, non-conformances, complaints, performance and the implementation and effectiveness of the PEMP. This reporting will generally take the form of the monthly Project Control Group (PCG) report.

All communication of information concerning the project environmental performance shall be reported internally via the Monthly Project Review and Quarterly Project Review reporting templates to senior management.

The Development Consents for the project require various informative and compliance reporting to occur to Council and/or Department of Planning. This reporting shall be managed via email correspondence as articulated in the Development Consents.

4.7. Notifiable Events – Duty to Notify

The duty to notify is set out in section 148 of the Protection of the Environment Operations Act 1997 (POEO Act). Pollution incidents causing or threatening material harm to the environment must be notified. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur. 'Material harm to the environment' is defined in section 147. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

The duty to report pollution incidents is a legal requirement that ensures that the appropriate regulatory authority (ARA) and other relevant persons are made aware of incidents that may have caused or threaten serious environmental harm or material environmental harm, and that appropriate action can be taken to minimise the extent of environmental harm caused.

Under the POEO Act, the following people have a duty to notify a pollution incident occurring in the course of an activity that causes or threatens material harm to the environment:

- the person carrying on the activity

- an employee or agent carrying on the activity
- an employer carrying on the activity
- the occupier of the premises where the incident occurs.

Notification must be given immediately, i.e. promptly and without delay, after the person becomes aware of the incident.

Only persons engaged in the activity resulting in the pollution incident, and occupiers of the land where the incident occurs, have a duty to report the incident.

Pollution incidents posing material harm to the environment should be notified to each 'relevant authority' as defined in section 148(8) of the POEO Act. 'Relevant authority' means:

- the appropriate regulatory authority (ARA)
- the Environment Protection Authority (EPA) if they are not the ARA
- the Ministry of Health
- SafeWork NSW (formerly WorkCover)
- the local authority, e.g. the local council, if this is not the ARA
- Fire and Rescue NSW

In general terms, sufficient detail of the incident must be reported to enable appropriate follow-up action. The information required is listed in section 150. Any required information that is not known when the incident is notified must be notified immediately once it becomes known.

If you fail to report a pollution incident posing material harm to the environment as required under Part 5.7 of the Act, you commit an offence. The maximum penalty is \$2,000,000 for corporations, or \$500,000 for individuals.

Under the Act, Watpac is classified an employee, contractor, or agent, who causes or becomes aware of a notifiable event, must notify the person who employs them or engaged them as a contractor or agent (i.e. the Principal) within 24 hours of becoming aware of the event.

The notice must contain sufficient details to provide notice of the event, its nature, and the circumstances in which it happened (for simplicity referred to as the details of the event). Watpac must always keep a record of when and to whom they gave notice of a notifiable event.

If the Principal cannot be contacted, then Watpac must give the administering authority (the State Environmental Authority) written notice with details of the event no later than 24 hours after first becoming aware of the event.

The Principal has a duty to give written notice with details of the event to the administering authority no later than 24 hours after becoming aware of the event.

As soon as possible Watpac must also either:

- Give written notice with details of the event to any combination of the occupiers or registered owners of affected land; or
- Give public notice of the details of the event.

The Environmental Complaint or Incident Report (C-FRM-060) can be used to notify the department (as administering authority) about notifiable events.

In addition to the written notice, if a person becomes aware of a notifiable event, the person should immediately call the State Environmental Protection Authority and report the matter.

Relevant legislative provisions under the POEO Act include:

- section 147: Meaning of material harm to the environment
- section 148: Pollution incidents causing or threatening material harm to the environment
- section 149: Manner and form of notification
- section 150: Relevant information to be given
- section 151: Incidents not required to be reported

- section 152: Offence for breaching duty to notify pollution incidents
- section 153: Incriminating information

4.8. Emergency Response Plan

Actions to respond to foreseeable environmental emergencies are detailed in Aspect 5.19 in Section 5.0 of this PEMP, as well as the Project Emergency Plan (separate document).

The response procedures, emergency contact numbers, responsibilities and required actions for responding to environmental emergencies have been integrated into the Project Emergency Plan.

4.9. Environmental Training & Induction

As part of their site environmental induction/training all personnel engaged in the works shall be made aware of the provisions of this Project Environmental Management Plan in order to promote a general awareness of the environment and to minimise any potential impact upon it. The following inductions are required on the Project:

- Watpac general company induction
- Site-specific induction including environmental component

Watpac General Company Induction

The Watpac general company induction provides an overview of the following items:

- Watpac HSEQ Policy
- Watpac EMS
- Watpac PEMP
- Protection of the Environment Operations Act (POEO Act) 1997
- Environmental responsibilities
- Environmental management issues (e.g. soil and water, flora and fauna, waste, fuel and chemical storage, noise and vibration, air quality and dust, traffic and property access, heritage, community and site restoration)
- Response to and reporting of environmental incidents (including pollution incidents)

This induction is compulsory for all site personnel including subcontractors involved with onsite construction works. Records of inductions are to be documented.

Site-Specific Induction

Prior to any personnel starting work at the project site, they must complete the site-specific environmental induction. This induction will be conducted by the Site Manager or Project Manager and will focus on the environmental management requirements for the project. Records of inductions are to be documented in the Induction Register.

Toolbox Talks

Toolbox talks will be held weekly at the project site. The purpose of the weekly toolbox talks is to facilitate two-way discussion of safety, community, and environment and construction matters at a site level. Details of toolbox meetings held (e.g. site, date, time, Site Manager, topics and attendance record) are to be maintained.

Environmental induction and training will be appropriately commensurate with their roles and environmental responsibilities in the project.

Evidence of environmental induction and training of personnel for this project shall be maintained on the project records.

Contractors shall be responsible for providing evidence to Watpac, as applicable, prior to commencing work that:

- Environmental training needs of their personnel working at the site have been assessed and satisfied
- Contractor personnel have received the appropriate environmental awareness training and / or qualification for the task to be undertaken.

Training requirements for Watpac personnel are identified and planned on appointment to their role, and for each project. The Project Manager will monitor the skills required by Watpac personnel and contractors to effectively implement the PEMP and its procedures on site. Any further training needs will be identified, implemented and recorded in the project records.

4.10. Audits & Site Inspections

To ensure the EMS is implemented and maintained in accordance with the principles of AS/NZ ISO 14001:2004, the Site Manager and/or the Watpac HSE Manager (or delegate) will conduct regular evaluations of the implementation and effectiveness of the PEMP via Weekly Site Inspections.

In addition to Weekly Site Inspections, the HSE Manager (or a third party) will conduct periodic environment audits including an audit of the implementation and effectiveness of this PEMP. The project KPIs include that an audit must be conducted within 6 months of project commencement.

Audits and site inspections will identify any deficiencies in the implementation and effectiveness of environmental management practices at the site. The HSE Manager will issue Non-Conformance Reports (NCRs) or Corrective Action Requests (CARs) as applicable. C-FRM-082 Environment Audit 100 will be used to conduct the site audits and C-FRM-061 Weekly Environmental Inspection will be used to conduct site inspections.

Client, Independent or regulatory audits may also be conducted from time-to-time, however these are not programmed by Watpac. Independent auditing as required by Development Consents will be arranged by the Client.

4.11. Environmental Non-Conformances, Corrective and Preventive Actions

Watpac will identify and evaluate all non-conformances with legal requirements; applicable permits; specifications and the requirements with this PEMP. Non-conformance can be identified via audits, as part of the accident/incident management process and site inspections.

Non-conformance Reports shall be raised as appropriate to clearly identify the nature of the non-conformance and document the proposed remedial action and the person responsible.

The Site Manager will verify follow-up action is implemented and effective. Reports will be filed in the project records.

Corrective and Preventive Action Requests will be raised, where appropriate, as a result of complaints, incidents, non-conformances and deficiencies identified in the implementation of environmental practices and procedures. Corrective and Preventive Action Requests shall be raised, where appropriate, to correct and/or prevent non-conformances in construction activities and in the operation of the Environmental Management System.

Actions as a result of Corrective and Preventive Action requests will be implemented, followed-up and recorded in the Project records.

4.12. Project Environmental Records

The following documents are to be retained in the project records:

- Weekly Environmental Inspection Reports (C-FRM-061)
- Environmental Incident and Complaint Reports (C-FRM-094)
- Environmental Non-Conformance Reports
- Environmental Corrective and Preventive Action Requests
- Environmental Reports (e.g. waste classification, soil/groundwater sampling, geotechnical, external audits)
- Copies of all applicable Environmental Permits

- Environmental Monitoring Records
- Environmental Induction and Training Records
- Environmental Audit Reports (C-FRM-082)
- Project Environmental Risk Assessment (C-FRM-018)
- Any correspondence regarding environmental issues relating to the site.

