PROJECT: NIHON UNIVERSITY NEWCASTLE CAMPUS

Monthly Project Control Group Report

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Prepared By	Ben Moss (Built Pty Ltd)

TEMPLATE OWNER: ENTERPRISE PROJECT CAPABILITY (v 12 DEC 10)

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Document Control

Revision History

Version	Author	Issue Date	Changes
Draft A	Ben Moss	16.01.2020	Draft Report
Rev 1	Ben Moss	20.01.2020	Approved
PCG Report 01	Ben Moss	31.01.2020	January 2020
PCG Report 02	Ben Moss	28.02.2020	February 2020
PCG Report 03	Ben Moss	27.03.2020	March 2020
PCG Report 04	Ben Moss	29.04.2020	April 2020
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1. Introduction

Built NSW Pty Ltd has been engaged by Nihon Daigaku Australia Newcastle Pty Ltd, c\o Azusa Sekkei & dwp Australia Pty Ltd to undertake the project and works associated with the redevelopment of the existing heritage listed Newcastle Courthouse site for the new Nihon University Newcastle Campus located at 9 Church Street, Newcastle NSW Australia.

Built NSW has been engaged under a Construct Only ABIC Major Works Contract with services and structural (excluding heritage courthouse building) design responsibility.

The project consists of the complete demolition of two existing three storey buildings, site remediation (including the management of any resultant contamination, mine workings and/or archaeological findings), the restoration and refurbishment of the retained and state heritage listed Newcastle Courthouse building and the construction of two new four storey buildings comprising student accommodation in the eastern building and teaching spaces\carpark in the western building.

2. Project Details

Date of Site Report: 29th May 2020

Prepared by Company: Built Pty Ltd

Address: Level 1, 155-157 Lambton Rd, Broadmeadow, NSW 2290

Contact: Rob McLaughlin

Phone: 02 4077 5906 Email: robertmclaughlin@built.com.au

Project No: 201229

Project Name: Nihon University Newcastle Campus

Address: 9 Church Street, Newcastle, NSW 2300

Client: Nihon Daigaku Australia C/O Azusa Sekkei

Architect / Head Contract Administration: dwp Australia Pty Ltd

Superintendent**'s Address:** 16 Telford Street, Newcastle East, NSW 2300

Contact: Ed Clode

Phone: 02 4926 5222 Email: Edward.c@dwp.com

3. Report

3.1 HSE Overview

Throughout May 2020, multiple high-risk activities such as demolition, civil, piling and retention works resulted in an increased number of both personnel and construction plant, equipment, and vehicle movements across all areas of site.

Due to this increase in work activity, Built continued to focus strongly on identifying HSE hazards and implementing the required control measures and procedures in consultation with site personnel through risk management processes, site inspections, monitoring activities, toolbox meetings, and site inductions.

HSE performance during the reporting period has been excellent with no injuries or environmental incidents occurring. A minor incident was recorded on 20/05/2020 where traffic control measures were ineffective leading to members of the public entering the construction zone. This was closed out with further consultation with the traffic controllers and the demolition contractor.

All personnel onsite continue working well together to both identify HSE aspects, implement the required control measures, and mitigate potential impacts to the health and safety of workers, the public, and harm to the environment.

A summary of HSE issues for May 2020 is outlined in Table 1 below.

The HSE Incident Register is attached in Appendix A.

Table 1: HSE Incident Summary

DATE OF ISSUE	BRIEF SUMMARY OF ISSUE	CORRECTIVE ACTION COMPLETED
20/05/2020	Near Miss (Not Notifiable) A construction vehicle that had entered the site under traffic and pedestrian control attempted to reposition before the spotter was in position at the gate entrance. As the driver repositioned the vehicle, the nose of the vehicle encroached onto the footpath and startled members of the public waiting to cross the driveway. Noted that the footpath had been closed to pedestrians in accordance with a Footpath Closure Permit approved by City of Newcastle. Appropriate warning signage and traffic cones were installed both East and West of the vehicle access gate.	• The driver, traffic control personnel, and subcontractors were immediately addressed by Built Site Management to determine how the incident occurred. • All parties were reminded of the traffic & pedestrian control procedures. • The subcontractor was instructed to conduct a toolbox talk with workers debrief the incident and to reinforce the correct procedures. • Increased signage & barricades implemented on the footpath.

3.2 Community Liaison Overview

In accordance with SSD-9787 Conditions of Consent and BUILT's Community Liaison Plan, BUILT has liaised with nearby residents, businesses, and organisations. BUILT intends to work closely with our neighbours for the duration of the Nihon University project by regularly updating and consulting stakeholders on upcoming works and overall construction progress.

BUILT has also established a Community Liaison email account (nihon@built.com.au) that is monitored by the Community Liaison Officers daily and a 24-hour contact number is present on project signage located on Church Street access gates.

BUILT maintains a register of all community complaints, notices, and queries received to ensure compliance with SSD conditions and reporting requirements.

A brief summary of community liaison in May 2020 is outlined in Table 2 below.

The Community Liaison Register for May 2020 is attached in Appendix B.

Table 2: Community Liaison Summary

DATE OF ISSUE	BRIEF SUMMARY OF ISSUE	RESPONSE / ACTIONS COMPLETED
15/05/2020	2005-CN012 Notification issued to HNE James Fletcher Hospital regarding the commencement of Temporary Ground Anchor Works to the new retaining wall as discussed onsite with HNE, dwp, and Built in March 2020 (REF 2003-CN009) and approved by NSW Public Works (reference email received from N. Halpin on 26/03/2020).	HNE responded on 18/05/2020 reminding Built to ensure HNE Engineering is aware of what is occurring on their property. Built (BM) contacted HNE for phone discussion to clarify and followed up with an email on 18/05/2020. No outstanding issues.
18/05/2020	2005-CQ007 Newcastle Grammar School contacted Built by phone & follow up email notifying Built that construction vehicles (trucks) were standing in the school drop off/pick-up zone. It was noted this was prior to school zone hours and requested an alert be raised with Built personnel & Subcontractors to ensure no issues moving forward.	Built immediately instructed Subcontractors on 18/05/2020 not to use this zone at any time. Follow up email sent to NGS advising them of action taken and acknowledging concerns. NGS had no further issues.
21/05/2020	2005-CC015 Built received a complaint from a resident via email regarding site personnel engaging in loud conversations when arriving at the site in the morning around 6:30am to 7:00am.	Email response sent advising of construction hours commencing at 7:00am and that Built would reinforce the need to be mindful of neighbours when arriving onsite of a morning. The resident responded with no further issues.

3.3 Audits & Monitoring

Throughout the Nihon University Newcastle Campus project, Health, Safety, Environmental & Quality (HSEQ) Audits will be undertaken internally by Built and externally by an Independent Third-Party Auditor (GHD Group Pty Ltd Newcastle) in compliance with both Built Management Systems and the SSD-9787 Development Consent Conditions.

Built has engaged a qualified and experienced Acoustic Consultant, RAPT Consulting (RAPT) to conduct noise and vibration monitoring throughout the duration of the project as required by the Construction Noise and Vibration Management Sub-Plan. Built's Project HSE Officer also conducts regular noise level spot checks on current construction activities, plant, and equipment using calibrated equipment.

A summary of these audit and monitoring activities is outlined in Sections 3.3.1 & 3.3.2 below.

3.3.1 Internal Audits & Monitoring

As noted within the PCG Report last month, RAPT conducted noise and vibration monitoring activities in late April 2020 and was unable to submit the monitoring reports prior to the completion of the PCG Report. A summary of these reports is therefore included in Table 4 below.

RAPT conducted vibration monitoring during the installation of temporary ground anchors to the south-west corner of Building A between 21st to 28th May 2020. This monitoring report will be included in the PCG Report for June 2020.

The Built project team completed a total of 49 HSE site inspections and monitoring activities throughout May 2020 with 12 corrective actions assigned as a result.

Table 3 below outlines the total number of activities completed by Built during May 2020. All activities are completed and recorded electronically using the Built.Safe software platform.

Table 3: Monthly Record of Internal HSE Activities Completed

ACTIVITY	DESCRIPTION	COMPLETED	ACTIONS
Site Inspection	Inspection of the site or specific work areas to identify potential HSE hazards and verify the implementation and effectiveness of management measures.	14	6
Plant Inspection	Inspection of plant and equipment to check it is fit for use prior to being permitted to use onsite or to re-inspect after a significant breakdown, damage, or expiry of a plant induction sticker.	11	0
Monitoring	Used to monitor construction activities compliant with the processes outlined in the Project HSE Management Plans and requirements of development approvals and permits.	19	3
BSMS Review	Review of the implementation and effectiveness of the Built Safe Mandatory Standards (controls) in relation to process risks such as scaffolding, temporary works, demolition, FRP concrete, and asbestos.	2	1
Noise Level Spot Check	Used to monitor noise levels at sensitive receiver locations, specific work areas, construction activities, and plant/equipment.	2	0
Audit – Internal HSE Plan	Used to monitor and measure the implementation of the HSE Plan by the project.	1	2
	TOTAL	49	12

HSE issues that were identified, and corrective actions assigned during the activities listed in Table 3 are summarised in Table 4 below.

Copies of these forms are attached in Appendix C.

Table 4: Internal Audit and Monitoring Activity Summary

DATE OF ACTIVITY	BRIEF SUMMARY OF ACTIVITY	CORRECTIVE ACTIONS COMPLETED
15/04/2020	Vibration Monitoring – SW Shoring Wall & Building B RAPT Consulting conducted vibration monitoring between 15th to 28th April during demolition and earthworks occurring on the ex-Supreme Courts (Western) area of the site. A monitor was placed adjacent to the existing retaining wall on the HNE James Fletcher Hospital site (Location 1), while the other was placed within the basement area of the Heritage Courthouse (Location 2). Results from the monitoring period showed: • Location 1 – Five (5) isolated one (1) minute instances where the PPV exceeded 3.0 mm/s, however, occurrences were below 5.0 mm/s and at frequencies in the 10-50 Hz range. • Location 2 - Eight (8) isolated one (1) minute instances where the PPV exceeded 3.0 mm/s, however, occurrences were below 5.0 mm/s and at frequencies in the 10-50 Hz range. • Both locations did not exceed the DECCW criteria for human comfort.	• Due to the exceedances being isolated and minor over the monitoring period, RAPT considered no further mitigation actions necessary. RAPT recommended, however, that survey monitoring of the retaining wall and adjacent structures should continue and additional monitoring takes place when significant vibration generating activities are anticipated. • Built also implemented the use of flat plate hand-driven compactors and dense foam protection adjacent to heritage structures to mitigate vibration.
30/04/2020	Vibration Monitoring – SW Shoring Wall RAPT Consulting conducted vibration monitoring between 30th April to 8th May during earthworks and CFA Piling occurring on the ex-Supreme Courts (Western) area of the site. A monitor was placed adjacent to the existing retaining wall on the HNE James Fletcher Hospital site (Location 1). Results from the monitoring period showed: • Location 1 – Several isolated (2% of monitoring between 30th April to 1st May) and minor one (1) minute instances where the PPV exceeded 3.0 mm/s, however, occurrences were below 5.0 mm/s and at frequencies in the 10-50 Hz range. • No structural/cosmetic exceedances occurred during CFA Piling works for the remainder of the monitoring period (2nd May to 8th May). • The DECCW criteria for human comfort was not exceeded during this monitoring period.	• Due to the exceedances being isolated and minor over the monitoring period, RAPT considered no further mitigation actions necessary. RAPT recommended, however, that survey monitoring of the retaining wall and adjacent structures should continue and additional monitoring takes place when significant vibration generating activities are anticipated.
30/04/2020	Attended Noise Monitoring – Church Street RAPT Consulting conducted noise monitoring on 30th April 2020 at during earthworks occurring on the ex-Supreme Courts	No corrective actions required.

	(Western) area of the site. Monitoring was undertaken at 36 Church St (Location 1) and 26 Church St (Location 2). Attended noise measurements indicated construction noise trigger levels were met at 26 Church Street and were above noise trigger levels by 8 dB(A). However, the noise measurements at this location were well below the highly noise affected noise trigger level of 75 dB(A).	
19/05/2020	Site Inspection – Building A & Building C 1. Electrical leads identified as expired. Noted that leads were tagged for 1 month only whereas the legal requirement is 3 months. 2. Sediment build-up identified on Building A hardstand/driveway within site. 3. Building C general housekeeping identified as needing improvement. 4. Dripping hose identified within Building A area.	1. Electrical leads identified as expired were tested & tagged. 2. Building A hardstand was scraped to clear sediment build-up to prevent tracking onto the road. 3. Building C area was tidied, and waste disposed of in site skips. 4. The dripping hose was repaired.
21/05/2020	Site Inspection – Church Street Sediment Control 1. Sediment control in place, though debris build-up was identified.	1. Sediment inlet trap and gutters were cleaned of debris.
25/05/2020	Monitoring – Soft Strip Demolition 1. Fall hazard identified due to the recent creation of an opening for removal of demolition waste.	1. Fall protection / demarcation installed.
25/05/2020	Monitoring – Mobile Plant 1. Identified flagging used to demarcate the mobile plant exclusion zone in Building C was not maintained (sagged due to fallen posts).	1. Flagging reinstated.
25/05/2020	Monitoring – Sediment Control 1. Identified water 'run-off' was passing under hoarding onto the Church Street footpath.	1. Sediment control measures implemented to the internal face of hoarding. Noted that heavy rain had been experienced for the several days and rainwater 'run-off' was draining from existing pavement/footpath surface behind hoarding. No sediment was witnessed.
26/05/2020	Audit - Internal HSE Plan Internal audit of the HSE Plan by Built's HSE Officer resulted in a score of 96% and two (2) Opportunities for Improvement identified. 1. Communication and Consultation	1. Weekly Site Meeting discussed HSE requirements. 2. Emergency scenario and/or evacuation drill scheduled for June 2020.