4.13. Issue and Control of the Project Environmental Management Plan

The Controlled copy of this PEMP is located in the project's environmental folder on the shared network drive. All hard copies of this document are uncontrolled.

The Project Manager is responsible for the issue of the PEMP. Copies of the PEMP shall be distributed electronically via Aconex. The distribution list shall be maintained within Aconex and is available from the Project Document Controller. The PEMP is to be revised with any applicable changes to the environmental requirements for this project.

4.14. Environmental Procedures

The Watpac Environmental Management System includes, but is not limited to, written procedures for controlling the following:

Internal Procedure Number	Description
C-PRO-003	Project Start-Up – Environment
C-PRO-004	Project Start-Up – Emergency Planning
C-PRO-014	Control of Non-Conformances
C-PRO-017	Environmental Control
C-PRO-021	Internal Audit
C-PRO-023	Control of Monitoring and Measuring Devices
C-PRO-028	Corrective and Preventive Action
C-PRO-030	Competence, Training and Awareness
C-PRO-031	Evaluation of Compliance
C-PRO-032	Aspects and Risk Assessment
C-PRO-033	Legal, Statutory and Other Requirements
C-PRO-034	Complaint and Incident Management
C-PRO-036	Environmental Responsibilities
C-FRM-060	Complaint and Incident Report
C-FRM-094	Project Complaint and Incident Register Template
C-PLA-014	Erosion and Sediment Control Guidelines
C-PRO-021	Internal Audit (Q&E)
C-PRO-022	External Audit (Q&E)
C-PRO-034	Complaint and Incident Management
C-REG-007	Environmental Legal and Statutory Requirements Register
C-FRM-018	Environmental Risk Assessments
C-FRM-061	Weekly Environmental Inspection
C-FRM-082	Environment Audit 100
C-PLA-004-N	Project Environmental Management Plan (NSW)

5. Aspects Management

5.1. Environmental Risk Assessment

An Environmental Risk Assessment (C-FRM-018) has been conducted for the project and is presented as Appendix 6.2 to this PEMP. The risk assessment includes issues within the following areas:

- Emissions to air
- Releases to water
- Releases to land
- Waste management, energy and resources
- Biodiversity
- Noise and vibration
- Traffic, transport and access
- Heritage
- Visual amenity
- Utilities and services
- Social and economic impacts
- Site restoration

5.2. Environmental Aspects

The Project Team in consultation with the HSE Manager have identified and addressed the environmental aspects associated with this project. They have:

- Reviewed the environmental requirements of the Contract and Contract Specifications
- Reviewed all environmental consent conditions including licence, permit and development approval consent conditions applicable to the project
- Reviewed specialist environmental reports and recommendations developed in the Project Design Phase (e.g. waste classification, soil and groundwater assessments, geotechnical, heritage, noise and vibration, community consultation, air quality etc.)
- Reviewed the site conditions and proposed construction activities
- Reviewed the Watpac Environmental Legal and Statutory Requirements Register (C-REG-007) to identify applicable legal and other statutory requirements
- Identified for each activity, the environmental aspects and associated actual and potential environmental impacts for normal and uncommon circumstances
- Assessed the inherent and residual significance of each identified environmental risk using the likelihood of occurrence of the impact and the consequence of the impact.
- Documented within this PEMP (and in the Environmental Risk Assessment (C-FRM-018)) project specific action plans and control measures to manage each identified environmental aspect and associated impact.

The environmental aspects associated with the project are documented in the Environmental Risk Assessment (C-FRM-018)

5.3. Action Plans and Control Measures for Identified Environmental Aspects

Environmental Action Plans have been developed to manage each environmental aspect pertinent to this project, as identified in the Environmental Risk Assessment (C-FRM-018)

These procedures document the Objective, Management Strategy, Control Measures, and Performance Indicators for each identified aspect. The procedure for each identified environmental aspect is documented in the sections below.

The Environmental Aspects, Actions and Control Measures included herein shall be routinely monitored, reviewed and updated. Generally this shall occur in line with the 6-monthly review of the PEMP, or any major change to the work scope.

Aspect 5.1

Erosion and Sediment Control (Water Quality Control)

Objective	Maintain the health of any impacted nearby waterbodies.
Management Strategy	Site environmental induction to address: - The issues concerned with the conservation of water usage in construction activities. - The issue of water quality and protective measures to prevent avoidable discharge into, or contamination of, waterways or established drainage systems.
Control Measures	Project Manager shall ensure: - Any water leaving the site must be compliant with the following discharge limits: - Less than 50mg/L Turbidity, or 50 NTU, or less than 10% of the receiving environment (to IECA guidelines). - pH must be betwn 6.5 and 8.5, and - Zero oils, hydrocarbons, coarse material, cement or other chemicals can be present in discharge (by visible inspection). - Wet discharge must be managed. This includes designated areas for washing out of concrete trucks, concrete pumps, paint, masonry cutting, and plaster. Refer to C-PLA-014 for more information. - Painter to utilise environmental washup facility - Use of water for wet trades' clean-up is minimal. - Paint, solvents, oils etc. are correctly stored. - Stockpiles of bulk materials are located well clear of any waterway or drainage systems, protected by sediment fences, and covered by tarp, seed, mulch or chemical binder wherever possible. - Inspect erosion and sediment control measures daily and after rain events. - Maintain erosion and sediment controls until disturbed surfaces are restored. - Limit plant/equipment movements on surfaces susceptible to erosion and unsealed areas. - Suspend construction during and/or after heavy rain if erosion and sediment cannot be controlled. - Minimise on-site storage time of spoil or other eroding materials in stockpiles and/or skip bins. - Where available, a recycled water source will be used for dust suppression. - If water discharge compliance can't be achieved, contaminated water is to be disposed to sewer under Trade Waste Agreement, or collected by a licenced contractor to licenced facility. - Roadways can be swept, not washed down. Machine operated street sweepers shall be used to ensure spoil and debris does not get tracked onto Council or RMS Roads. The frequency of use shall be increased during periods of unfavourable weather - Work in or around watercourses should be managed to minimise impact in accordance with Watpac plan C-PLA-014. - Sediment basins: Refer to C-PLA-014 for establishing, managing and servicing sediment basins. - During bulk excavation, truck shakers shall be installed at all exit points to manage spoil within the site. These shall be at least 6m in length. The bottom shall be lined with geotech fabric - Provide spill kits and training to relevant workers on the use of spill kits Refer to C-PLA-014, Erosion and Sediment Control Guide, for a detailed manual on following ESC Plans and establishing on site.
Performance Indicators	- No incidents of inadvertent waste of water. - No run-off of sediment - No pollution or contamination of waterways.
Reporting	- Daily monitoring reflected in daily site diary entries when required - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form (C-FRM-061)

Applicable Permits	• Authority from local Council and/or NSW EPA required prior to discharge to stormwater. Written authorisation to be obtained. • Trade Waste Permit from Sydney Water required if discharge to sewer infrastructure is required.
Reference	• Managing Urban Stormwater: Soils and Construction. Volume 1, 4th Edition. Blue Book'. • NSW EPA Approved Methods for the Sampling and Analysis of Water Pollutants in NSW • Protection of the Environment Operations Act 1997 (NSW), Section 120 • Standard Methods for the Examination of Water and Wastewater, 20th Edition (APHA). • Water Management Act 2000 (NSW) and Amendment Act 2010 • Water Management (General) Regulation 2011 (NSW) • SSD Conditions: B11, B22, C20, C35, C36 • REF Conditions: 7, 17, 19, 21 • TTW Erosion & Sediment Control Plan (CIV-DNG-00-902)

Aspect 5.2

Protection of Existing Trees

Objective	Protect existing trees from damage and maintain them in their condition as found at time of contractor site possession.
Management Strategy	- Site environmental induction to address the issue of tree protection to prevent damage caused by construction activities. - Establishment of tree protection zones (in accordance with AS4970-2009) around trees identified as significant or otherwise worthy of retention in the Arboricultural Development Assessment Report (<i>Moore Trees Arborist Report, Hornsby Ku-ring-gai Hospital S2 24/10/2017</i>, Appendix K of SSD Application 17_8647)
Control Measures	Project Manager shall ensure: - Tree Protection Zones (TPZs) are established around trees identified as significant or otherwise worthy of retention in the Arboricultural Development Assessment Report, and access is restricted to TPZs by the use of protective fencing which is maintained and regularly checked. - If fencing cannot be installed, or must be temporarily removed, other tree protection measures must be used such as: signage, trunk and branch protection, ground protection, root protection during works within the TPZ. All subcontractors engaged by Watpac are to ensure: - Protective measures (i.e. fencing) around TPZs are not disturbed without express written permission from Watpac site management. - Works including but not limited to the following are not undertaken within TPZs: machine excavation including trenching, excavation for silt fencing, removal of turf and topsoil, storage/stacking of items, preparation of chemicals (including cement products), vehicle and plant parking, refuelling, dumping of waste, washing and cleaning of equipment, placement of fill, lighting of fires, changing of soil levels, temporary or permanent installation of utilities and signs, physical damage to the tree.
Performance Indicators	No damage to protected trees.
Reporting	- Daily monitoring reflected in daily site diary entries when required - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form (C-FRM-061)
Reference	- Australian Standards 4970-2009: Protection of trees on development sites - Environment Protection and Biodiversity Conservation Act 1999 - Environment Protection and Biodiversity Conservation Regulations 2000 - Threatened Species Conservation Act 1995 - Native Vegetation Act 2003 - Contract Specifications - SSD Conditions: B42-45 - REF Conditions: 7, 12 - Arboricultural Development Assessment Report (<i>Moore Trees Arborist Report, Hornsby Ku-ring-gai Hospital S2 24/10/2017</i>, Appendix K of SSD Application 17_8647)

Aspect 5.3

Noise and Vibration Management

Objective	Control, minimise or avoid environmental nuisance caused by 'unreasonable' levels of noise or vibration in ground works or other structural activities.
Management Strategy	- Engage expert consultant (Acoustic Logic) to prepare Noise and Vibration Management Plan - Site environmental induction to address the issue of noise and protective measures to prevent 'unreasonable' noise caused by construction activities. - Site environmental induction to address the issue of vibration and protective measures to prevent disturbance/incidents caused by vibration. - Identify works likely to cause high vibration—communicate this to the Principal and to neighbours. - Where possible and feasible, adjust construction methodology / techniques to implement less obtrusive noise / vibration generating construction or demolition techniques. - If ongoing complaints regarding noise levels are received, review construction methods and where necessary undertake noise monitoring - Abide by the approved site working hours as follows; SSD Approval - M-F 7:00am - 6:00pm - Sat. 8:00am - 1:00pm - Sun & P. Hols. No Work REF Approval for Stormwater and Sewer works - M-F 7:00am - 5:00pm - Sat. 7:00am – 3:30pm - Sun & P. Hols. No Work - Noisy works to be restricted to 9:00am-12:00pm and 2:00-5:00pm M-F and 9:00am-12:00pm Saturday. Respite periods shall be provided at minimum 3 hourly increments.
Control Measures	All subcontractors engaged by Watpac are to ensure: - Works are carried out in accordance with the Noise and Vibration Management Plan prepared by expert consultant Acoustic Logic - Utilise fixed vibration monitoring as identified by Consultant, and routine hand-held noise monitoring. Maintain records.
Performance Indicators	- No repeat complaints concerning noise nuisance from the project site - No structural damage to existing and retained buildings caused by vibration - No fines received from the regulator
Reporting	- Daily monitoring reflected in daily site diary entries when required - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form (C-FRM-061)
Reference	- Protection of the Environment Operations Act 1997 (NSW) - Protection of the Environment Operations (Noise Control) Regulation 2008 (NSW) - Contract Specifications - Australian Standard 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites - Protection of the Environment Operations Act 1997 (NSW) - Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth), s12, 15B, 16, 18, 20, 21, 23, 24B, 24D - Assessing vibration: a technical guideline 2006 - AS 2670.2-1990 Evaluation of human exposure to whole-body vibration Continuous and shock-induced vibration in buildings (1 to 80 Hz) - BS6472 Guide to Evaluate Exposure to Vibration in Building (1Hz to 80Hz) - DIN4150 Part 3 Structural Vibration – Effects of vibration on structures - Interim Construction Noise Guideline (Department of Environment and Climate Change NSW) 2009. - SSD Conditions: B14, B24, C4-C10

- REF Conditions: 7, 16, 20, 22, 23

Aspect 5.4

Dust, fumes & air quality control

Objective	Avoid, control or minimise contaminant emissions to the atmosphere caused by rising dust, vehicle/plant emissions, noxious fumes/odours, or paint spraying activities.
Management Strategy	• Site environmental induction to address the issue of air quality and protective measures to prevent avoidable discharge of contaminant to the atmosphere • Implement measures for control and suppression of dust
Control Measures	All subcontractors engaged by Watpac are to ensure: • Dust is minimised throughout work areas. During the demolition phase dust will be minimised by heavy duty shade cloth, water suppression and demolition strategy. • Materials deliveries such as fill, soil, sand, gravel, landscaping supplies etc, are transported to the site under covered loads. • Stockpiles are dampened down or covered as necessary. • Trucks are not overloaded and load covers are used when excavated material is transported from site. • Plant and equipment is operated and maintained in accordance with acceptable industry standards and will be turned off when not in use. • Putrescible waste is regularly removed from site. • Site conditions are regularly inspected and hand held sprinklers and/or water cart are used as required to minimise dust. • On-site speed restrictions and the need to control dust are formally discussed during site inductions. • Roads bordering the site kept free of dust and mud (regular mechanical and manual sweeping as required). • External paint spraying activities are undertaken in accordance with local authority requirements and not carried out during adverse weather conditions. • Refer Appendix 6.2 • Access roads and materials handling areas to be swept regularly.
Performance Indicators	• Visual observance of dusts levels; vehicle and plant emissions • No dust complaints
Reporting	• Daily monitoring reflected in daily site diary entries when required • Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form
Reference	• Protection of the Environment Operations Act 1997 (NSW) • Protection of the Environment Operations (Clean Air) Regulation 2010 (NSW) • National Greenhouse and Energy Reporting Act 2007 (NGER Act) • National Environmental Protection Measure (NEPM) for Ambient Air Quality • Contaminated Land Management Act 1997 (NSW) • SSD Conditions: B22, C15 • REF Conditions: 7, 15, 20, 21 • CG21 Preliminaries: 5.17

Aspect 5.5

Retention of the Timber of Angophora Trees for Use by the Public Artist

Objective	Avoid, control, or minimise damage to nominated Angophora trees during removal and temporary on-site storage prior to handover to artist engaged by client.
Management Strategy	- Trees removed by others prior to Watpac engagement. Stored off-site. - If transferred to site, timber shall be protected until used by the artist engaged by the client or another authorised client's representative.
Control Measures	Project Manager shall ensure: Adequate storage is provided to reasonably protect the timber from damage by both human and natural causes.
Performance Indicators	Acceptance by the artist engaged by the client or another authorised client's representative.
Reporting	Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form, in accordance with Aspect 5.2 above.
Reference	Contract Specifications and Preliminaries

Aspect 5.6	
Vehicular and Pedestrian Traffic Management	
Objective	Avoid interference of, or obstruction to, roadways, footpaths or access points by the use of appropriate traffic control measures.
Management Strategy	• Site environmental induction to address the issues of access and delivery arrangements for materials including timing and unloading of materials. • Coordinate construction programme and delivery times to avoid hold-ups and traffic congestion. • Provide appropriate fencing/hoardings and protection for the public.
Access	• Access to the site will be determined to minimise impact.
Control Measures	Project Manager shall ensure: • Prior to site establishment ensure a Traffic Management Plan (TMP) has been prepared and approved by appropriate authority (Council or Roads and Maritime Services (RMS)). • Controls documented in the approved Traffic Management Plan are implemented • Refer to approved TMP for specific management actions related to road closures (diversions, signage, barricading etc.). • Control of traffic on public roads to be conducted by RMS-certified Traffic Controller (as per specifications in TMP). • Ensure a Road Occupancy Licence is obtained from the RMS. Confirm times and dates approved under the Road Occupancy Licence and comply with any conditions. • Ensure a Road Opening Permit is obtained from the local Council, where required. • Vehicle entry/exits with shakedown grids will be established to remove the potential for vehicles departing the site to deposit debris on the roads. Watpac will deploy street sweepers as required. Retain records / note in site diary. • Site fencing/hoarding is properly secured and lockable; access points are clearly designated, and appropriate signage erected. • Materials set-down areas are established. • Construction program and delivery times are coordinated to avoid delays and possible traffic congestion. • Access points for each stage of construction are unobstructed to facilitate prompt service to set-down areas within the site. • Materials handling is managed to cause least disruption to traffic and local amenity. • Traffic Controllers are RMS accredited • There shall be no trucks permitted to queue on local roads. All trucks will be required to queue on state roads until they can be wholly accommodated within the site or within an approved work zone. Two-way radios and/or mobile phones shall be used to manage this condition. • Where required, all pedestrians shall be escorted across the site by RMS accredited Traffic Controllers.
Performance Indicators	• Reports or complaints of interruption or interference with pedestrian or vehicular traffic movement around the site.
Reporting	• Daily monitoring reflected in daily site diary entries • Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form
Applicable Permits	• Road Occupancy Licence (RMS) • Road Opening Permit (Council) • Traffic Control Permit (Traffic Controller)
Reference	• Public Health Act 2010 (NSW) • Road Transport Act 2013 (NSW) • Road Transport (General) Regulation 2013 (NSW) • Roads Act 1993 (NSW)