	- A consultative inspection of the site was missed due to wet weather and limited personnel onsite. 2. Emergency Response - Recent update to the Project Emergency Response Plan and site layout requires emergency scenario and/or evacuation drill.	
28/05/2020	Site Inspection – Whole Site 1. Identified steel reinforcement bars protruding from recently demolished stair.	1. Reinforcement to be cut down/capped.
29/05/2020	BSMS Review – Hoarding 1. Recommendation that signage be displayed on hoarding/gates to show where traffic enters and leaves the site.	1. Signage to be installed. Noted that gates are under controlled by qualified traffic control personnel and traffic warning signs & hi-vis cones always in place at driveways.

3.3.2 External Audits & Monitoring

In accordance with SSD-9787 Condition C23, a Pre-Construction Compliance Report (03) was prepared by dwp Australia and submitted to DPIE on 20/05/2020 prior to the commencement of Construction Certificate 02 works.

The report documents the compliance status of the pre-construction requirements outlined within the SSD Development Consent applicable to the reporting period between 18th February 2020 to 20th May 2020.

The report identified that construction activities during the reporting period were compliant with all applicable pre-construction requirements.

Construction Compliance Report (01) is scheduled for submission to DPIE on the 18th November 2020.

3.4 Contract Programme Status

In May 2020, dwp Australia directed Built to revise the existing Contract Programme (Revision 3) to better reflect the current construction methodology and sequencing adopted as a result of staging and development consent requirements, and Extensions of Time (EOT) approvals for latent conditions/site remediation, and mine subsidence works. Built submitted the updated Contract Programme (Revision 4) to dwp Australia on 20th May 2020 and provided a further update via Revision 5 on 28th May 2020 via Aconex along with the submission for EOT#2.

3.4.1 Construction Progress Update

The following construction activities have been completed during the reporting period:

<u>Key Project Milestones Achieved:</u>

- CC#2a Approved for Building A & Building B

<u>Preliminary Items:</u>

- Design and Engineering of Crane and Crane Base

Civil, Piling & Retention Works:

- Residential Building – Dudley Seam (shallow) Mines Grouting
- Education Building – CFA Piles to SW Shoring Wall
- Education Building – FRP Concrete Capping Beam to SW Corner
- Education Building – Bench (excavate) down to create platform for Anchoring
- Education Building – Installation of Ground Anchors to Western and SW Shoring Walls
- Education Building – Stressing of Ground Anchors and preparation for shotcreting the SW shoring wall

3.4.2 Current Construction Activities

The following construction activities are currently underway on site and progressing well:

Building A – Education

- Installation of reinforcement mesh to SW shoring wall for shotcreting
- Removal of temporary structural propping to Western retaining wall
- Preparation works for demolition of slab on ground

Building B – Heritage

- Soft strip demolition & removal of additional asbestos materials
- Structural alterations and forming of openings including temporary propping
- Additional demolition / alteration works in accordance with Architect Instructions
- Relocation of site offices and amenities to enable Demolition works to continue on Level 2

Building C – Residential

- Trimming and re-compaction of piling platform in preparation for CFA Foundation Piling
- Set out for stormwater diversion works by Civil contractor

3.4.3 Upcoming Construction Activities (June 2020)

The following construction activities outlined below are expected to commence in June 2020:

Building A – Education

- Shotcrete to south-west corner retaining wall
- Removal of piling platform and ramp to south-west corner
- Demolition of slab on ground and bulk excavation down to formation levels
- Geotechnical and Archaeological investigations to Building A
- Filling of site with sub-base and construction of all-weather base for mines drilling to commence
- Mines drilling and grouting of Dudley Seam (shallow workings)

Building B – Heritage

- Installation of new structural elements to Book Store on Level 1
- Removal of existing structural elements to Book Store on Level 1
- Excavation down to required FL in B.17 and B.18 on Level 1

- Preparation works for install of lintels and blockwork
- Removal of timber floor within existing Male Toilets on Level 2
- Removal of existing piers and excavate new Lift Lobby on Level 1
- Removal of existing high-level services
- Detailed demolition to external elements

Building C – Residential

- Residential Building - CFA piles to Southern boundary wall
- Detailed excavation of Southern boundary wall capping beam
- Installation of CFA foundation piles
- FRP concrete capping beam to southern boundary retaining wall
- Detailed excavation of lift pits, pile caps and crane base
- Cropping of foundation piles
- FRP concrete to lift pits, pile caps, and crane base
- Erect & commission tower crane within stair C1
- Detailed excavation to footings and beams
- FRP concrete to footings and beams and slab on ground

External Works

- Hunter Water Upgrade Works on Church Street

3.4.4 Potential Issues

BUILT regularly reviews the construction programme to identify issues that have the potential to impact time, cost, and quality aspects of the project. The following issues have been flagged for attention:

a) Recent conditions imposed by SANSW regarding the Borehole Seam mine workings and structural adequacy of the Heritage Courthouse. While the extent of the works for 'Stage 1 – residential building' has now been completed with costs and time submitted for review and approval, 'Stage 2 – education building' works remain unknown which remains a risk to the date for PC.
b) City of Newcastle approval process for Section 138 application for Public Domain Works.
c) The extent of termite and water damage within the Heritage Courthouse.
d) The extent of contaminated soil and remediation risk for Building C Education building and external works.
e) COVID-19 global pandemic potential risk to construction activities and procurement
f) Additional Archaeological investigations within areas yet to be excavated.
g) Risk of existing services within the Public Domain potentially affected by Section 138 Works.
h) Existing fibre optic cable located beneath Building C driveway may need to be relocated deeper to allow for the required civil works.

3.4.5 Statused Contract Programme

A copy of the statused Contract Programme (Revision 5 – EOT#2) for May 2020 is attached in Appendix D.

3.4.6 Four Weekly Look Ahead

A Four Week Programme for June 2020 is attached in Appendix E. This programme shows works still underway and commencing prior to the end of June 2020.

3.5 Progress Photos



Photo 01: Aerial view of site beginning of May 2020 showing mines grouting works



Photo 02: Aerial view of site taken end of May showing preparation works for piling



Photo 03: View of site from Church Street looking South West



Photo 04: View of site from corner of Church & Bolton Street looking South



Photo 05: View of site from corner of Church & Bolton Street looking South West



Photo 06: View of site from Church Street looking South East



Photo 07: Building A – CFA Piles to South West shoring wall



Photo 08: Building A – South West shoring wall capping beam after concrete pour



Photo 09: Building A - View from Southern boundary looking North.



Photo 10: Building A - Excavation works to South West shoring wall in preparation for installation of ground anchors



Photo 11: Building A – CFA pile shoring wall & capping beam after excavation for ground anchors



Photo 12: Building A – South West shoring wall prepared for installation of ground anchors (looking West)



Photo 13: Building A – Installation of ground anchors (looking South)



Photo 14: Building A – Ground anchors to Western retaining wall after stressing



Photo 15: Building A – South West shoring wall with ground anchors, subsoil drainage, and reinforcement installed



Photo 16: Building A – Ground anchors, subsoil drainage, and reinforcement ready for shotcreting



Photo 17: Building B – Basement Level showing extent of soft strip demolition



Photo 18: Building B – New opening formed and temporary propping in Basement Level



Photo 19: Building B – Demolition of existing stairs from Basement Level to Level 1 (looking North)

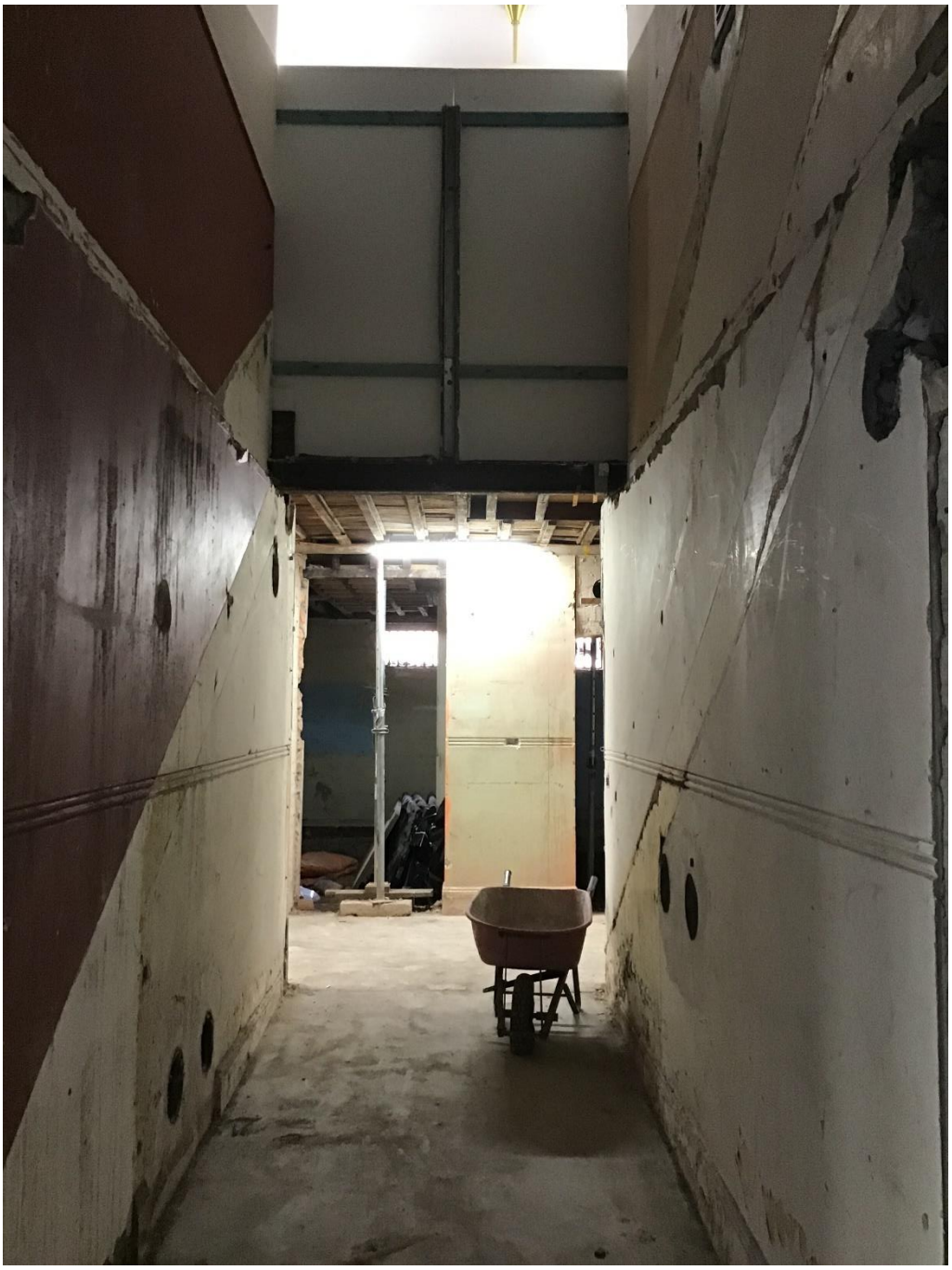


Photo 20: Building B – Demolition of existing stairs from Basement Level to Level 1 (looking South)



Photo 21: Building B – New opening formed, and temporary propping installed in Basement Level



Photo 22: Building B – Removal of floor finishes within Courthouse on Level 1. Note protective materials to timber features.



Photo 23: Building B – Removal of floor finishes within Main Courtroom on Level 1. Note protective materials to timber features.



Photo 24: Building B – Openings formed, and temporary propping installed on Level 1



Photo 25: Building B – Removal of wall finishes on Level 1



Photo 26: Building B – Demolition works within Level 1 including removal of ceiling & formed new opening.



Photo 27: Building B – Demolition to existing bathrooms/toilets on Level 1



Photo 28: Building B – Relocation of Site Lunch Room on Level 1



Photo 29: Building C – View of the Eastern façade of the Heritage Courthouse during mines grouting works.



Photo 30: Building C – Mines grouting batching plant onsite and steel casings on ground



Photo 31: Building C – Drilling rig set up for mines grouting



Photo 32: Building C – View of drilling rig set-up on existing driveway adjacent to Police Station



Photo 33: Building C – Surveyed set-out of foundation piles in preparation for CFA piling



Photo 34: Building C – View of trimmed and compacted piling platform and Eastern façade of Heritage Courthouse



Photo 35: Building C – View of proposed easement and Eastern façade of Heritage Courthouse

3.6 Design Update

3.6.1 Architectural

- AFC documents were issued on 13/05/20 and are currently being updated to include co-ordination with services and structural documentation and will be issued on 29/05/20.

3.6.2 Structural & Civil

- Structural plans for Education and Residential Buildings were submitted for Construction by Northrop on 01/05/20 and are currently being updated following architectural review as well as the resolution of the set downs and falls to the roof terraces.
- Cardno completed a peer review of Northrop structural drawings on 28/04/20 and most of the comments were picked up in the AFC issue of drawings.
- AFC Structural drawings for Heritage Building have not yet been received from Cardno.
- Cardno submitted civil and stormwater drawings for Construction however there are several amendments that need to be made for re-submission.

3.6.3 Hydraulic Services

- Hydraulic drawings were issued For Construction on 22/05/20 and reviewed by Built. dwp still conducting review of these drawings.

3.6.4 Electrical Services

- Electrical Services drawings were issued for Construction on 15th May 2020. Drawings have been reviewed by Built and dwp with minor amendments to be made.

3.6.5 Mechanical Services

- Mechanical Services drawings were issued for Construction on 19th May 2020. There are still some minor co-ordination issues to work through.

3.6.6 Fire Services

- Fire Services drawings were issued for Construction on 19th May 2020 to reflect the updated FER.

3.6.7 Fire Engineering

- Updated fire engineering report (revision 6) was issued on 18th May 2020 with the performance solution for the removal of the fire hydrants to level 3 and 4 of the Heritage Building, inclusion of the drenchers to the opening in the administration building and re-modelling for omission of smoke proof walls in Residential corridors.

3.6.8 Green Star

- A statused copy of the Green Star Pathway design items is attached in Appendix F.
- Statement from Wood and Grieves was received confirming that the project had been designed in accordance with the 4-star pathway.