- SSD Conditions: B21, B22, B28, C37
- REF Conditions: 7, 15, 20

Aspect 5.7

Commuting Mass Transport & Local Car Parking

Objective	Encourage commuting mass transport on site and minimise impact to local neighbourhood associated with car parking congestion.
Management Strategy	Inform and promote alternative transports options on site.
Control Measures	Project Manager shall ensure that: - • Inductions and Safety Meetings address and promote carpooling, company buses, or public transport options. • Nearby public transport hubs should be identified during inductions. • Provide shuttle bus service during peak morning and afternoon times to/from site to local public transport hub/exchange.
Performance Indicators	• Site personnel are using alternative means of transport.
Reporting	• Performance to be noted in monthly PCG report.
Reference	• None • REF Conditions: 7, 20

Aspect 5.8

Accidental Discovery of Artefacts

Objective	Avoid damage or disturbance to archaeological/cultural artefacts including skeletal remains, shell middens or other cultural artefacts.
Management Strategy	- Review historical information of the site (where available) to establish, as far as practical, the likelihood of existence of archaeological/cultural artefacts. - Site environmental induction to address possibility of discovery of archaeological/cultural artefacts - Excavation personnel to remain vigilant over ground penetration points.
Control Measures	Project Manager shall ensure: - Where archaeological/cultural artefacts are discovered, personnel cease work in the subject area and call a heritage specialist for advice. - The Client and the NSW Heritage Office is promptly advised of significant discoveries. This would be most likely done through the engagement of a heritage consultant. - Directions from the NSW Heritage Office are followed - If suspected human remains are discovered that work is ceased and the Site Manager, Police and State Coroner's Office are contacted, and if applicable, Aboriginal Affairs NSW - In the event that archaeological 'relics' are unexpectedly discovered during excavation; work must immediately cease in the affected area and the Client and historical specialist contacted to inspect and record the remains. The NSW Heritage Council must be notified in writing of the discovery of any relics. Depending on the nature of the discovery, additional assessment and approval may be required prior to the recommencement of excavation in the affected area. - If any Aboriginal objects are discovered on the site, excavation or disturbance is to cease and the Client and NSW National Parks and Wildlife Service is to be informed.
Performance Indicators	No damage, or minimal disturbance, to any archaeological/cultural artefacts discovered.
Reporting	- Superintendent is immediately notified of any discovery - Daily monitoring reflected in daily site diary entries - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form
Reference	- Environment Protection and Biodiversity Conservation Act 1999 - Heritage Act 1977 - Aboriginal and Torres Strait Islander Heritage Protection Act 1984 - Aboriginal and Torres Strait Islander Heritage Protection Regulations 1984 - Australian Heritage Council Act 2003 - Environmental Planning and Assessment Act 1979 - SSD Conditions: B22, C18 - REF Conditions: 7, 20, 24

Aspect 5.9

Demolition Works

Objective	Avoid, control, or minimise disruptive or damaging environmental effects of demolition works.
Management Strategy	- Site environmental induction to address issues of air quality, noise, vibration and vermin/pests, and relevant protective measures. - Implement site-wide measures for control and minimisation of dust, odours, fumes, noise, vibration, and vermin/pests.
Control Measures	All subcontractors engaged by Watpac are to ensure: - All demolition work is undertaken in accordance with AS2601-2001: Demolition of Structures. - Dust is minimised throughout work areas. During the demolition phase dust will be minimised by heavy duty shade cloth, water suppression and demolition strategy. - Plant and equipment are operated and maintained in accordance with acceptable industry standards and will be turned off when not in use. - Trucks are not overloaded, and load covers are used when demolished material is transported from site. - All construction activities will be undertaken mindful of the provisions of AS 2436:1981 - Guide to Noise Control on Construction & Demolition Sites. - Each item of plant is fitted with effective noise suppression devices (generally exhaust mufflers) as applicable. - All plant, equipment and machinery are operated and maintained in accordance with acceptable industry standards and turned off when not in use. - Vibration is controlled in accordance with AS 2670.2. - Six weeks prior to the commencement of any demolition, individual blocks, properties and the surrounding area should be inspected in order to identify the presence and extent of any infestations. Where infestations are identified, appropriate treatments must be implemented by licenced Pest Control Contractors to eliminate infestation before demolition.
Performance Indicators	- Visual observance of timber condition before and after felling. - Acceptance by the artist engaged by the client or another authorised client's representative.
Reporting	Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form, in accordance with Aspect 5.2 above.
Reference	- Australian Standard 2601-2001: Demolition of Structures - Australian Standard 2436-1981: Guide to Noise Control on Construction, Maintenance and Demolition Sites - SSD Conditions: A6, B26, C22, AN8 - REF Conditions: 6, 7, 14, 15, 20, 25, 26

Aspect 5.10

Waste Management

Objective	To control the disposal of waste generated from construction activities.
Management Strategy	- Site induction to address the issue of waste management and protective measures to prevent environmental incidents caused by inappropriate methods of waste disposal. - Designated bin storage locations (for both wheelie bins & skips), and an appropriate regime for clearance.
Control Measures	Project Manager shall ensure: - A Waste Management Plan (C-PLA-012) is developed and implemented to ensure at least 80% of waste generated during demolition and construction by weight is reused or recycled. - The SDS of Chemicals and Hazardous Substances should be consulted before disposal instructions, which will usually involve dropping of containers to Chemical Waste/Hazardous Collection stations. Containers must not be washed out and disposed of as normal. - Waste is minimised through the use of detailed measurement and conservative ordering to prevent oversupply of materials. - All waste will be sorted (including that from clearing, demolition, off cuts, etc.) into appropriate categories for recycling or disposal. - Spoil is to be loaded directly to appropriate vehicle for transport to approved disposal or recycling facility (if pre-classified) or stockpiled in a designated area on site to enable samples to be collected for chemical testing. Spoil that can be classified as VENM by observation does not require chemical testing. VENM classifications are to be made by an environmental specialist and documented. - All waste (liquid and non-liquid) must be classified prior to disposal/ reuse/ recycling. Contact the Watpac HSE Manager to confirm waste classification requirements or refer to the Watpac Waste Classification Procedure. - Where required, ensure waste transportation company is appropriately licensed (refer Watpac Waste Classification Procedure). - Ensure hazardous waste transporters and receiving facilities are licenced to transport and receive hazardous waste. Obtain copies of licences. - Watpac will ensure that all recyclables are placed into appropriate recycling processes and uses (e.g. scrap metal, mulch, road base) and that wastes are safely disposed of. - Work with the waste contractor engaged for the project to ensure that all practicable initiatives to minimise, segregate, re-use and recycle construction waste are identified and implemented. "Ship to point of use" techniques will be deployed where practical to minimise protective wrappings or enclosures. - Waste skips/bins are covered and located to be easily accessible and protected from weather. - A recycling bin will be provided separately to the bin for Construction waste material and general waste (food scraps, cans, etc). - Paper and toner waste will be collected and recycled in specific office bins. - The construction site is kept free from build-up of waste materials by directing regular clean-ups by subcontractors. - No burning of waste takes place on-site. - Concrete washouts will be provided on site, allowing evaporation of slurry water. Refer to C-PLA-014 for more info on correct establishment. - Paint washouts will be provided. - Neither Watpac nor any subcontractor will discharge or dump any deleterious materials into the drainage system, onto any roads or at any locations that have not been reviewed and approved by the Principal. - Limit the storage of chemicals (e.g. fuels, lubricants, hydraulic fluids, etc) on site. Where chemicals are stored on site, they must be stored appropriately (location and storage) in accordance with the WHS Act and Regulation 2011, and AS 1940 – 2004: The Storage and Handling of Flammable and Combustible Liquids and the chemical's