3.7 Authorities & Approvals

3.7.1 NSW Dept. Planning & Environment.

- A statused version of the SSD-9787 Conditions Matrix has been attached in Appendix G

3.7.2 City of Newcastle

- Section 138 application was submitted to the City of Newcastle on 17/03/20.
- The City of Newcastle acknowledged receipt of the application on 01/04/2020. CoN advised dwp Australia that they have yet to commence the assessment of the application.

3.7.3 Ausgrid

- Certified Ausgrid ASP3 design was received on 20th May 2020.

3.7.4 Jemena

- Jemena offer for connection is with Nihon for approval.

3.7.5 Hunter Water

- Hunter water design for replacement of the existing cast iron sewer pipe has been revised following site inspection with Metiri, Hunter Water, Murphy Plumbing, dwp and Built on 29/05/20. This has been sent to Hunter Water for their approval.
- Built and the Hydraulic subcontractor are closing out the final requirements to commence Hunter Water Main Upgrade works on Church Street.

3.7.6 NBN

- NBN application has been approved and an agreement has been sent to Nihon for their signature.

3.7.7 SANSW

- Conditional approval was received from SANSW for the Stage 1 works- Residential and Heritage Building.
- Approval for Stage 2 will be sought on completion of grouting works to Education Building

3.8 Outstanding RFIs

(Generated from Aconex)

RFI Register (28/05/2020)							
Mail No.	Subject	Sent	From (Company)	To (Company)	Status	Comments / Actions	Discipline
BUILT-RFI-000074	Gas provision for fireplaces	26/02/20	Built	Jun / dwp	Responded	ACTION: Built have provided proposal to use existing joinery unit that was to be retained in Heritage Scope of Works for room. Will resolve mechanical & gas fireplace issues. Dwp to respond	Services
dwp AU-RFI-000049	Re: Hydraulic Mark-ups for review and comment	10/03/20	dwp	McCallum Plumbing	Responded	Action: dwp to review current issue of Hydraulic drawings. Items captured, dwp to close out	Services
BUILT-RFI-000144	New/Existing sewer connection	24/03/20	Built	Marline / Northrop / dwp	Responded	ACTION: New garden bed added from tender drawings to be removed from area, issues with pipe depths to be finalised.	Services/ Structural
BUILT-RFI-000205	GREENSTAR CREDITS 17B, 18B & Innovation Sustainable Trans	07/04/20	Built	Woods & Grieve	Responded	ACTION: Built awaiting on response from GBCA	Greenstar/ Architectural
dwp AU-RFI-000099	EXISTING COURT HOUSE DOWN PIPE SURVEY RESULTS	15/04/20	dwp	Built	Responded	Additional surveys required of existing downpipes. Information to be included on hydraulic drawings. Survey to be conducted once perimeter scaffold is erected	Services
dwp AU-RFI-000110	Newcastle Courthouse - Electrical drawings Markup	22/04/20	dwp	Northrop	Responded	Northrop have amended drawings. dwp to review	Services
dwp-AU-FRI-000121	Lotus Operable Wall	28/04/2020	dwp	Northrop	Responded	Architectural drawings/specification to include note structural support by operable wall contractor. Dwp to close out	Structural

RFI Register (28/05/2020)							
Mail No.	Subject	Sent	From (Company)	To (Company)	Status	Comments / Actions	Discipline
dwp-AU-RFI-000123	Access panel locations	29/04/2020	dwp	Northrop	Responded	dwp to document access panels and nominate types on RCP's. Northrop provided guidance on sizes 450 x450 - multiple services are accessed and 600x600 where equipment is maintained.	Services
NE-RFI-000044	Roof drainage concept	29/04/2020	Northrop	Built / dwp	Responded	Atrium roof drainage has been resolved as per latest hydraulic drawings. Built requested Cardno to confirm overflow drainage in ground is sufficient	Services
NE-RFI-000046	Fire Services Mark Ups	5/05/2020	Northrop - Ser	Design Confidence	Responded	Captured in FER Rev 6. Northrop to close out	Services
NE-RFI-000047	Fire Services Mark Ups	5/05/2020	Northrop - Ser	Design Confidence	Outstanding	Dix Gardiner to comment on whether they are OK with the fire rating of the penetrations at slab level instead of through wall.	Services
dwp-AU-RFI-000133	Structural & Mechanical IFC Comments	7/05/2020	dwp		Responded	Rob completed site inspection cassette unit added to admin office to resolve issues and return air flow grille to be relocated. L3 Residential to be resolved offline - 20mm pipes to underside of beam and turn up. dwp need to maintain maximum height required in eastern ceiling	Structural / Services
Built-RFI-000253	Co-ordination of existing services with new footpath works	8/05/2020	Built		Responded	dwp to issue Built with Architects instruction to organise site investigation works for locating and surveying existing services heights in pavement	Civil

RFI Register (28/05/2020)							
Mail No.	Subject	Sent	From (Company)	To (Company)	Status	Comments / Actions	Discipline
Built-RFI-000254	Updated Civil Documentation	11/05/20	Built	Cardno	Outstanding	Cardno still resolving RWT outlet pipes, flow rates for carpark pump to be provided to Built. DP's from heritage need to drain into stormwater and not RWT	Civil
dwp-AU-RFI-000137	Structural & Mechanical IFC Comments	11/05/20	dwp	Northrop	Outstanding	External stair formwork finish class 2 - steel supports for atrium	Structural
Built-RFI-000257	Stairs & Labelling of Stairs - details required	12/05/20	Built	dwp/Northrop/ Card no	Responded	Northrop to provide detail for Stair 6. Need to be steel	Structural
Built-RFI-000259	Secondary structural steel - Education Building Façade	12/05/20	Built	Northrop	Responded	Northrop to update drawings with spandrel hangers spacings a maximum 2.8m apart	Structural
InfraB-RFI-0001	Residential retaining wall capping beam	14/05/20	OneSteel	Built	Responded	Site team to confirm measurements	Structural
InfraB-RFI-0002	Residential retaining wall capping beam N24 Starters	14/05/20	OneSteel	Built	Outstanding	Site team to confirm measurements	Structural
NE-RFI-000048	Atrium area mechanical	14/05/20	Northrop	dwp	Responded	dwp to provide a section thru elevator lounge for Northrop to understand how diffusers will work	Services
dwp-RFI-000141	Nihon Staging Plan	18/05/20	dwp		Responded	Closed Out	Architectural
NE-RFI-000049	Teachers Room RCP	18/05/20	Northrop	dwp	Outstanding	dwp has changed the RCP to teachers' room - bulkhead to be amended for return air duct	Services
Built-RFI-000281	Structural Items to be Updated	18/05/20	Built	Northrop	Outstanding	Updated documents expected by 28/05/20	Structural

RFI Register (28/05/2020)							
Mail No.	Subject	Sent	From (Company)	To (Company)	Status	Comments / Actions	Discipline
Built-RFI-000286	Superseded Specifications	20/05/20	Built	dwp/Cardno	Outstanding	dwp to mark services specifications as no longer in use - dwp/Cardno to confirm stormwater specification	Services
Built-RFI-000289	Review of Civil Drawings-400 Series	20/05/20	Built	Cardno	Outstanding	Drawings to be updated with queries raised on marked up plans	Civil
dwp AU-RFI-000145	Newcastle Courthouse - RFI Atrium roof structure	20/05/20	dwp	Northrop	Responded	dwp to review and advised if proposal is acceptable. Northrop to update Structural documentation accordingly	Structural
Built-RFI-000291	Extent of Honed Masonry Blocks to Landscape Planters	20/05/20	Built	dwp	Responded	Built to review amended plans when issued	Architectural
Built-RFI-000292	Curing Approval-Masterkure 250	20/05/20	DMG	Built	Responded	Waiting on approval of curing compound from Northrop	Structural
Built-RFI-000294	Wall to Roof - Type 4 Connections	21/05/20	Built	Cardno	Responded	Cardno to update Drawing ST-017 Detail Type 4 Connection	Structural
dwp-AU-RFI-000149	RESI_LEVEL 2 SUPPORT OVER GLAZING	21/05/20	dwp	Northrop / Built	Responded	Northrop to document 89x6.0 SHS in lieu of lintel angle	Structural
Built-RFI-000295	RL's required for Top of Foundation to Pile Cap for Crane Foundations	21/05/20	Built		Responded	Northrop to provide section detail through area and connection for stair wall / piling cap	Structural
Built-RFI-000296	Re: Newcastle Courthouse - Retained heritage spaces	22/05/20	Built	dwp/Cardno	Responded	dwp to confirm proposal for services is acceptable	Architectural / Services

RFI Register (28/05/2020)							
Mail No.	Subject	Sent	From (Company)	To (Company)	Status	Comments / Actions	Discipline
Built-RFI-000297	Heritage Roof Drainage	22/05/20	Built	dwp	Outstanding	dwp to advise if 1:100 assessment will be completed on existing Heritage Building	Architectural / Services
Built-RFI-000298	Fire Pump Status and Fault Link to BMS	22/05/20	Built	Northrop	Responded	Northrop to confirm whether this is required	Services
BUILT-RFI-000300	Review of Architectural documents in Aconex document register - Action required	25/02/20	Built	dwp	Responded	dwp to update and issue revised A600 series drawings	Architectural
BUILT-RFI-000302	Landscape Bed Clarification	25/02/20	Built	Cardno/ dwp	Responded	Dwp to confirm planter bed detail- kerb or block wall	Architectural
BUILT-RFI-000304	Design Review Comments	25/02/20	Built	Northrop	Outstanding		Services/ Structural
BUILT-RFI-000305	Review of Architectural documents in Aconex document register - A600's drawings and A700's RLS	25/02/20	Built	dwp	Responded	dwp updating	Architectural
BUILT-RFI-000306	Amended Design Statement	25/02/20	Built	dwp	Outstanding	May not be required?	Architectural
dwp AU-RFI-000151	Re: WS1 sprinkler installation requirements	25/02/20	dwp	Design Confidence	Outstanding	Design Confidence to respond	Architectural / Services
BUILT-RFI-000307	RLS A712 - Missing Furniture ID Tags	25/02/20	Built	dwp	Responded	Updating for end of May issue	Architectural
dwp AU-RFI-000152	Hunter Water Major Works Upgrades -	25/02/20	dwp	Built	Outstanding	Built to provide details	Services

RFI Register (28/05/2020)							
Mail No.	Subject	Sent	From (Company)	To (Company)	Status	Comments / Actions	Discipline
	watermain & sewer						
BUILT-RFI-000308	Joinery Item J14	25/02/20	Built	dwp	Responded	Updating for end of May issue	Architectural
BUILT-RFI-000309	A778 - Joinery Labels & Furniture Key missing	25/02/20	Built	dwp	Responded	Updating for end of May issue	Architectural
BUILT-RFI-000310	RLS - A703 - Room Layout Sheet for Language Room 2 (A.L2.07)	25/02/20	Built	dwp	Responded	Updating for end of May issue	Architectural
BUILT-RFI-000312	Updated Structural Drawings for Level 4 Heritage	26/05/20	Built	Cardno	Outstanding		Architectural
BUILT-RFI-000313	Review of Window Schedule	26/05/20	Built	dwp	Responded	dwp to address in next issue	Architectural
BUILT-RFI-000317	ACTION REQUIRED: Approval of Curing Approval-Masterkure	27/05/20	Built	Northrop	Responded	Closed out. Built to confirm	Structural
BUILT-RFI-000318	Services and Maintainability Review	27/05/20	Built	Northrop	Outstanding		Services
dwp AU-RFI-000154	Newcastle Courthouse-Electrical Markup	27/05/20	dwp	Northrop	Outstanding	Northrop to comment and amend	Services

3.10 Recycling Records

Built has engaged Central Waste Station to handle all the construction waste from demolition through to project completion. Central Waste has a resource recovery centre in Kurri Kurri where they sort, and recycle materials on-site, or send on to speciality recyclers, with a minimum amount of waste that is unable to be recycled then disposed of in licenced landfill sites. Central Waste Station is targeting a 90% materials recovery rate of all waste collected.

Each month, Central Waste will issue Resource Recovery Reports to Built specifically for this project which will be included in the monthly PCG Report (attached in Appendix H)

For the month of May 2020, the Total Waste Recovery Percentage was 98.98%

4. Appendices

Appendix A – HSE Incident Monthly Register

Appendix B – Community Liaison Register

Appendix C – Internal Audit Records

Appendix D – Statused Contract Programme

Appendix E – Four Week Programme

Appendix F – Green Star Pathway Status

Appendix G - Statused SSD-9787 Conditions Matrix

Appendix H – Monthly Waste Recovery Reports

Appendix A – HSE Incident Monthly Register

Monthly HSE Incident Register

Built.

Project: Nihon University

May-20

Month	Labour Hours	First Aid Incident	Medical Treatment Incident	Lost Time Incident	Near Miss Incident	Notifiable Dangerous Incident	Environmental Incident *Includes complaints
Jan-20	2180	0	0	0	0	0	0
Feb-20	6500	0	0	0	1	0	1*
Mar-20	5930	0	1	0	0	0	3*
Apr-20	5070	0	0	0	0	0	7*
May-20	7700	0	0	0	1	0	1*
TOTALS:	**27380**	**0**	**1**	**0**	**2**	**0**	**12**

Appendix B – Community Liaison Register

Community Liaison Register

Built.

Project: Nihon University

Complaints Register

Last Updated: 29/05/20

REF ID	DATE / TIME RECEIVED	RECEIVED FROM	DESCRIPTION	DATE / TIME RESPONDED	RESPONSE BY	DESCRIPTION	CLOSED (Y / N)
2001-CC001	21/01/2020 1:20pm	Tanya Way (JFH Employee)	Concerned about removal of trees at Southern Boundary & wildlife. Works at James Fletcher Hospital.	22/01/2020 9:00am	BM	Phoned Tanya to disuss her concerns and assure precautions were taken and removal is in accordance with SSD-9787. Followed up with email containing project information and NSW Planning Portal	Y
2002-CC002	27/02/2020 4:20pm	Tony Lawler (Resident)	Notified Built via email of cracks appearing within his property at 30 Church Street that were previously not noted. Believes demolition works occurring the past couple of days and vibration are the cause.	27/02/2020 5:06pm	BM	Phoned Tony to further discuss the issue raised. An inspection of the property has been arranged for 3:00pm 28/02/2020 with Tony, Built Project Manager and Structural Engineer who completed initial Pre-Construction Dilapidation Report. Follow up email sent to Tony at 5:26pm confirming details of phone complaint and inspection. Inspection Report submitted to Tony on 02/03/20 showing cracks identified and not worsened. Vibration monitor results received on 03/03/20 show compliance with structural levels.	Y
2003-CC003	9/03/2020 1:50pm	Jennifer Leslie (Resident)	Noise complaint received via phone call to Construction Manager Rob McLaughlin regarding noise prior to approved construction hours.	09/03/2020 1:58pm	BM	Built contacted Jennifer on her mobile number to discuss the issue. Jennifer stated that there was noisy vehicles and concerns of "loading of bricks and things in the morning" approximately between 4:30am to 6:30am. Upon review of CCTV footage, a large skip bin garbage truck and other heavy vehicle was seen on Bolton Street between 5-6:00am and not related to the Nihon Project. Built also spoke with Jennifer's neighbour Mark Hill, who confirmed the workers were related to a project on Bolton Street as he had confronted them that morning.	Y
2003-CC004	10/03/2020 4:06pm	Tony Lawler (Resident)	Tony lodged an additional complaint via email related to demolition works causing existing cracks to "enlarge" within his residence.	10/03/2020 4:23pm	BM	Built responded via email advising that vibration monitoring to date has shown compliant levels. It was requested that Tony submits photos of enlarged cracks for review by Structural Engineer prior to another inspection as it was found that all cracks were existing after his initial complaint. Built conducted 7 days of monitoring at Tony's residence between 13/03/2020 & 20/03/2020. Built issued Vibration Monitoring Report to Tony on 26/03/2020 showing that vibration results were well under the limits for both structural damage and human comfort.	Y

2003-CC005	19/03/2020 4:05pm	James Fletcher Hospital (JFH)	Architect/Superintedent notified Built of noise complaint lodged directly to DPIE regarding demolition works.	19/03/2020 4:40pm	BM	Built contacted JFH main contact, Nicole Halpin (Corporate Services Manager - Hunter New England Health) to discuss the complaint. Nicole advised that she was unaware of the issue and had received no internal complaints. Built conducted immediate spot check of demolition noise which showed works were within permissable noise limits. Built engaged acoustic consultant to conduct internal noise monitoring within JFH on 20/03/2020. Results came back compliant with construction noise limits & report was submitted to JFH for their records on 25/03/2020.	Y
2004-CC006	01/04/2020 12:59pm	Jane Bellemore & Cynthia Grahame (Resident)	Lodged complaint by email to Nihon community liaison address regarding vibration causing discomfort	02/04/2020 2:11pm	BM	Response email sent noting concerns and advising of Built monitoring activities to maintain compliance with vibration criteria and minimise disruptions. Advised the resident to contact if there are any further concerns or structural changes noted.	Y
2004-CC007	03/04/2020 9:24am	Jane Bellemore & Cynthia Grahame (Resident)	Lodged complaint by email to Nihon community liaison address regarding workers being spotted onsite without Hard Hats and not maintaining social distancing.	03/04/2020 10:22am	BM	Response email sent advising that Built takes HSE and social distancing measures seriously and that this concern has been immediately addressed with workers onsite. It must be noted that the workers were completing a pre-start talk and were outdoors in open space.	Y
2004-CC008	03/04/2020 1:16pm	Jane Bellemore & Cynthia Grahame (Resident)	Lodged complaint in relation to 2004-CN009 Extended Working Hours advising of the Environmental Planning and Assessment (COVID-19 Development – Construction Work Days) Order 2020 being implemented onsite.	06/04/2020 3:05pm	BM	Response sent by email noting concerns and frustration. Also advised that Built is continuing to follow Government advice in response to COVID-19, will continue to monitor the situation and implement required measures. - Refer also to Community Notice (2004-CN010) sent on 06/04/2020	Y
2004-CC009	03/04/2020 3:15pm	Keran Davis (Resident)	Lodged complaint in relation to 2004-CN009 Extended Working Hours advising of the Environmental Planning and Assessment (COVID-19 Development – Construction Work Days) Order 2020 being implemented onsite.	6/04/2020	BM	Refer to Community Notice (2004-CN010) sent on 06/04/2020.	Y
2004-CC010	03/04/2020 9:13pm	Catherine Turner (Resident)	Lodged complaint in relation to 2004-CN009 Extended Working Hours advising of the Environmental Planning and Assessment (COVID-19 Development – Construction Work Days) Order 2020 being implemented onsite.	6/04/2020	BM	Refer to Community Notice (2004-CN010) sent on 06/04/2020.	Y

2004-CC011	6/04/2020 10:04am	Jane Bellemore & Cynthia Grahame (Resident)	Lodged complaint in relation to alleged cracking of their property caused by groundworks onsite.	06/04/2020 12:20pm	BM	Built arranged for an inspection of the property to assess claim against conditions noted within Pre-Construction Dilapidation Report. Inspection completed by Structural Engineer on 08/04/2020 Inspection Report issued to the Resident on 09/04/2020 advising that in the Engineer's opinion, the cracks identified by the Resident were noted within the Pre-Construction Dilapidation Report and had not worsened. Resident disputed the findings of one of the identified cracks. Built responded that vibration monitoring of an adjacent property during the same period had demonstrated compliance with vibration criteria and that any disputes will be addressed after the completion and findings of the Final Dilapidation Reports required under the Development Consent Conditions. No further response received.	Y
2004-CC012	06/04/2020 1:40pm	Keran Davis (Resident)	Lodged complaint by email regarding extended working hours, social distancing, and a traffic management issue on 04/04/2020 (Saturday).	06/04/2020 4:13pm	BM	Referred the Resident to Community Notice (2004-CN010) for response to concerns regarding social distancing. Advised that the traffic management issue had been issued to the Site Team and Subcontractors for urgent action. Also requested that for any future issues, the Resident should contact Built PM or SM immediately to ensure matters are actioned quickly. Email received from City of Newcastle Councillor thanking Built for responding to the concerns of residents.	Y
2004-CC013	8/04/2020 9:48am	Michael Weightman (Employee - Newcastle Chambers)	Lodged complaint by email regarding noise caused by grinding activities onsite.	08/04/2020 11:58am	BM	Response stated Built's intention to minimise noise and conduct ongoing monitoring during construction, however, elimination of noise is not possible. Advised that structural demolition is nearing completion on the portion of site near his office. Note: Works were a short term activity located behind 2.4m plywood hoarding. No further response received	Y

2004-CC014	28/04/2020 2:42pm	Nicole Halpin (HNE)	Email correspondence received from HNE advising of internal complaints related to vibration causing activities and requesting information on construction monitoring activities and methodology mentioned within Community Notice (2004-CN011) Construction Progress Update 02.	28/04/2020 3:53pm	BM	Built responded via email advising of the current site activities and their expected completion date of 1st May and that previous monitoring had demonstrated compliance. Built also advised that vibration monitors had been collected on 28/04/20 and that the monitoring report would be submitted to HNE for transparency and their records. Built submitted the monitoring report to HNE on 01/05/2020 showing that the acceptable vibration dose levels for intermittent vibration related to human comfort had not been exceeded. No further issues raised.	Y
2005-CC015	21/05/2020 5:52am	Bernadette Connolly (Resident)	Email sent to Built Design Manager regarding noise when site personnel are arriving to site in the morning around 6:30am to 7:00am. Complaint specifically mentions noise generated by individuals talking as walking past the residence.	22/05/2020 3:38pm	BM	Email response sent advising of construction hours commencing at 7:00am and that Built would reinforce the need to be mindful of neighbours when arriving onsite of a morning. Resident responded with no further issues.	Y

Community Liaison Register

Built.

Project: Nihon University

Notices Register

Last Updated: 29/05/20

REF ID	DATE ISSUED	ISSUED TO	ISSUED BY	METHOD	DESCRIPTION	RESPONSES RECEIVED / DETAILS	CLOSED (Y / N)
1911-CN001	5/11/2019	ALL	SV	LETTER	Dilapidation Report request to nearby stakeholders - residents, businesses, etc.	Responses received from majority of stakeholders. Dilap reports completed by Engineer and submitted.	Y
1912-CN002	13/12/2019	James Fletcher Hospital	SV	MEETING	Consultation meeting with Hunter New England Health Management to discuss upcoming commencement of works, general scope, temporary fencing, boundary, etc.	Response received post-meeting that HNE Health would like the opportunity for NSW Dept. Public Works to review the works.	Y
1912-CN003	19/12/2019	ALL	BM	LETTER	Notice of commencement of works	NIL	Y
2001-CN004	21/01/2020	ALL	BM	EMAIL / LETTER	Notice of commencement of Asbestos removal	NIL	Y
2002-CN005	4/02/2020	Newcastle Police Station	BM / LA	MEETING	Meeting with Sgt Darren Holmes (Station Manager) to discuss shared lighting circuit requiring disconnection, noise mitigation & upcoming Work Zone Installation.	2002-CQ001	Y
2002-CN006	5/02/2020	NGS	BM	MEETING	Consultation meeting with Newcastle Grammar School Deputy Head of School & Director of Operations to discuss potential impacts and concerns regarding relocation of pedestrian crossing and proposed construction zone along Church Street site frontage.	Initial response was positive due to concerns around student & staff safety traversing past live site. Built issued additional information for review and suggested additional meeting if required.	Y
2002-CN007	19/02/2020	Newcastle Police Station	BM	LETTER	Formal notice of work zone installation	NPS raised concerns on lack of solution for parking of Correctional Services vehicles. Requested Built facilitate talks with CoN. Built facilitated discussions with CoN on 20/02/2020 & long term solution was agreed.	Y
2002-CN008	20/02/2020	ALL	BM	EMAIL & LETTER	Construction progress update including completion of Stage 1 asbestos removal, commencement of structural demolition, installation of work zone & pedestrian crossing	Response from Newcastle Grammar School thanking Built for notification and advised they will communicate the information to their parent body.	Y
2003-CN009	2/03/2020	HNE	BM/OR	MEETING	Meeting arranged with HNE & NSW Public Works representatives to discuss heritage wall retention works and other construction activities potentially affecting HNE James Fletcher Hospital	HNE Engineer Jason Thomas was the only attendee. Discussed all works and items. Built issued meeting minutes & retention design to HNE on 04/03/2020 for review and comment Deadline for HNE response is 27/03/2020. Response received from HNE on 27/03/2020 with no objections.	Y
2004-CN009	3/04/2020	ALL	BM	EMAIL / LETTER	Extended Construction Hours: Notice issued to all surrounding residents, businesses, and organisations advising of the introduction of the Environmental Planning and Assessment (COVID-19 Development - Construction Working Days) Order 2020. The notice advised that Built intended to enact this Order at Nihon University until further advice/notice received from the NSW Dept. Planning, Industry and Environment	Community complaints received from Residents on Church Street. These are referenced below. 2004-CC007 2004-CC008 2004-CC009 2004-CC010 2004-CC012 In response to the community concerns, Built issued additional Community Notice (2004-CN010).	Y

2004-CN010	6/04/2020	ALL	BM	EMAIL / LETTER	Community Response to Extended Construction Hours: Notice issued to surrounding residents, businesses, and organisations advising that in response to community responses received related to 2004-CN009, Built will be extending working hours on Saturday's only in the short term and that any changes will be communicated in advance.	Additional responses were received, however, all were still in relation to extended working hours. Built has continued to implement the revised extended working hours on Saturday's and COVID-19 prevention measures onsite in accordance with Government advice.	Y
2004-CN011	22/04/2020	ALL	BM	EMAIL / LETTER	Construction Progress Update 02: - Noted establishment of Church Street Hoarding. - Advised of structural demolition progress - Advised of commencing piling / retention works in SW corner of the site on 27/04/2020. - Advised of piling method (CFA) to minimise noise and vibration. - Advised of planned Water Main Upgrade works commencing in late May 2020.	NIL	Y
2005-CN012	15/05/2020	HNE	BM	EMAIL	Notice to HNE James Fletcher Hospital regarding commencement of Temporary Ground Anchor Works to new retaining wall as discussed onsite with HNE, dwp, and Built in March 2020 (REF 2003-CN009) and per the design approved by NSW Public Works (reference email received from N. Halpin on 26/03/2020)	HNE response on 18/05/2020 ensuring HNE Engineering is aware of what is occurring on their property. Built (BM) contacted HNE for phone discussion to clarify and followed up with email on 18/05/2020. No outstanding issues.	Y

Community Liaison Register

Built.