	Safety Data Sheet (SDS). - The SDS for Hazardous Chemicals should be consulted for disposal instructions, which will usually involve dropping of containers to Chemical Waste/Hazardous Collection stations (or collection by supplier). Containers must not be washed out and disposed of as general waste. - Any liquid waste, including backwash of wet trades, should be collected by a licensed liquid waste collection contractor (look for 'Waste Reduction and Disposal Services')
Performance Indicators	No incidents arising from the disposal of end waste.
Reporting	- Waste Reports including details of the percentage of waste diverted from landfill, to be maintained, where applicable - Daily monitoring of waste facilities reflected in daily site diary entries - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection (C-FRM-061)
Reference	- National Environment Protection (Movement of Controlled Waste between States and Territories) Measure. - Protection of the Environment Operations Act 1997 - Protection of the Environment Operations (Waste) Regulation 2014 - Waste Avoidance and Resource Recovery Act 2001 - EPA Waste Classification Guidelines 2014 - Construction and Demolition Waste Guide - Recycling and Reuse across the Supply Chain - National Waste Policy: less waste, more resources 2009 - National Packaging Covenant - Work Health and Safety Act 2011 - Work Health and Safety Regulation 2011 - AS 1940 – 2004: The Storage and Handling of Flammable and Combustible Liquids and the chemical's Safety Data Sheet (SDS)SSD Conditions: B17, B22, B26, C14-16, C32-34. - REF Conditions: 7, 14, 20 - CG21 Preliminaries: 5.16, 6.3

Aspect 5.11

Hazardous Substances and Dangerous Goods

Objective	To avoid contamination of the environment or risk to human health To appropriately manage the discovery of Hazardous Materials on site
Management Strategy	Site environmental induction to make personnel aware of the project handling and storage procedures to manage Hazardous Substances and Dangerous Goods • All hazardous materials introduced onto site must be accompanied by a MSDS and the material entered onto the project register. • All hazardous materials must be stored in compliance with the manufacturer's recommendations and in accordance with Australian Standards • No bulk fuels are to be retained on site. Refuelling of plant is to be undertaken on as required basis and only within a prepared designated area (or as otherwise approved). • Any discovery of a hazardous material is immediately reported to the client.
Control Measures	All subcontractors engaged by Watpac are to ensure: • The quantities of Hazardous Substances and Dangerous Goods on site are minimised • Fuelling and maintenance of vehicles and equipment on site is avoided. Where refuelling is unavoidable, the location and procedures will be strictly controlled. • Subcontractors advise the Site Manager of the type of material, location, volume and any special handling / storing precautions in relation to any dangerous gases or flammable materials that are proposed to be brought on site. • Subcontractors do not use any materials which are classified as Hazardous in or adjacent to occupied areas without the prior approval of the Site Manager. • Subcontractors provide a current MSDS for all Hazardous Substances and Dangerous Goods proposed to be brought onto site. • A Site MSDS Register is developed and maintained. • Storage and handling of hazardous materials is monitored daily. • A Spill Kit and Site Emergency Plan are readily accessible. • Clean up materials are disposed of in compliance with regulatory requirements. • All oxygen and acetylene cylinders are properly stored in an upright position and adequately restrained away from heat sources.
Performance Indicators	• No spillages, incidents or complaints
Reporting	• Licenced removal contractor to provide site safety clearance certificate and documented evidence of proper disposal. • Health Infrastructure must be notified in accordance with the HI Stakeholder Management Plan Process. Refer to Appendix 6.1
Reference	• Work Health and Safety Regulation 2011 (NSW), s 357 • National Code of Practice for the Storage and Handling of Workplace Dangerous Goods [NOHSC: 2017 (2001)]. • Environmentally Hazardous Chemicals Act 1985 (NSW) • SSD Conditions: B5-8, B17, B26, C12-17, C35, AN8, AN9 • REF Conditions: 7, 10, 14, 15, 20, 25, 26 • CG21 Preliminaries: 5.6, 5.7

Aspect 5.12

Spill Management and Response

Objective	Control, minimise or avoid spillage of hazardous or prohibited substances, and react quickly to contain spills in the event they occur.
Management Strategy	- Induct all personnel to handle chemicals with care. - Provide spill kits to all sites.
Control Measures	In event of spill: Assess: Evaluate the spill to determine if it can be dealt with by an individual, the spill response team or if outside assistance is required i.e. hazchem, police, fire brigade, specialist spill response company. Secure: Make the site safe for all personnel and the general public. Contain: Spill response equipment such as spill booms, drain covers or bunding can be used to contain the spill. For solids, tarps may be used to cover and prevent dampness to granules or possible dispersion by wind. PPE: Identify the liquid and check the MSDS to ascertain the required PPE. Absorb: Once the liquid is contained, it will need to be converted to a solid by absorption. Use the appropriate absorbing pads or absorbent (according to the type of material spilled) to soak up the spill by placing them over the liquid. Remove the saturated pads and replace as necessary. On porous surfaces, sprinkle loose absorbent over the spill and broom through until surface appears dry. Dispose: Place the spent absorbent in the disposal bags. Correctly dispose of contaminants off site using a licensed contaminated waste disposal contractor. Report: Document the incident and include what happened, when it happened, where it happened; and what was done to eliminate or minimise the impact. Restock: Order and replace used up PPE and absorption materials. Project Manager shall ensure: - Spill containment and treatment equipment and materials will be available near storage areas of hazardous materials. Spill kits and other suitable incident response equipment will also be located at other key points around the site and maintained ready for use. - Subcontractors will be required to maintain their own spill kits where required. - Spills of hazardous materials will be collected by licensed contractor and collected for treatment at a licensed waste disposal facility. - All hazardous waste will be tracked as per the Protection of the Environment Operations (Waste) Regulation 2014 and the NSW EPA Waste Classification Guidelines 2014 - Contaminated ground is remediated in accordance with the Contaminated Land Management Act 1997 and Regulation 2013. - SWMS must be submitted and approved for the handling and use of hazardous chemicals. - Any waste oils, lubricants and contaminated cloths, resulting from maintenance of plant on-site, are placed in suitable containers prior to removal and disposal at an approved waste receiving facility. - Wastes generated on site are to be managed in accordance with the Watpac Waste Management Plan (C-PLA_012). - Project Environment Consultant to prepare a Remediation Plan for the management of all contaminated soil. The Remediation Plan shall be submitted to Principal for approval.
Performance Indicators	- No spillages. - Spill kits readily accessible.
Reporting	- Daily monitoring reflected in daily site diary entries when required - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form (C-FRM-061) - Health Infrastructure must be notified in accordance with the HI Stakeholder Management Plan Process. Refer to Appendix 6.1
Reference	Work Health and Safety Regulation 2011 (NSW)

- Protection of the Environment Operations Act 1997 (NSW)
- Protection of the Environment Operations (Waste) Regulation 2014
- EPA Waste Classification Guidelines 2014
- National Code of Practice for the Storage and Handling of Workplace Dangerous Goods [NOHSC: 2017 (2001)].
- SSD Conditions: B22, C15, C35
- REF Conditions: 7, 17, 19, 20, 21

Aspect 5.13

Management of Radiation and Radioactive Material

Objective	To avoid contamination of the environment or risk to human health during demolition, construction, commissioning and post-handover operation.
Management Strategy	Site induction to make personnel aware of the radiation-specific design and construction requirements of the Medical Imaging building and any other location where radiation-related activities will be required during operation of the facility. Certification of compliance with the <i>Radiation Control Act 1990</i> and <i>Radiation Control Regulation 2013</i> before commencement of construction works and again before commencement of hospital operation by a suitably qualified radiation consultant.
Control Measures	Project Manager shall ensure: • Site induction makes personnel aware of the radiation-specific design and construction requirements of the Medical Imaging building and any other location where radiation-related activities will be required during operation of the facility. • Prior to the release of the certificate under Section 109R of the EP&A Act 1979, certification of design compliance with the <i>Radiation Control Act 1990</i> and <i>Radiation Control Regulation 2013</i> is provided to the certifying authority. • Construction works are undertaken in accordance with the Radiation Shielding Assessment Report (dated 22/04/2016 by Radiation Services Group, received as part of the tender documentation). • Prior to commencement of hospital operation, certification from a suitably qualified radiation consultant is provided to verify that the construction of the work satisfies all relevant requirements. All subcontractors engaged by Watpac are to ensure: • They are aware of the radiation-specific design and construction requirements of the Medical Imaging building and any other location where radiation-related activities will be required during operation of the facility as detailed in the site induction. • Their works are undertaken in accordance with the Radiation Shielding Assessment Report (dated 22/04/2016 by Radiation Services Group, received as part of the tender documentation), as well as the <i>Radiation Control Act 1990</i> and <i>Radiation Control Regulation 2013</i>.
Performance Indicators	• Certifications of compliance received. • No incidents or complaints.
Reporting	• Works to be certified by a suitably qualified radiation consultant; certifications to be provided to the Principal.
Reference	• Work Health and Safety Regulation 2011 (NSW) • Radiation Control Act 1990 • Radiation Control Regulation 2013 • Radiation Shielding Assessment Report (dated 22/04/2016 by Radiation Services Group, received as part of the tender documentation) • REF Conditions: 7, 13, 28