Project: Nihon University

Queries Register

Last Updated: 29/05/20

REF ID	DATE / TIME RECEIVED	RECEIVED FROM	DESCRIPTION	DATE / TIME RESPONDED	RESPONSE BY	DESCRIPTION	CLOSED (Y / N)
2002-CQ001	4/02/2020	Newcastle Police Station	Request for sound baffling installed to L1, 2, 3 Balcony Windows due to meeting held on 03/02/2020	4/02/2020	BM	Confimed that BUILT can organise an inspection by Acoustic Consultant and provide an appropriate solution. Acoustic solution provided by Consultant is to install acoustic door seals.	Y
2002-CQ002	19/02/2020	Newcastle Police Station	Request for Built to facilitate talks with City of Newcastle regarding long term solution for Correctional Services vehicle parking	19/02/2020	BM	Built has scheduled onsite meeting with Newcastle Police Station & City of Newcastle for 20/02/2020 to discuss solutions. City of Newcastle agreed to provide permanent parking on Watt Street for required vehicles.	Y
2003-CQ003	03/03/2020 1:04pm	Andrew Russell	Email received from Andrew Russell. Spoke with Built Foreman onsite regarding blanked out pedestrian crossing and concerns around pedestrian safety due to lack of signage & physical barriers warning common users that the crossing is no longer in place. Forwarded email sent to City of Newcastle expressing same concerns plus stating that Built had traffic control personnel onsite directing pedestrians which was good to see. Advised Council that additional signage should be implemented	04/03/2020 10:35am	BM	Response email sent acknowledging concerns and advising that Built is working with Council to ensure signage is installed ASAP. City of Newcastle responded on 09/03/20 with additional requirements originally not requested during consultation. All actions closed out.	Y
2003-CQ004	26/03/2020 5:19pm	Jack Strachan	Email sent to Structural Engineer responsible for completing Pre-Construction Dilapidation Report on the property requesting that vibration causing activities be noted for Post-Construction Dilapidation Inspection.	27/03/2020	BM	Noted by Built & Engineer. No further correspondence received.	Y
2004-CQ005	01/04/2020 12:21pm	John Pasterfield	Email sent to Nihon community liaison address advising of vibration felt within their residence caused by a loaded vehicle entering site	02/04/2020 2:06pm	BM	Response email sent noting concerns and advising of Built monitoring activities to maintain compliance and minimise disruptions. Advised the resident to contact if there are any further concerns or structural changes noted. No further response received.	Y
2004-CQ006	01/04/2020 12:47pm	Keran Davis	Email sent to Nihon community liaison address advising that vibrations were felt at various times throughout the day.	02/04/2020 2:08pm	BM	Response email sent noting concerns and advising of Built monitoring activities to maintain compliance and minimise disruptions. Advised the resident to contact if there are any further concerns or structural changes noted. No further response received.	Y

2005-CQ008	18/05/2020	Newcastle Grammar School	Phone call to Built & follow up email notifying Built that construction vehicles (trucks) were standing in the school drop off/pick-up zone. Noted this was prior to school zone hours and requested an alert to be raised with Built & Subcontractors to ensure no issues moving forward.	19/05/2020 9:24am	OR	Built immediately instructed Subcontractors on 18/05/2020 not to use this zone at any time. Follow up email sent to NGS advising them of action taken and acknowledging concerns. NGS had no further issues.	Y

Appendix C – Internal Audit Records

RAPT CONSULTING

Built

Construction Noise Monitoring – 9 Church Street Newcastle NSW April 2020

Relationships **A**ttention **P**rofessional **T**rust

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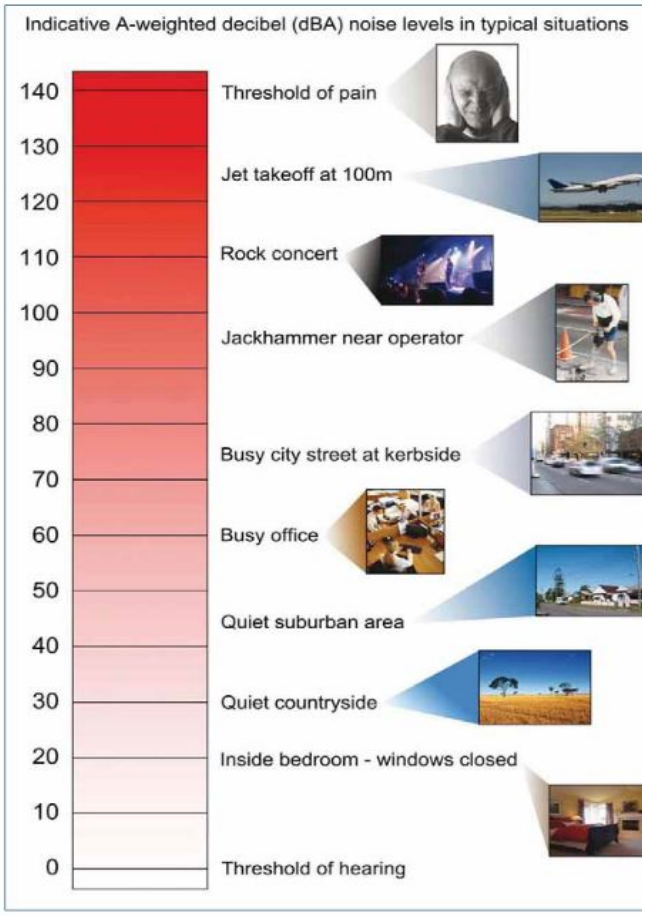
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Glossary of Acoustic Terms

Term	Definition
dB	Decibel is the unit used for expressing the sound pressure level (SPL) or power level (SWL) in acoustics. The picture below indicates typical noise levels from common noise sources. 
dB(A)	Frequency weighting filter used to measure 'A-weighted' sound pressure levels, which conforms approximately to the human ear response, as our hearing is less sensitive at very low and very high frequencies.
$L_{Aeq(period)}$	Equivalent sound pressure level: the steady sound level that, over a specified period of time, would produce the same energy equivalence as the fluctuating sound level actually occurring.
$L_{A10(period)}$	The sound pressure level that is exceeded for 10% of the measurement period.
$L_{A90(period)}$	The sound pressure level that is exceeded for 90% of the measurement period.
L_{Amax}	The maximum sound level recorded during the measurement period.

Noise sensitive receiver	◗ An area or place potentially affected by noise which includes: ◗ A residential dwelling. ◗ An educational institution, library, childcare centre or kindergarten. ◗ A hospital, surgery or other medical institution. ◗ An active (e.g. sports field, golf course) or passive (e.g. national park) recreational area. ◗ Commercial or industrial premises. ◗ A place of worship.
Rating Background Level (RBL)	The overall single-figure background level representing each assessment period (day/evening/night) over the whole monitoring period.
Feasible and Reasonable (Noise Policy for Industry Definition)	**Feasible** mitigation measure is a noise mitigation measure that can be engineered and is practical to build and/or implement, given project constraints such as safety, maintenance and reliability requirements. Selecting **Reasonable** measures from those that are feasible involves judging whether the overall noise benefits outweigh the overall adverse social, economic and environmental effects, including the cost of the mitigation measure. To make a judgement, consider the following: ◗ Noise impacts ◗ Noise mitigation benefits ◗ Cost effectiveness of noise mitigation ◗ Community views.
Sound power level (SWL)	The sound power level of a noise source is the sound energy emitted by the source. Notated as SWL, sound power levels are typically presented in dB(A).

1. Introduction

Background

RAPT Consulting has been engaged to undertake short term attended construction noise monitoring for Built as part of their project at Nihon University. Based on the information provided it is understood there is a requirement for noise and vibration monitoring to be undertaken during construction works of the Nihon University project located at 9 Church Street Newcastle. The site and surrounding area is provided in Figure 1.



Figure 1 Site Location and Surrounding Area

1.1 Limitations

The purpose of this report is to provide an independent noise assessment for the project.

It is not the intention of the assessment to cover every element of the acoustic environment, but rather to conduct the assessment with consideration to the prescribed work scope.

The findings of the noise assessment represent the findings apparent at the date and time of the assessment undertaken. It is the nature of environmental assessments that all variations in environmental conditions cannot be assessed and all uncertainty concerning the conditions of the ambient environment cannot be eliminated. Professional judgement must be exercised in the investigation and interpretation of observations.

In conducting this assessment and preparing the report, current guidelines for noise were referred to. This work has been conducted in good faith with RAPT Consulting's understanding of the client's brief and the generally accepted consulting practice.

No other warranty, expressed or implied, is made as to the information and professional advice included in this report. It is not intended for other parties or other uses.

2. Noise and Vibration Criteria

2.1 Construction Noise

Construction noise is assessed with consideration to DECCW *Interim Construction Noise Guidelines* (ICNG) (July 2009). The INCG is a non-mandatory guideline that is usually referred to by local councils and other NSW government entities when construction / demolition works require development approval. The ICNG recommend standard hours for construction activity as detailed in Table 1.

Table 1 ICNG Recommended Construction Hours

Work type	Recommended standard hours of work
Normal construction	Monday to Friday: 7 am to 6 pm. Saturday: 8 am to 1 pm. No work on Sundays or Public Holidays.
Blasting	Monday to Friday: 9 am to 5 pm. Saturday: 9 am to 1 pm. No work on Sundays or Public Holidays.

The ICNG provides noise management levels for construction noise at residential and other potentially sensitive receivers. These management levels are to be calculated based on the adopted rating background level (RBL) at nearby locations, as shown in Table 2.

Table 2 ICNG Recommended Noise Management Levels

Period	Management Level $L_{Aeq(15\ min)}$
Residential Recommended standard hours	Noise affected level: RBL + 10 Highly noise affected level: 75 dB(A)
Residential Outside recommended standard hours	Noise affected level: RBL + 5
Classrooms at schools and other educational institutions	Internal Noise Level 45 dB(A) (applies when properties are being used)
Offices, retail outlets (external)	70 dB(A)
industrial premises (external)	75 dB(A)

The above levels apply at the boundary of the most affected residences / offices or within 30 m from the residence where the property boundary is more than 30 m from the residence.

The *noise affected level* represents the point above which there may be some community reaction to noise. Where the *noise affected level* is exceeded all feasible and reasonable work practices to minimise noise should be applied and all potentially impacted residents should be informed of the nature of the works, expected noise levels, duration of works and a method of contact. The *noise affected level* is the background noise level plus 10 dB(A)

during recommended standard hours and the background noise level plus 5 dB(A) outside of recommended standard hours.

The *highly noise affected level* represents the point above which there may be strong community reaction to noise and is set at 75 dB(A). Where noise is above this level, the relevant authority may require respite periods by restricting the hours when the subject noisy activities can occur, considering:

- Times identified by the community when they are less sensitive to noise (such as mid-morning or mid-afternoon for works near residences).
- If the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.

Construction noise trigger levels for the project were established by EMM and are found in their document *Noise and Vibration Assessment – Operational and Construction Nihon University – Newcastle Campus. May 2019, Report # H190015 RP#1.* Based on the above and the RBL determined from site monitoring, construction noise trigger levels have been derived, as shown in Table 3.

Table 3 ICNG Noise Goals Leq(15min) dB(A)

Receiver	Standard Hours
	Daytime (7am-6pm)
Residential (external)	59
Offices, retail outlets (external)	70
industrial premises (external)	75
Classrooms (when in use)	45/55 (internal/external)
Hospital Wards and Operating Theatres (when in use)	45/55 (internal/external)
Places of Worship (when in use)	45/55 (internal/external)

3. Construction Noise Monitoring

Attended noise monitoring was undertaken on 30 April 2020 at 36 and 26 Church Street at the request of Built as active construction work was taking place on the western end of the site including gravel deliveries and earthmoving equipment. These sites are consistent with being nearest residences to the works. The monitoring locations are provided in figure 2 and 3.



Figure 2 Noise monitoring Location 36 Church Street



Figure 3 Noise Monitoring 26 Church Street

During site visits it was noted that construction activities including earthmoving noise sources primarily described the ambient noise environment. Additionally, road traffic was perceptible and a component of the ambient noise environment.

The monitoring was conducted using a RION NL-42 type 2 integrated noise logger within calibration. These units are capable of measuring continuous sound pressure levels and are able to record LAmin, LA90, LA10, LA1, LAmax and LAeq noise descriptors. Calibration was checked prior to and at the conclusion of the measurements with no significant drift.

Weather conditions were fine 20 degrees with wind speeds < 5 m/s.

Logged data was reviewed and filtered to exclude any extraneous data results during the monitoring period. The noise monitoring results are provided in Table 4.

Table 3 Noise Monitoring Results

Location	Lmax dB(A)	L1 dB(A)	L10 dB(A)	L90 dB(A)	Lmin dB(A)	Leq (dB(A)	Time Interval
36 Church Street	88	78	67	58	53	67	13:00 – 13:15
26 Church Street	68	63	60	53	52	58	13:30 – 13:45

Observations:

- Car Passby 60-64 dB(A)
- Reverse Beacon 70 – 72 dB(A)
- Dumping Gravel 65-68 dB(A)
- Gravel Delivery Truck Brake Squeal 87 dB(A)

Attended noise measurements indicated construction noise trigger levels were met at 26 Church Street and were above noise trigger levels by 8 dB(A). However the noise measurements at this location were well below the highly noise affected noise trigger level of 75 dB(A).

4. Conclusion

RAPT Consulting has undertaken standard hours construction noise monitoring for Built. The purpose of the monitoring was to measure while standard hours construction activities were taking place and compare against established project specific standard hours project noise trigger levels.

Should you have any further questions regarding this report, please do not hesitate to contact Greg Collins on 0488512224 or greg@raptconsulting.com.au.

Thank you,



Greg Collins

Director – RAPT Consulting

5. Appendix A Calibration Certificates



Acoustic Research Labs Pty Ltd
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Sound Level Meter
IEC 61672-3.2013
Calibration Certificate
Calibration Number C19507

Client Details	Rapt Consulting 106/10 Kendrick Street The Junction NSW 2291
Equipment Tested/ Model Number :	Rion NL-42EX
Instrument Serial Number :	00572567
Microphone Serial Number :	170404
Pre-amplifier Serial Number :	72905

Pre-Test Atmospheric Conditions		**Post-Test Atmospheric Conditions**	
Ambient Temperature :	24.4°C	**Ambient Temperature :**	24.6°C
Relative Humidity :	31.3%	**Relative Humidity :**	36%
Barometric Pressure :	101.55kPa	**Barometric Pressure :**	100.4kPa

Calibration Technician :	Lucky Jaiswal	**Secondary Check:**	James Jepsen
Calibration Date :	21 Aug 2019	**Report Issue Date :**	23 Aug 2019

Approved Signatory : Ken Williams

Clause and Characteristic Tested	Result	Clause and Characteristic Tested	Result
12: Acoustical Sig. tests of a frequency weighting	*Pass*	17: Level linearity incl. the level range control	*Pass*
13: Electrical Sig. tests of frequency weightings	*Pass*	18: Tonebrust response	*Pass*
14: Frequency and time weightings at 1 kHz	*Pass*	19: C Weighted Peak Sound Level	*Pass*
15: Long Term Stability	*Pass*	20: Overload Indication	*Pass*
16: Level linearity on the reference level range	*Pass*	21: High Level Stability	*Pass*

The sound level meter submitted for testing has successfully completed the class 2 periodic tests of IEC 61672-3 2013, for the environmental conditions under which the tests were performed.