Aspect 5.14

Landscape Maintenance

Objective	Avoid, control, or minimise damage to landscaped areas within the contractor's site boundary and associated loss of amenity for hospital users/stakeholders.
Management Strategy	• Site environmental induction to address preservation of landscaped areas that are within the contractor's site boundary but are not targeted for construction/demolition works. • Allow for landscaping subcontractor to make good any damaged landscaped areas that are not included with the scope of works for new landscaping.
Control Measures	All subcontractors engaged by Watpac are to ensure: • Vehicles are not driven or parked on landscaped areas. • Landscaped areas are not used as materials storage areas.
Performance Indicators	• Visual observance of landscaped areas.
Reporting	• Daily monitoring reflected in daily site diary entries when required. • Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form, in accordance with Aspect 5.2 above.
Reference	• Protection of the Environment Operations Act 1997 (NSW) • Environmental Planning and Assessment Act 1979 (NSW) • Native Vegetation Act 2003 (NSW) • SSD Conditions: D8, E7 • REF Conditions: 27

Aspect 5.15	
Construction Site Management	
Objective	To avoid nuisance, disruption or danger to local residents and hospital staff, patients and visitors.
Management Strategy	Site induction to make personnel aware of the rules and requirements of the site, and relevant workplace safety legislation and principles. Vigilant monitoring of site conditions and subcontractor behaviour by Watpac staff.
Control Measures	Project Manager shall ensure: • Site induction makes personnel aware of the rules and requirements of the site, and relevant workplace safety legislation and principles. • Construction fencing is installed and maintained along the site boundary, and around any zones of work that are required outside of the established boundary. Vehicle and workforce access points and roads to the construction compounds are clearly designated and controlled for authorised access only. • The worksite is left tidy and free of rubbish each day prior to leaving the site and at the completion of works. • Suitable arrangements are made for temporary parking for hospital staff, visitors, patients and construction workers for the duration of the construction program. • All materials on-site or being delivered to the site are wholly contained within the site. The requirements of the <i>Protection of the Environment Operations Act 1997</i> are to be complied with when placing/stockpiling loose material or when disposing of waste products or during any other activities likely to pollute drains or watercourses. • The public roadway and internal roadway are not obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances, except without prior approval of the road authority under the <i>Roads Act 1993</i>. • A copy of the approved and certified plans, specifications and documentation shall be kept on site at all times and shall be available for perusal. • Any contractor(s) meets all workplace safety legislation and requirements. • Any loose material stockpiles are stored within the temporary construction compound(s) and are protected from possible erosion.
Performance Indicators	• No incidents or complaints.
Reporting	• Daily monitoring reflected in daily site diary entries when required. • Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form.
Reference	• Work Health and Safety Regulation 2011 (NSW) • Protection of the Environment Operations Act 1997 (NSW) • Environmental Planning and Assessment Act 1979 (NSW) • SSD Conditions: A23, B22, B23-31, C1-C37 • REF Conditions: 7, 20

Aspect 5.16	
Site Accommodation	
Objective	Control, minimise or avoid contamination or spoiling of areas in the establishment, operation and disestablishment of temporary site accommodation facilities.
Management Strategy	- Establish temporary site offices, amenities and ablution facilities, including provision for sanitary waste, in accordance with the requirements of the relevant local authority, all relevant Acts and Regulations and industry best practice. - Remove all temporary buildings and facilities from site when no longer needed and make good all disturbed areas, including landscaping where required.
Control Measures	Project Manager shall ensure: - Site offices, amenities and ablution facilities are located and operated in such a manner as not to cause environmental concern - Site offices, hoarding, crossovers and fencing complies with the approved Site Plan or approved revision - The site is made good upon disestablishment of the site accommodation facilities. - Adequate firefighting equipment is provided and maintained for the works - Required permits and approvals are received prior to commencing works - Install automatic shut-off taps to water points and utilise low voltage luminaries to site facilities - No trees or vegetation is damaged or removed for site accommodation facilities. Adequate tree protection will be provided. - The Contractor must ensure that construction routes are cleaned regularly at weekly intervals or as required. - The hours of work for the project are: - Monday to Friday – 7:00am – 6:00pm - Saturday 8:00am – 1:00pm - Excluding Public Holidays - No work is undertaken outside the specified Hours of Work without Contract Administrator approval
Performance Indicators	- Appropriate location and operation of all facilities. - Site reinstated upon completion of project.
Reporting	- Daily monitoring reflected in daily site diary entries when required - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form (C-FRM-061)
Reference	- Approved Site Plan - Australian Standard 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites - Hornsby Shire Council Local Environment Plan - Environmental Planning and Assessment Act 1979 (NSW) - Native Vegetation Act 2003 (NSW) - Protection of the Environment Operations (Noise Control) Regulation 2008 (NSW)

Aspect 5.17

Site Amenities

Objective	Maintain hygiene and reduce nuisance created by site accommodation.
Management Strategy	- Keep site clean and tidy - Monitor area
Control Measures	Project Manager shall ensure that: - - Septic waste issues from overflowing portable toilets and unaccounted sewerage pipe burst is avoided. - Adequate lavatory systems are provided within reasonable proximity of working areas - Septic waste removal service is scheduled - Toilet facilities are well maintained - Clean up procedures are included in induction - There is bunting around temporary septic systems - There is a suitable and adequate amount of signage - Site induction demonstrate proper site behaviour - Waste paper waste from site office is collected in paper recycling bins and regularly collected. - Cardboard waste bin is provided on site. - All putrescible waste is stored in secure containers until removal and disposal off site. - A daily 'sweep' of the entire area is done to remove any stray/windblown litter. - Designate specific areas on site for the temporary management of waste; i.e. general domestic waste, works waste and contaminated waste. - Waste streams will be segregated to enhance recycling opportunities where practicable i.e. general domestic waste, works waste and contaminated waste. - All domestic and hazardous waste to be disposed of in dedicated industrial bins. - Waste bin lids to be closed at all times to avoid rainwater ingress, windblown littering, access by birds and scavenging by vermin, birds or native wildlife. - Waste oils to be recycled where practicable. - No waste will be burnt on site.
Performance Indicators	No odour or vermin present
Reporting	Monthly waste reports from waste contractor
Reference	None

Aspect 5.18

Identification and Protection of Existing Utility Services

Objective	Avoid damage to, or unplanned interruption of, utility, overhead and underground services.
Management Strategy	- Site environmental induction to address location of and protective measures for utility services. - Identify, mark and protect utility services (electricity, water, gas etc.). - Ensure all necessary interruptions to utility services are planned and communicated to all relevant persons and Authorities.
Control Measures	Project Manager shall ensure: - Existing services plans will be studied, and services will be located and marked prior to commencing any works. - Comprehensive “consolidated services plans” will be procured and prepared for all works areas including type, location, depth etc. of all known or identifiable services (to be prepared by surveyor). - Services Detection will be undertaken wherever services are likely to be encountered. - Non-destructive excavation techniques to be implemented wherever possible, especially around existing services. - Contact telephone numbers for emergency services for utilities are established and readily available in the Site Emergency Plan - Storage areas are located remote from utility services. - Access ways, haul roads and turning points are arranged to avoid possible clashes with utility services. - Overhead protection/warning is provided for high loads, vehicles, cranes etc. - Spotters are provided when work is undertaken beneath overhead power lines. - Where it is found necessary to temporarily interrupt, remove, divert or make connection to an existing service or other existing work beyond the control of the Watpac, written approval from the Principal will be sought prior to undertaking Works.
Performance Indicators	No unplanned interruptions to any utility service.
Reporting	- Health Infrastructure must be notified in accordance with the HI Stakeholder Management Plan Process. Refer to Appendix 6.1 - Notification to relevant authorities - Daily monitoring reflected in daily site diary entries - Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form
Applicable Permits	- Dial Before You Dig - Permit to Dig (Watpac NSMS Form)
Reference	- Work Health and Safety Act 2011 - Energy and Utilities Administration Act 1987 (NSW) - SSD Conditions: B32, B33, C33 - REF Conditions: 7, 18, 20 - CG21 Preliminaries: 5.4, 5.15

Aspect 5.19	
Vermin and Pest Control	
Objective	Minimise the possibility of infestation from rats, mice, insects, bats, possums etc.
Management Strategy	- Keep site clean and tidy - Monitor area for infestation - Consult Pest Management Contractor if required
Control Measures	Project Manager shall ensure that: - - Keep site clean and tidy with daily clean-ups. - Ensure all putrescible waste is disposed of in an appropriately sealed receptacle. - Six weeks prior to the commencement of any demolition, individual blocks, properties and the surrounding area should be inspected in order to identify the presence and extent of any infestations. Where infestations are identified, appropriate treatments must be implemented by licenced Pest Control Contractors to eliminate infestation before demolition. - Minimise ponding and exposed water sources to prevent mosquitos and midgeys. - Ideally, licenced Pest Control Contractors should be consulted for management strategies after the substructure is completed. Frequently the dark cold environment can be a pest habitat which presents an unacceptable working environment. - To prevent rat egress from live drains and sewers to new systems, the live systems should be temporarily sealed off with expanding drainage stoppers until connection to new drainage is completed. - Where vermin present itself as a problem on site, consult a Pest Control company for advice. Do not attempt to address the problem internally.
Performance Indicators	No infestations.
Reporting	None
Reference	- Work Health and Safety Regulation 2011 - CG21 Preliminaries: 6.4

Aspect 5.20

Environmental Emergency Plans

Objective	The Project Manager shall ensure that: - • A Spill kit is available on site at all times • All reasonable measures are taken to prevent environmental emergencies • The Project Emergency Plan is readily accessible to all site personnel • Emergency Plans are part of site Inductions
Reporting	• Health Infrastructure must be notified in accordance with the HI Stakeholder Management Plan Process. Refer to Appendix 6.1 • All emergency situations to be reported, investigated and recorded
In the event of an environmental incident	• Stop work and secure the area if safe to do so • Initiate the Project Crisis Checklist • Prevent the incident from escalating • Notify applicable management, emergency services and authorities • Clean up the affected area. Engage specialist help if required • Investigate the circumstances • Record the incident • Implement actions to prevent a recurrence • Follow-up to ensure the actions were correctly implemented and effective
In the event of an incident involving a dangerous goods spill, leak or explosion;	In event of spill: • Assess: Evaluate the spill to determine if it can be dealt with by an individual, the spill response team or if outside assistance is required. • Secure: Make the site safe for all personnel and the general public. • Contain: Spill response equipment such as spill booms, drain covers or bunding can be used to contain the spill. For solids, tarps may be used to cover and prevent dampness to granules or possible dispersion by wind. • PPE: Identify the liquid and check the MSDS to ascertain the required PPE. • Absorb: Once the liquid is contained, it will need to be converted to a solid by absorption. Use the appropriate absorbing pads or absorbent to soak up the spill by placing them over the liquid. Remove the saturated pads and replace as necessary. On porous surfaces, sprinkle loose absorbent over the spill and broom through until surface appears dry. • Dispose: Place the spent absorbent in the disposal bags. Correctly dispose of contaminants off site using a licensed contaminated waste disposal contractor. • Report: Document the incident and include what happened, when it happened, where it happened; and what was done to eliminate or minimise the impact. • Restock: Order and replace used up PPE and absorption materials.
Extreme Weather	Wet • Alert site personnel and stop all external work on if applicable • Check site for plant, equipment and materials and secure anything not in immediate use • Check water outlets, water catchments, stormwater and sedimentation controls
Unplanned Interruptions to Existing Services	• Shut down and isolate plant if safe to do so • Immediately notify relevant emergency services and service providers • Secure the area and erect hazard markers as required • Protect stormwater outlets, implement controls if required. • Do not recommence work until approved by the relevant authority
High Wind Warning	• Alert outdoor workers of potential dangers and stop all external work • Secure any loose object that could become missiles
Discharge to Trade Waste	• Immediately notify relevant authorities of any event relating to a discharge to sewer that may: cause a breach of the trade waste agreement; endanger the life or compromise the safety of water authority workers; prevent or disrupt the operation of any sewerage; treatment plant; detrimentally affect any aspect of the environment

Aspect 5.21	
Earthworks and Groundwater Contamination	
Objective	To detect and manage contaminated land, prevent leaching of contaminated materials or groundwater infiltration during earthworks, and detect services prior to commencement Mitigate potential environmental and operational consequences of encountering groundwater during excavation and piling. Avoid or minimise contamination of land caused by the use of imported materials, or by spillage of fuels, paint, form oil, chemicals etc.
Management Strategy	- Expert consultants are engaged to investigate project site geotechnical conditions and provide a detailed assessment of the quality of the earth, and existence of groundwater table, before earthworks begin. - Services will be identified before earthworks commences - Controls are in place to capture and treat contaminated soil and groundwater. - An 'unexpected finds protocol' would be prepared and included to assist with the identification, assessment, management, health and safety implications, remediation and/or disposal (at an appropriately licenced facility) of any potentially contaminated soil and/or water. - If dewatering is required during construction, the water would be tested (and treated if necessary) prior to re-use, discharge or disposal.
Control Measures	Project Manager shall ensure: - Obtain soil testing for waste classification prior to excavation and removal off site. Tests would confirm the presence and type of any contaminants and classify the soil for the purpose of spoil management and removal. - Hoarding is in place prior to any excavations being undertaken on-site. - Dial Before You Dig permits will be obtained before earthworks commence. - All materials on-site or being delivered to the site shall be contained within the site. The requirements of the Protection of the Environment Operations Act 1997 shall be complied with when placing/stockpiling loose material or when disposing of waste products or during any other activities likely to pollute drains or watercourses. - Cease work in the immediate vicinity of any areas of suspected contamination that are identified prior to or during work. Ensure that these areas are not disturbed and are cordoned off as a safety risk. - In the event that indicators of contamination are encountered during construction (e.g. odours or visually contaminated materials), work in the area will cease until an occupational hygienist can advise on the need for remediation or other action. - If remediation is required, then a Remedial Action Plan is to be prepared and remediation works are to be carried out in accordance with State Environmental Planning Policy No. 55 – Remediation of Land. - Plant and equipment to be inspected prior to start up. Any defects that may result in an environmental incident (spills, leaks, etc.) are to be repaired prior to operation. - Check machinery daily for oil, fuel or other liquid leaks. - No water used or generated by machinery or equipment is to be discharged to stormwater, drainage lines, water course/bodies, or the sewage system unless a permit/license is acquired. - Where reasonably practicable, contingent timing of earthworks when water levels are low, that is, avoiding periods of heavy rain to avoid extensive soil saturation. - Remediation plans will be developed if required. This will either involve off-site disposal or on-site remediation, which may be stockpiling and treating. - If disposal, a permit for removal and disposal of contaminated soil will be required - Imported materials will be certified as being as per the specifications and free from deleterious organic matter. - All imported materials are procured from known sources and must be validated to ensure it is suitable for the proposed land use from a contamination perspective in accordance with National Environment

	Protection Measure (NEPM: Assessment of Site Contamination) measure which defines criteria for different land uses. - Validation as suitable clean fill must either be in the form of suitable documentation from the supplier or by sampling and analysis in accordance with relevant legislative requirements • Manage stockpiles by implementing sediment and erosion control devices in accordance with Managing Urban Stormwater, Soils & Construction, Volume 1 (Landcom, 2004). - Stockpiling will be in approved locations, and tested for contamination/suitability before being re-used on site - Stockpiles will be surrounded by sediment fences/screens and covered to prevent weather effects. - Any proposed re-use on site to be considered in accordance with NEPM (Assessment of Site Contamination) • Stabilisation of any excavated areas occurs as soon as reasonably practicable. - Sediment traps and cut-off drains are provided to control surface drainage. • Any contamination caused by construction related activities must be notified to the PM/CA in accordance with the environmental incident report outlined in this PEMP and fully remediated to satisfaction. All contaminated material to be managed in strict compliance with the approved remediation plan. • All waste generated from earthworks/civil works will be classified and immobilised as per EPA Waste Classification Guidelines. • If Asbestos or other extremely hazardous material (PAHs,TRHs and leads) are encountered, a hygienist will be engaged to develop a Remediation Plan. Certified asbestos removalists will be engaged and monitored by the Hygienist. - Asbestos removal and management in NSW is regulated under the WHS Act 2011 and WHS Regulation 2011. The handling of asbestos and asbestos work will be carried out in accordance with relevant codes/guides including, but not limited to, Code of Practice: How to Safely Remove Asbestos (Safe Work Australia, 2016) and Code of Practice for the Safe Removal of Asbestos 2nd Edition (NOHSC: 2002 (2005)). - If leads, fuels or other NPI trackable substances that do not present an immediate extreme danger are encountered, soil is to be stockpiled and the civil engineer or geotechnical engineer consulted for treatment purposes. • If any suspicious material is encountered the 'Unexpected find checklist' is followed and completed (see appendix 6.8)
Performance Indicators	• No pollution or contamination of waterways • No release of contaminated materials or compromised water from the site • Zero harm – no harm to anyone (worker/PCBU/hospital staff or patrons/public)
Reporting	• All spillages and discovery of contaminated material to be reported to the Project Manager or Contract Administrator • Daily monitoring during associated works, reflected in daily site diaries when required • Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form
Applicable Permits	• Permits for removal and disposal of contaminated soil
Reference	• NSW State Groundwater Quality Protection Policy (Department of Land & Water Conservation 1998) • Environmental Planning and Assessment Act 1979 • Protection of the Environment Operations Act 1997 • State Environmental Planning Policy No. 55 – Remediation of Land (July, 2014) • Managing Urban Stormwater, Soils & Construction, Volume 1 (Landcom, 2004) • EPA Waste Classification Guidelines (2014) • Workplace Health and Safety (WHS) Act 2011 • Workplace Health and Safety (WHS) Regulation 2011 • Code of Practice: How to Safely Remove Asbestos (Safe Work Australia, 2016) • Code of Practice for the Safe Removal of Asbestos 2nd Edition (NOHSC: 2002 (2005))