However, no general statement or conclusion can be made about conformance of the sound level meter to the full requirements of IEC 61672-1:2013 because evidence was not publicly available, from an independent testing organisation responsible for pattern approvals, to demonstrate that the model of sound level meter fully conformed to the requirements in IEC 61672-1:2013 and because the periodic tests of IEC 61672-3:2013 cover only a limited subset of the specifications in IEC 61672-1:2013.

Least Uncertainties of Measurement -

Acoustic Tests		Environmental Conditions	
31.5 Hz to 8kHz:	*±0.18dB*	*Temperature*	*±0.2°C*
12.5kHz:	*±0.19dB*	*Relative Humidity*	*±2.4%*
16kHz:	*±0.29dB*	*Barometric Pressure*	*±0.015kPa*
Electrical Tests			
31.5 Hz to 20 kHz:	*±0.11dB*		

All uncertainties are derived at the 95% confidence level with a coverage factor of 2.

This calibration certificate is to be read in conjunction with the calibration test report.

Acoustic Research Labs Pty Ltd is NATA Accredited Laboratory Number 14172.
Accredited for compliance with ISO/IEC 17025 - calibration.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration and inspection reports.

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Acoustic Research Labs Pty Ltd
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Sound Calibrator

IEC 60942-2017

Calibration Certificate

Calibration Number C19509

Client Details Rapt Consulting
106/10 Kendrick Street
The Junction NSW 2291

Equipment Tested/ Model Number : Pulsar Model 106
Instrument Serial Number : 79635

Atmospheric Conditions
Ambient Temperature : 24.6°C
Relative Humidity : 35.7%
Barometric Pressure : 100.38kPa

Calibration Technician : Lucky Jaiswal
Calibration Date : 21 Aug 2019
Secondary Check: James Jepsen
Report Issue Date : 23 Aug 2019
Approved Signatory : Ken Williams

Characteristic Tested	Result
Generated Sound Pressure Level	Pass
Frequency Generated	Pass
Total Distortion	Pass

	Nominal Level	Nominal Frequency	Measured Level	Measured Frequency
Measured Output	94.0	1000.0	93.8	1000.38

The sound calibrator has been shown to conform to the class 2 requirements for periodic testing, described in Annex B of IEC 60942:2017 for the sound pressure level(s) and frequency(ies) stated, for the environmental conditions under which the tests were performed.

Least Uncertainties of Measurement -

Specific Tests		Environmental Conditions	
Generated SPL	*±0.14dB*	*Temperature*	*±0.2°C*
Frequency	*±0.01%*	*Relative Humidity*	*±2.4%*
Distortion	*±0.48%*	*Barometric Pressure*	*±0.015kPa*

All uncertainties are derived at the 95% confidence level with a coverage factor of 2.

* The tests <1000 kHz are not covered by Acoustic Research Labs Pty Ltd NATA accreditation.

This calibration certificate is to be read in conjunction with the calibration test report.

Acoustic Research Labs Pty Ltd is NATA Accredited Laboratory Number 14172.
Accredited for compliance with ISO/IEC 17025 - calibration.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

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RAPT CONSULTING

Built

Vibration Monitoring, 9 Church Street Newcastle NSW - April 2020

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1. Introduction

Background

RAPT Consulting has been engaged to undertake vibration monitoring for Built as part of their project at Nihon University. Based on the information provided it is understood there is a requirement for noise and vibration monitoring to be undertaken during construction works of the Nihon University project located at 9 Church Street Newcastle. The site and surrounding area is provided in Figure 1.



Figure 1 Site and Surrounding Area

Site activities at the time of the monitoring included demolition and earthworks to the ex-Supreme Courts Building, and internal soft strip demolition works to the Heritage Courthouse. Photographs of site activities is provided in figures 2-4.



Figure 2 Site Operations



Figure 3 Site Operations



Figure 4 Site Operations

The purpose of the vibration monitoring was to ascertain compliance with adopted vibration goals.

1.1 Limitations

The purpose of this report is to provide an independent vibration compliance assessment for the works currently taking place at 9 Church Street Newcastle.

It is not the intention of the assessment to cover every element of the ambient vibration environment, but rather to conduct the assessment with consideration to the prescribed work scope.

The findings of the vibration assessment represent the findings apparent at the date and time of the assessment undertaken. It is the nature of environmental assessments that all variations in environmental conditions cannot be assessed and all uncertainty concerning the conditions of the ambient environment cannot be eliminated. Professional judgement must be exercised in the investigation and interpretation of observations.

In conducting this assessment and preparing the report, current guidelines for vibration were referred to. This work has been conducted in good faith with RAPT Consulting's understanding of the client's brief and the generally accepted consulting practice.

No other warranty, expressed or implied, is made as to the information and professional advice included in this report. It is not intended for other parties or other uses.

2. Vibration Guidelines

2.1 Human Exposure

Vibration goals were sourced from the DECCW's Assessing Vibration: a technical guideline, which is based on guidelines contained in British Standard (BS) 6472–1992, Evaluation of human exposure to vibration in buildings (1–80 Hz).

Intermittent vibration is assessed using the vibration dose value (VDV), fully described in BS 6472 – 1992. Acceptable values of vibration dose are presented in Table 1.

Location	Daytime [1]		Nighttime [1]	
	Preferred value	Maximum value	Preferred value	Maximum value
Critical areas [2]	0.10	0.20	0.10	0.20
Residences	0.20	0.40	0.13	0.26
Offices, schools, educational institutions and places of worship	0.40	0.80	0.40	0.80
Workshops	0.80	1.60	0.80	1.60

Table 1 Acceptable Vibration Dose Values for Intermittent Vibration ($m/s^{1.75}$)

1 Daytime is 7:00 to 22:00 and nighttime is 22:00 to 7:00; and

2 Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring. These criteria are only indicative, and there may be need to assess intermittent values against the continuous or impulsive criteria for critical areas.

2.2 Building Damage

Currently, there is no Australian Standard that sets the criteria for the assessment of building damage caused by vibration. Guidance of limiting vibration values is attained from reference to the following International Standards and Guidelines:

- British Standard BS7385.2 - 1993 *Evaluation and Measurement for Vibration in Buildings*, Part 2 - Guide to damage levels from ground borne vibration; and
- German Standard DIN 4150-3: 1999-02 Structural Vibration – Part 3: *Effects of vibration on structures*.

The German Standard Where heritage structures may be impacted, DIN 4150-3 specifies a method of measuring and evaluating the effects of vibration on structures and these vibration criteria will be applied. The criteria applicable to heritage buildings are identified in table 5-7. Based on DIN 4150-3, a measured value exceeding those listed in Table 5-7 will not necessarily lead to damage if it is significantly exceeded, however, further investigations may be necessary, and monitoring implemented during the project.

DIN 4150-3: 1999-02 is utilised in this case in the assessment of potential building damage resulting from ground borne vibration produced by the proposed activity.

The recommended Peak Particle Velocity (PPV) guidelines for the possibility of vibration induced building damage are derived from the minimum vibration levels above which any damage has previously been encountered and are presented in Table 2.

Table 2 Guideline values for vibration velocity to be used when evaluating the effects of short-term vibration on structures

Type of Structure	Peak Component Particle Velocity, mm/s			
	Vibration at the foundation at a frequency of			Vibration of horizontal plane of highest floor at all frequencies
	1 Hz to 10 Hz	10 Hz to 50 Hz	50 Hz to 100 Hz*	
Buildings used for commercial purposes, industrial buildings, and buildings of similar design	20	20-40	40-50	40
Dwellings and buildings of similar design and/or occupancy	5	5-15	15-20	15
Structures that, because of their sensitivity to vibration, do not correspond to those listed in lines 1 and 2 of table 5-7 and are of great intrinsic value (e.g. buildings that are under a preservation order)	3	3 to 8	8 to 10	8

**At Frequencies above 100Hz, the values given in this column may be used as minimum values*

3. Measurement Methodology

The assessment was conducted from 15 April to 28 April 2020 on the concrete ground adjacent to the James Fletcher Hospital facing north towards the demolition works and the basement floor of the courthouse at 9 Church Street, Newcastle.

Measurements were conducted using Profound Vibra ground vibration monitors (Serial Numbers VIB0814 at James Fletcher Hospital and VIB1724 at the Courthouse. The geophones were coupled securely to the floors for the experiment.

The instruments were set up to gather PPV levels at 1-second intervals in all three directions.

The setups are shown in Figure 3 and 4 below.



Figure 3 Equipment Location James Fletcher Hospital and Setup



Figure 4 Equipment Location Courthouse and Setup

3.1 Measured Vibration Levels

The vibration monitors recorded the peak particle velocity (PPV) in each of the three orthogonal axes. To simplify the analysis the maximum component (i.e. the greatest magnitude PPV on any of the three axes) was calculated and is reported. This is considered to be representative of the maximum resultant PPV.

The vast majority of measurements taken over the course of the two-week monitoring period were within adopted guideline values. However 5 isolated instances occurred over 1-minute periods where PPV exceeded 3.0 mm/s at the James Fletcher Hospital monitoring location. These occurrences were below 5.0 mm/s and at frequencies in the 10 to 50 Hz range. The remainder of the recorded measurements were within guideline values for velocity. These exceedances were considered minor and very infrequent. With this in mind, it is considered no further mitigation actions are considered necessary. However, it is recommended and understood weekly monitoring of the brick wall adjacent to the hospital running east and west is taking place by surveyors. Additionally it is recommended further vibration monitoring take place when potentially vibration generating activities are planned for the area in this vicinity.

8 isolated instances occurred over 1-minute periods over the course of the monitoring where PPV exceeded 3.0 mm/s however were less than 5 mm/s at the Court House. These occurrences were at frequencies in the 10 to 50 Hz range. The remainder of the recorded measurements were within guideline values for velocity.

Calculated vibration dose values ranged from 0.1 to 0.7m/s$^{1.75}$ the James Fletcher Hospital which is within acceptable vibration dose values for intermittent vibration for offices, schools, educational institutions and places of worship. At the Courthouse vibration dose values ranged from and 0.2 to 1.0 m/s$^{1.75}$ which also agrees with acceptable vibration dose values for an active area such as a workshop.

4. Conclusion

RAPT Consulting has undertaken vibration monitoring on behalf of Built as part of their project at Nihon University. The purpose of the monitoring was to ascertain if current construction operations at 9 Church Street Newcastle comply with current vibration guidelines. Based on the results of the monitoring assessment vibration levels are within goal levels for assessing potential building damage and protecting human comfort at the monitoring locations.

Should you have any questions regarding this report please do not hesitate to contact Greg Collins on 0488512224 or greg@raptconsulting.com.au.

Thank you,



Greg Collins

Director – RAPT Consulting

5. Calibration Certificates

Acoustic Research Labs Pty Ltd
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Vibration Meter

Calibration Certificate

Calibration Number C19603

Client Details Acoustic Research Labs Pty Ltd
Unit 36/14 Loyalty Road
North Rocks NSW 2151

Equipment Tested/ Model Number : Profound VIBRA
Instrument Serial Number : VIB01724
Geophone Serial Number : TDA00687

Atmospheric Conditions
Ambient Temperature : 24.7°C
Relative Humidity : 38.2%
Barometric Pressure : 99.8kPa

Calibration Technician : Lucky Jaiswal
Calibration Date : 4 October 2019
Secondary Check:
Report Issue Date :
Signed : Ken Williams

Test Procedure

Reference levels for the selected test frequencies were obtained using a Profound Vibra+ (S/N: VIBe0176) attached to a Shaker Table. The device under test was then attached to the IMV MS-VE-01N Shaker Table (S/N: 410168) and the readings taken directly from the internal display were recorded below. The deviation of these readings from the reference readings are listed along with these results.

Test Equipment Used

A RIGOL LXI DG1022 DG1ZA193704157 Arbitrary Function Generator (S/N -US36047448was used to generate the required electrical signals for each test with a means for varying the attenuation of these signals via the IMV MS-VE-01N Shaker Table (S/N: 410168) was provided by a JFW Industries dual rotary Model 50DR-001attenuator (S/N - 761637). A Lutron MHB-382SD (S/N – AG.88227) was used for measuring environmental conditions during device calibration.

Test Results

		X-Axis (Peak Velocity)		Y-Axis (Peak Velocity)		Z-Axis (Peak Velocity)	
Frequency	Reference (mm/s)	Result (mm/s)	Variance (mm/s)	Result (mm/s)	Variance (mm/s)	Result (mm/s)	Variance (mm/s)
5Hz	10.00	9.86	-0.14	10.12	+0.12	9.86	-0.14
10Hz	10.00	9.95	-0.05	10.03	+0.03	10.27	+0.27
20Hz	10.00	10.09	+0.09	9.77	-0.23	9.90	0.10
40Hz	10.00	10.02	+0.02	10.20	+0.20	10.22	+0.22

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Vibration Meter

Calibration Certificate

Calibration Number C19595

Client Details Acoustic Research Labs Pty Ltd
Unit 36/14 Loyalty Road
North Rocks NSW 2151

Equipment Tested/ Model Number : Profound VIBRA
Instrument Serial Number : VIB00814
Geophone Serial Number : TDA00494

Atmospheric Conditions
Ambient Temperature : 24.6°C
Relative Humidity : 48.2%
Barometric Pressure : 99.8kPa

Calibration Technician : Lucky Jaiswal
Calibration Date : 2 October 2019
Secondary Check:
Report Issue Date :

Signed : Ken Williams

Test Procedure

Reference levels for the selected test frequencies were obtained using a Profound Vibra+ (S/N: VIBe0176) attached to a Shaker Table. The device under test was then attached to the IMV MS-VE-01N Shaker Table (S/N: 410168) and the readings taken directly from the internal display were recorded below. The deviation of these readings from the reference readings are listed along with these results.

Test Equipment Used

A RIGOL LXI DG1022 DG1ZA193704157 Arbitrary Function Generator (S/N -US36047448was used to generate the required electrical signals for each test with a means for varying the attenuation of these signals via the IMV MS-VE-01N Shaker Table (S/N: 410168) was provided by a JFW Industries dual rotary Model 50DR-001attenuator (S/N - 761637). A Lutron MHB-382SD (S/N – AG.88227) was used for measuring environmental conditions during device calibration.

Test Results

		X-Axis (Peak Velocity)		Y-Axis (Peak Velocity)		Z-Axis (Peak Velocity)	
Frequency	Reference (mm/s)	Result (mm/s)	Variance (mm/s)	Result (mm/s)	Variance (mm/s)	Result (mm/s)	Variance (mm/s)
5Hz	10.00	9.83	-0.17	10.11	+0.11	9.91	-0.09
10Hz	10.00	10.08	+0.08	10.20	+0.20	9.98	-0.02
20Hz	10.00	10.07	+0.07	9.94	-0.06	9.95	-0.05
40Hz	10.00	10.30	+0.30	10.24	+0.24	10.14	+0.14

RAPT CONSULTING

Built

Vibration Monitoring, 9 Church Street Newcastle NSW - May 2020

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1. Introduction

Background

RAPT Consulting has been engaged to undertake vibration monitoring for Built as part of their project at Nihon University. Based on the information provided it is understood there is a requirement for noise and vibration monitoring to be undertaken during construction works of the Nihon University project located at 9 Church Street Newcastle. The site and surrounding area is provided in Figure 1.



Figure 1 Site and Surrounding Area

Site activities at the time of the monitoring included dCFA Piling Rig & Excavator in use throughout the monitoring period in the SW Corner of the site. The works involved the construction of the new shoring wall consisting of 38 CFA Piles. Site activities are provided in figure 2.



Figure 2 Site Operations

The purpose of the vibration monitoring was to ascertain compliance with adopted vibration goals and to assist in managing vibration where vibration activities are taking place.

1.1 Limitations

The purpose of this report is to provide an independent vibration compliance assessment for the works currently taking place at 9 Church Street Newcastle.

It is not the intention of the assessment to cover every element of the ambient vibration environment, but rather to conduct the assessment with consideration to the prescribed work scope.

The findings of the vibration assessment represent the findings apparent at the date and time of the assessment undertaken. It is the nature of environmental assessments that all variations in environmental conditions cannot be assessed and all uncertainty concerning the conditions of the ambient environment cannot be eliminated. Professional judgement must be exercised in the investigation and interpretation of observations.

In conducting this assessment and preparing the report, current guidelines for vibration were referred to. This work has been conducted in good faith with RAPT Consulting's understanding of the client's brief and the generally accepted consulting practice.

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2. Vibration Guidelines

2.1 Human Exposure

Vibration goals were sourced from the DECCW's Assessing Vibration: a technical guideline, which is based on guidelines contained in British Standard (BS) 6472–1992, Evaluation of human exposure to vibration in buildings (1–80 Hz).

Intermittent vibration is assessed using the vibration dose value (VDV), fully described in BS 6472 – 1992. Acceptable values of vibration dose are presented in Table 1.

Location	Daytime [1]		Nighttime [1]	
	Preferred value	Maximum value	Preferred value	Maximum value
Critical areas [2]	0.10	0.20	0.10	0.20
Residences	0.20	0.40	0.13	0.26
Offices, schools, educational institutions and places of worship	0.40	0.80	0.40	0.80
Workshops	0.80	1.60	0.80	1.60

Table 1 Acceptable Vibration Dose Values for Intermittent Vibration ($m/s^{1.75}$)

1 Daytime is 7:00 to 22:00 and nighttime is 22:00 to 7:00; and

2 Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring. These criteria are only indicative, and there may be need to assess intermittent values against the continuous or impulsive criteria for critical areas.

2.2 Building Damage

Currently, there is no Australian Standard that sets the criteria for the assessment of building damage caused by vibration. Guidance of limiting vibration values is attained from reference to the following International Standards and Guidelines:

- British Standard BS7385.2 - 1993 *Evaluation and Measurement for Vibration in Buildings*, Part 2 - Guide to damage levels from ground borne vibration; and
- German Standard DIN 4150-3: 1999-02 Structural Vibration – Part 3: *Effects of vibration on structures*.

The German Standard Where heritage structures may be impacted, DIN 4150-3 specifies a method of measuring and evaluating the effects of vibration on structures and these vibration criteria will be applied. The criteria applicable to heritage buildings are identified in table 5-7. Based on DIN 4150-3, a measured value exceeding those listed in Table 5-7 will not necessarily lead to damage if it is significantly exceeded, however, further investigations may be necessary, and monitoring implemented during the project.

DIN 4150-3: 1999-02 is utilised in this case in the assessment of potential building damage resulting from ground borne vibration produced by the proposed activity.

The recommended Peak Particle Velocity (PPV) guidelines for the possibility of vibration induced building damage are derived from the minimum vibration levels above which any damage has previously been encountered and are presented in Table 2.

Table 2 Guideline values for vibration velocity to be used when evaluating the effects of short-term vibration on structures

Type of Structure	Peak Component Particle Velocity, mm/s			
	Vibration at the foundation at a frequency of			Vibration of horizontal plane of highest floor at all frequencies
	1 Hz to 10 Hz	10 Hz to 50 Hz	50 Hz to 100 Hz*	
Buildings used for commercial purposes, industrial buildings, and buildings of similar design	20	20-40	40-50	40
Dwellings and buildings of similar design and/or occupancy	5	5-15	15-20	15
Structures that, because of their sensitivity to vibration, do not correspond to those listed in lines 1 and 2 of table 5-7 and are of great intrinsic value (e.g. buildings that are under a preservation order)	3	3 to 8	8 to 10	8

**At Frequencies above 100Hz, the values given in this column may be used as minimum values*

3. Measurement Methodology

The assessment was conducted from 30 April to 8 May 2020 on the concrete ground adjacent to the James Fletcher Hospital facing north towards the demolition works at 9 Church Street, Newcastle.

Measurements were conducted using Profound Vibra ground vibration monitors (Serial Number VIB01711 at James Fletcher Hospital. The geophone was coupled securely to the ground for the experiment.

The instrument was set up to gather PPV levels at 1-second intervals in all three directions.

The setup is shown in Figure 3 below.



3.1 Measured Vibration Levels

The vibration monitor recorded the peak particle velocity (PPV) in each of the three orthogonal axes. To simplify the analysis the maximum component (i.e. the greatest magnitude PPV on any of the three axes) was calculated and is reported. This is considered to be representative of the maximum resultant PPV.

The majority of measurements taken over the course of the monitoring period were within adopted guideline values. Some isolated instances occurred over 1-minute periods where PPV in the 3.0 mm/s to 8.0 mm/s range at the James Fletcher Hospital monitoring location. These occurred on 30 April and 01 May while final preparation / compaction works for the piling platform were undertaken on the 30th April & 1st May. The occurrences were below 5.0 mm/s and at frequencies in the 10 to 50 Hz range. These instances were considered minor and infrequent occurring approximately 2% of the time during the monitoring period. CFA Piling commenced onsite in the SW Corner on 4th May and were completed on 8th May when lower readings were recorded. All measurements were well within guideline values for dwellings and buildings of similar design and/or occupancy and buildings used for commercial purposes, industrial buildings, and buildings of similar design. With this in mind, it is considered no further mitigation actions are considered necessary. However, it is

recommended and understood weekly monitoring of the brick wall adjacent to the hospital running east and west is taking place by surveyors. Additionally it is recommended further vibration monitoring take place when potentially vibration generating activities are planned for the area in this vicinity.

On 1 May calculated vibration dose values were 1.4 $m/s^{1.75}$, the remainder of the measurements ranged from 0.4 to 0.8$m/s^{1.75}$ at the James Fletcher Hospital which is within acceptable vibration dose values for intermittent vibration for offices, schools, educational institutions and places of worship.

4. Conclusion

RAPT Consulting has undertaken vibration monitoring on behalf of Built as part of their project at Nihon University. The purpose of the monitoring was to ascertain if current construction operations at 9 Church Street Newcastle comply with current vibration guidelines and to manage vibration where vibration activities are taking place. While guidelines utilised in this assessment are largely met, the results of the monitoring assessment suggest further vibration monitoring takes place particularly where anticipated vibration generating activities are planned to minimise the risk of vibration impacts..

Should you have any questions regarding this report please do not hesitate to contact Greg Collins on 0488512224 or greg@raptconsulting.com.au.

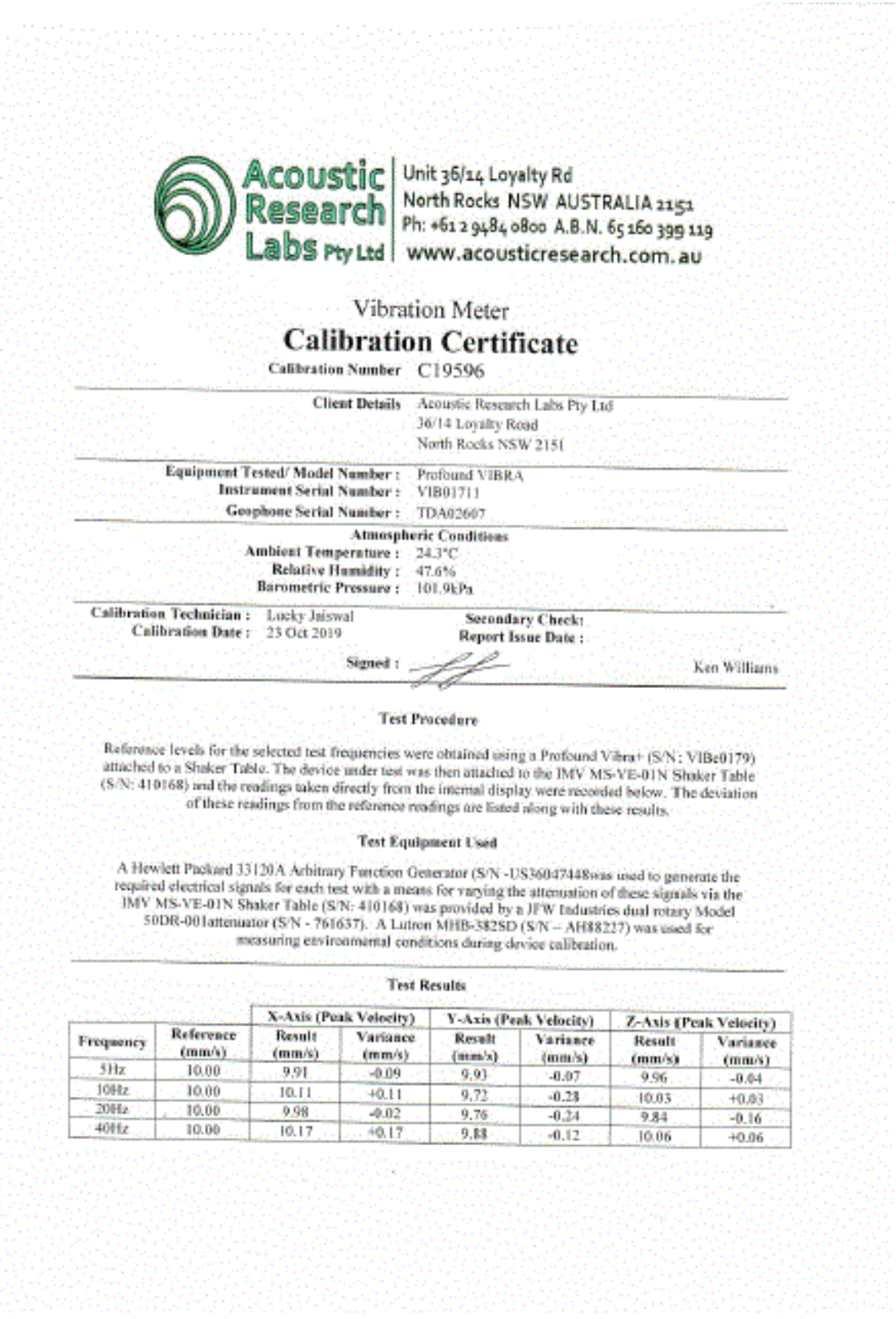
Thank you,



Greg Collins

Director – RAPT Consulting

5. Calibration Certificates



Acoustic Research Labs Pty Ltd
Unit 36/14 Loyalty Rd
North Rocks NSW AUSTRALIA 2151
Ph: +61 2 9484 0800 A.B.N. 65 160 399 119
www.acousticresearch.com.au

Vibration Meter

Calibration Certificate

Calibration Number C19596

Client Details Acoustic Research Labs Pty Ltd
36/14 Loyalty Road
North Rocks NSW 2151

Equipment Tested/ Model Number : Profound VIBRA
Instrument Serial Number : VIB01711
Geophone Serial Number : TDA02607

Atmospheric Conditions
Ambient Temperature : 24.3°C
Relative Humidity : 47.6%
Barometric Pressure : 101.9kPa

Calibration Technician : Lucky Jaiswal
Calibration Date : 23 Oct 2019
Secondary Check:
Report Issue Date :

Signed : Ken Williams

Test Procedure

Reference levels for the selected test frequencies were obtained using a Profound Vibra+ (S/N: VIBe0179) attached to a Shaker Table. The device under test was then attached to the IMV MS-VE-01N Shaker Table (S/N: 410168) and the readings taken directly from the internal display were recorded below. The deviation of these readings from the reference readings are listed along with these results.

Test Equipment Used

A Hewlett Packard 33120A Arbitrary Function Generator (S/N -US36047448was used to generate the required electrical signals for each test with a means for varying the attenuation of these signals via the IMV MS-VE-01N Shaker Table (S/N: 410168) was provided by a JFW Industries dual rotary Model 50DR-001attenuator (S/N - 761637). A Lutron MHB-382SD (S/N – AH88227) was used for measuring environmental conditions during device calibration.