- SSD Conditions: C12, C13, C34, AN9
- REF Conditions: 7, 10, 14, 15, 20, 25, 26

Aspect 5.22

External Lighting

Objective	Control or minimize the obtrusive effects of outdoor lighting used on the project site for works, safety and/or security.
Management Strategy	Outdoor/external lighting designed and implemented in accordance with AS4282 - 1997 Control of the Obtrusive Effects of Outdoor Lighting
Control Measures	Project Manager shall ensure: Outdoor lighting is controlled in accordance with AS4282 - 1997. External lighting principles, as described in Appendix A - AS4282, are adhered to where reasonably practicable: - Switch off lights when not required for safety, security or enhancement of the night-time scene. (In this respect, one can introduce the concept of a curfew with further limitations on lighting levels between agreed hours, e.g. the reduction or switching of advertising and decorative floodlighting between 11pm and dawn. - Whenever possible, direct light downwards, not upwards, to illuminate the target area. If there is no alternative to up-lighting, then the use of shield and baffles will help reduce spill light to a minimum. - Use specifically designed lighting equipment that, once installed, minimises the spread of light near to, or above, the horizontal. - Do not 'over' light. It is a cause of light pollution and a waste of money. Recommended light levels exist for some applications – see relevant standards. - To keep glare to a minimum, ensure that the main beam angle of all lights directed towards any potential observer is kept below 70°. It should be noted that the higher the mounting height, the lower can be the main beam angle. In places with low ambient light, glare can be very obtrusive and extra care should be taken in positioning and aiming. - Wherever possible use floodlights with asymmetric beams that permit the front glazing to be kept at or near parallel to the surface being lit. Lighting that efficiently directs the light into the area required, thereby minimising the energy consumption and waste light. Illuminance calculated as per Section 5 <i>Calculation of Light Technical Parameters</i>, AS4282. A survey of properties in the immediate precinct of the site is undertaken and notes made, particularly on buildings within the hospital grounds and residential buildings along Derby Road. Lighting is sufficient to safely carry out any works required in any given area
Performance Indicators	No disturbances/incidents or complaints.
Reporting	Monitoring records to be maintained during any activities with potential to generate obtrusive light infliction on local environment. Weekly Inspections undertaken and recorded on the Weekly Environment Inspection Form
Reference	AS4282 - 1997 Control of the Obtrusive Effects of Outdoor Lighting • SSD Conditions: B4, E8

6. Appendices

6.1. HI Incident Stakeholder Management Plan

6.2. Environmental Risk Assessment

6.3. Weekly Environmental Inspection Checklist

6.4. Project Complaint and Incident Register

6.5. Complaint and Incident Report Form

6.6. Environmental Legal and Statutory Requirements Register

6.7. Disruptive Works Notices – Process and Templates

a) Disruptive Works Notices Process

For the construction of Hornsby Ku-ring-gai Stage 2 Redevelopment and Medical Imaging Building, Watpac proposes to implement a full and partial DWN system, whereby a full DWN would be submitted for works directly affecting the NSLHD interfaces and a partial DWN as a courtesy notice for works where a Contractor may be outside the site undertaking minor works or when works are undertaken within the site that may be perceived as out of the ordinary, such as additional hours on site (if approved by the relevant authority) or increased noise or vibration.

The procedures and process for both full and partial DWN's will be consistent with the following steps undertaken:

STEP 1: PRE-PLANNING OF WORKS

- Works will be assessed with the following items considered and documented within the DWN form
 - Durations of works
 - Sequencing of works
 - – Stakeholders affected
 - – Disruptions with services shutdowns and reconnections
 - – Impacts to access and egress
 - – Temporary signage
 - – Traffic Management
 - – Potential Industrial Relations issues and sensitive matters
 - – Environmental impact
- Drawings to be provided to articulate intent of works with sequencing where required.
- DWN form to be reviewed and approved internally prior to submission to Health Infrastructure and APP

STEP 2: DRAFT DWN SUBMITTED

- Watpac will submit the DWN form to APP for review, discussion and approval
- Should any amendments be required Watpac will update the form accordingly and re-submit

STEP 3: SUBMIT DWN FORM TO APP / STAKEHOLDER

- APP will submit the DWN to the relevant stakeholder.
- If required APP will arrange a meeting with the stakeholders to discuss the works in more detail. Watpac will facilitate the meeting and incorporate any amendment to the DWN before resubmitting for final approval

STEP 4: PRIOR TO WORKS COMMENCING

- Subcontractors and direct employees involved in the works will be required to participate in a Tool Box Talk to review the proposed risk control measures and to confirm the control measures are appropriate before works proceed. A copy of the Notice of Disruptive Works Form will be attached to the Tool Box Talk.
- 24 hours prior to the work commencing Watpac will send a notice to APP confirming works will proceed as scheduled.

STEP 5: WORKS UNDERTAKEN

- Works will be undertaken in line with DWN. If these works are scheduled over a long duration Watpac will provide APP with status updates to ensure works as progressing as scheduled.

STEP 6: COMPLETION OF WORKS

- Upon completion of the works subcontractors and direct employees involved will sign off the DWN form to confirm all works are complete.
- When works are completed Watpac will send APP a notification identifying all works have ceased and confirm the area of work has been re-instated to its original condition or to the agreed condition endorsed within the DWN.

Coordination of Services Shutdowns, Diversions and Reconnection

Watpac recognises the importance of full coordination and planning when undertaking services shutdown, diversions and reconnections in order to maintain stakeholders, LHD staff and public safety at all times and minimise disruption to surrounding operational buildings business continuity. For a successful outcome all

activities must be appropriately managed through open communication and collaboration with the relevant stakeholders and staff during all stages of the process.

Watpac personnel have extensive experience with undertaking an array of different types of shutdowns, diversions and reconnection successfully on health and science projects and provide the following key principles and methodologies that apply to all situations.

Planning for the Works

When planning shutdowns, diversions and reconnections the involvement of all key stakeholders in the development of the plan facilitates a collaborative approach, avoids incorrect assumptions being made and promotes a streamlined process by reducing the production of unnecessarily documents.

Early Warning

When undertaking shutdowns, diversions and reconnections stakeholders and LHD staff will require sufficient time to coordinate and communicate the proposed activities to the relevant people affected by the works. Depending on the complexity of works several meetings may be required to confirm activities. Engineering may require a supplier / vendor / authority to undertake pre works, checks and balances prior to the commencement of the shutdown, diversion and reconnection, or supplier / vendor / authority may be required on site during the works.

Timing

Depending on the type of shutdown, diversion, and reconnection stakeholders and LHD staff may request the works are undertaken on certain days that are quieter, days when particular staff are rostered on or when case lists are not scheduled.

Open communication

Maintaining open communication channels throughout the entire process is paramount. Shutdowns, diversions, and reconnections often require real time communication on the day to coordinate the exact timing and ensure all parties aware of the situation.

Delaying or Postponing Works

If the shutdown, diversion, and reconnection affecting critical areas works may need to be delayed or postponed if for some reason there is an issue relating to safety. Typically these type of issues will normally not be known until a few minutes prior to the agreed time. Should this occur, all parties must be patient and understanding, as works must only be carried out if all parties agree it is safe to continue. While Watpac acknowledge most shutdowns, diversions and reconnection have specific methodologies and or processes to implement, the following steps outline the overarching principles for works to be implemented.

b) Disruptive Works Notice Template

c) Disruptive Works Notices Register Template

6.8. Unexpected Finds Checklist