Test Results

Frequency	Reference (mm/s)	X-Axis (Peak Velocity) Result (mm/s)	X-Axis (Peak Velocity) Variance (mm/s)	Y-Axis (Peak Velocity) Result (mm/s)	Y-Axis (Peak Velocity) Variance (mm/s)	Z-Axis (Peak Velocity) Result (mm/s)	Z-Axis (Peak Velocity) Variance (mm/s)
5Hz	10.00	9.91	-0.09	9.93	-0.07	9.96	-0.04
10Hz	10.00	10.11	+0.11	9.72	-0.28	10.03	+0.03
20Hz	10.00	9.98	-0.02	9.76	-0.24	9.84	-0.16
40Hz	10.00	10.17	+0.17	9.88	-0.12	10.06	+0.06

Site Inspection

Details

Form id	125095
Created at	19/05/2020
Completed at	19/05/2020
Last modified	25/05/2020 14:40:10
Status	Complete
Respondent	Benjamin Moss
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	
Type of Site Inspection	Supervisor Inspection

Built Attendance

Include the person who is logged in as well.

Name
Benjamin Moss

Others in attendance

Subcontractor Name	Persons Name

Areas or Locations Inspected

Identify the area/s reviewed during the inspection. The may include; whole of project, certain levels or certain locations.

Building A (Education)
Building C (Residential)

Summary of inspection

This may include; common checks, activities or items reviewed, good practices observed or general commentary of the inspection.
Note; all actions need to be registered in the "Actions" area at the bottom of this page.

- Building A: Access gate sediment control requires improvement due to recent rain. Despite wheel wash, some mud tracking. Noted that sediment is being regularly swept/broomed.
- Building A: Leaking tap/hose connection observed on the hoarding near Nurse Call Station.
- Building A: Spotters in place for mobile plant operating in Building A Area.
- Building A: Exclusion zone in place in SW Corner during excavation/demolition

- Building C: Expired electrical lead test tags identified on several leads and pieces of equipment
- Building C: Fire extinguisher tested and tagged (compliant)
- Building C: Exposed reinforcement bars & star pickets had capping as required.
- Building C: Spotters in place for mobile plant operating in the area
- Building C: Exclusion zone in place adjacent to the demolition work zone adjacent to Building B.
- Building C: General housekeeping to be improved.

High Potential Hazard Reporting

High Potential Classification	Trade/Process	Comments

Site Inspection

Select from the drop down list those which apply. Use the Add button to add one line per issue	***State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'***	***Describe the situation that is classified as High Potential***

Site Inspection

Additional

Photos



Building A - Access Gate

Site Inspection



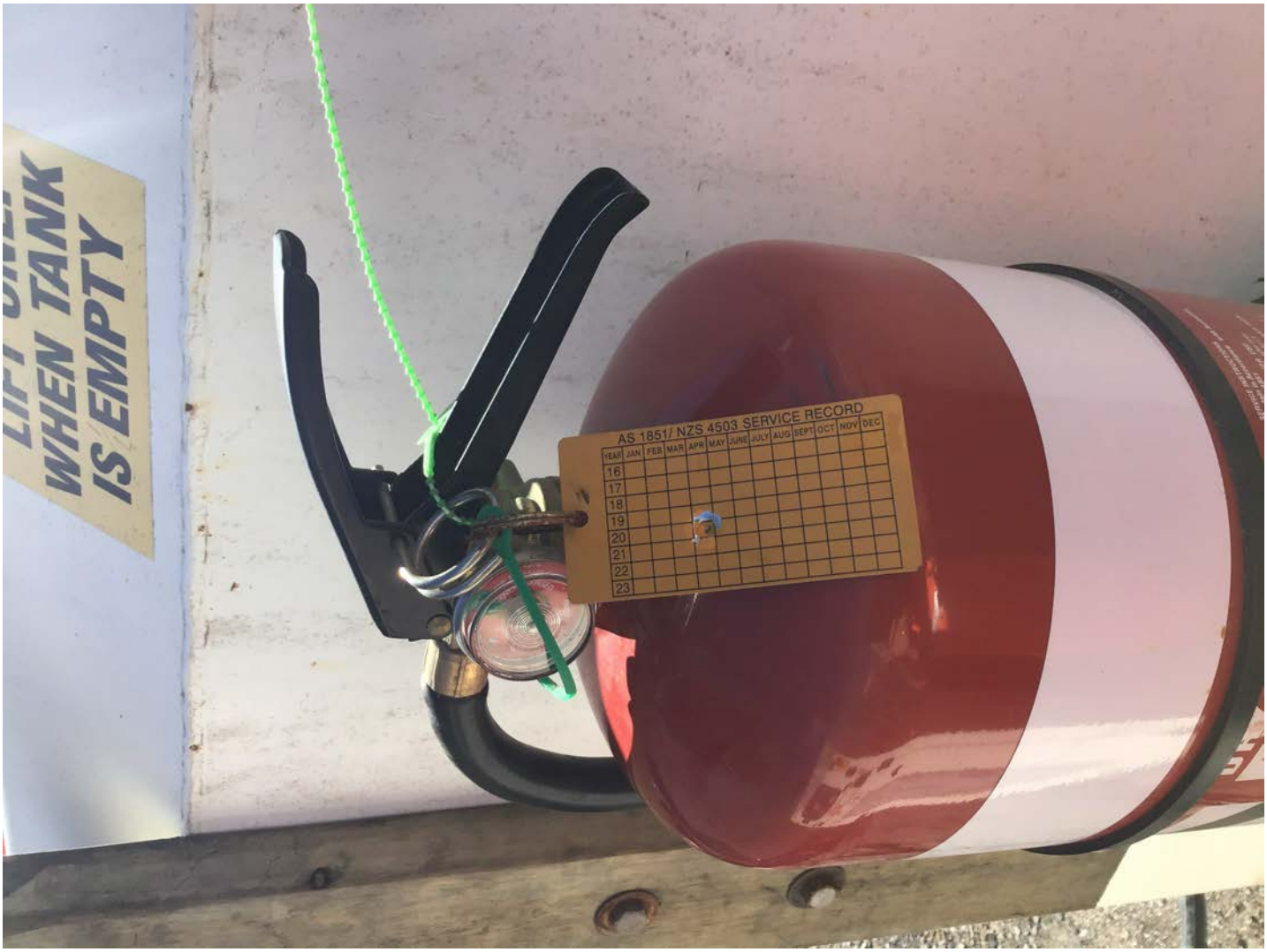
Building C Exclusion Zone near Mobile Plant

Site Inspection



Expired electrical test tags

Site Inspection



Fire Extinguisher recently tagged

Site Inspection



Capped reinforcement

Site Inspection



Housekeeping to be improved

Attachments

- *No file attachments*

Actions Summary

ID	First name	Last name	Due date	Date closed	Action description	Status	Last Comment
33957	John	Howard-HOWARDRECYCLINGSERVICES	20/05/2020	25/05/2020	All electrical leads and equipment to be inspected, tested and tagged by licenced electrician. Submit completed test & tag electrical register.	Closed	
33958	Mark	Bishop-DRUMDERG	20/05/2020	25/05/2020	Building A Access Driveway - Scrape away sediment back to hardstand and ensure vehicles are not tracking onto roads.	Closed	
33959	John	Howard-HOWARDRECYCLINGSERVICES	20/05/2020	25/05/2020	Conduct clean of Building C Area and ensure waste is disposed of according to requirements.	Closed	
33960	Benjamin	Bates	22/05/2020	20/05/2020	Building A: Repair dripping tap/hose connection on hoarding.	Closed	

Actions

ID: 33957 **Due date:** 2020-05-20 **Status:** Closed

Site Inspection

Actionee: John Howard-HOWARDRECYCLINGSERVICES **Date closed:** 2020-05-25

Action description: All electrical leads and equipment to be inspected, tested and tagged by licenced electrician. Submit completed test & tag electrical register.

Attachments

- *No file attachments*

ID: 33958 **Due date:** 2020-05-20 **Status:** Closed

Actionee: Mark Bishop-DRUMDERG **Date closed:** 2020-05-25

Action description: Building A Access Driveway - Scrape away sediment back to hardstand and ensure vehicles are not tracking onto roads.

Attachments

- *No file attachments*

ID: 33959 **Due date:** 2020-05-20 **Status:** Closed

Actionee: John Howard-HOWARDRECYCLINGSERVICES **Date closed:** 2020-05-25

Action description: Conduct clean of Building C Area and ensure waste is disposed of according to requirements.

Attachments

- *No file attachments*

ID: 33960 **Due date:** 2020-05-22 **Status:** Closed

Actionee: Benjamin Bates **Date closed:** 2020-05-20

Action description: Building A: Repair dripping tap/hose connection on hoarding.

Attachments

- *No file attachments*

Site Inspection

Details

Form id	125839
Created at	21/05/2020
Completed at	21/05/2020
Last modified	21/05/2020 12:21:09
Status	Complete
Respondent	Liam Tamsett
Division	NSW
Business unit	
Department	
Project	Nihon University Newcastle Campus
Subcontractor	DRUMDERG PTY LTD
Type of Site Inspection	Environmental Inspection
Built Attendance	

Include the person who is logged in as well.

Name

Others in attendance

Subcontractor Name	Persons Name

Areas or Locations Inspected *Identify the area/s reviewed during the inspection. The may include; whole of project, certain levels or certain locations.*	Kerb are front of site
Summary of inspection *This may include; common checks, activities or items reviewed, good practices observed or general commentary of the inspection.* *Note; all actions need to be registered in the "Actions" area at the bottom of this page.*	Sediment control in place but backed up with mud

High Potential Hazard Reporting

High Potential Classification ***Select from the drop down list those which apply. Use the Add button to add one line per issue***	**Trade/Process** ***State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'***	**Comments** ***Describe the situation that is classified as High Potential***

Site Inspection

Additional

Photos

Attachments

- *No file attachments*

Actions Summary

ID	First name	Last name	Due date	Date closed	Action description	Status	Last Comment
34028	Mark	Bishop-DRUMDERG	22/05/2020	27/05/2020	Clean out gutter around sediment control	Closed	

Actions

ID: 34028 **Due date:** 2020-05-22 **Status:** Closed

Actionee: Mark Bishop-DRUMDERG **Date closed:** 2020-05-27

Action description: Clean out gutter around sediment control



Attachments

- *No file attachments*

Monitoring

Details

Form id	126618
Created at	25/05/2020
Completed at	25/05/2020
Last modified	25/05/2020 12:58:55
Status	Complete
Respondent	Michael Louis
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	DRUMDERG PTY LTD
Monitoring Activity	Fall from Height
Outline of activity being monitored	Soft strip
Documents referenced during monitoring *This could include; SWMS, Permit, Traffic Management Plans, Methodology documents, Engineering advice, SOP/JSA. Where possible provide the exact name and version number of the document.*	Swms
Summary of monitoring *Provide an outline of any positive observations or conversations, work practices being performed well, compliance with the documents reference or a brief outline.*	Fall prevention/demarcation to be established. See photos
Was work required to be stopped?	No

High Potential Hazard Reporting

High Potential ***Select from the drop down list those which apply. Use the Add button to add one line per issue***	**Trade/process** ***State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'***	**Comments** ***Describe the situation that is classified as High Potential***

Built staff in attendance

Include the person who is logged in to the software in this section as well as the other attendees

Attendee name
Michael Louis

Others in attendance

This could include workers involved in the activity, the subcontractor supervisor or others

Subcontractor name	**Persons name**

Monitoring

Additional

Photos

Monitoring



Attachments

- *No file attachments*

Actions Summary

Monitoring

ID	First name	Last name	Due date	Date closed	Action description	Status	Last Comment
34095	Benjamin	Bates	25/05/2020	26/05/2020	Install fall prevention/demarcation	Closed	

Actions

ID: 34095 **Due date:** 2020-05-25 **Status:** Closed

Actionee: Benjamin Bates **Date closed:** 2020-05-26

Action description: Install fall prevention/demarcation



Attachments

- *No file attachments*

Monitoring

Details

Form id	126621
Created at	25/05/2020
Completed at	25/05/2020
Last modified	25/05/2020 13:00:45
Status	Complete
Respondent	Michael Louis
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	DRUMDERG PTY LTD
Monitoring Activity	Struck by Moving Plant
Outline of activity being monitored	Movement of plant
Documents referenced during monitoring *This could include; SWMS, Permit, Traffic Management Plans, Methodology documents, Engineering advice, SOP/JSA. Where possible provide the exact name and version number of the document.*	Swms
Summary of monitoring *Provide an outline of any positive observations or conversations, work practices being performed well, compliance with the documents reference or a brief outline.*	Reinstate flagging
Was work required to be stopped?	No

High Potential Hazard Reporting

High Potential ***Select from the drop down list those which apply. Use the Add button to add one line per issue***	**Trade/process** ***State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'***	**Comments** ***Describe the situation that is classified as High Potential***

Built staff in attendance

Include the person who is logged in to the software in this section as well as the other attendees

Attendee name
Michael Louis

Others in attendance

This could include workers involved in the activity, the subcontractor supervisor or others

Subcontractor name	**Persons name**

Monitoring

Additional

Photos

Attachments

- *No file attachments*

Actions Summary

ID	First name	Last name	Due date	Date closed	Action description	Status	Last Comment
34096	Robbie	Clydesdale	25/05/2020	27/05/2020	Reinstate flagging to building C	Closed	

Actions

ID: 34096 **Due date:** 2020-05-25 **Status:** Closed

Actionee: Robbie Clydesdale **Date closed:** 2020-05-27

Action description: Reinstate flagging to building C



Attachments

- *No file attachments*

Monitoring

Details

Form id	126622
Created at	25/05/2020
Completed at	25/05/2020
Last modified	25/05/2020 13:03:21
Status	Complete
Respondent	Michael Louis
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	BUILT PTY LIMITED
Monitoring Activity	General Observation
Outline of activity being monitored	Sediment run off
Documents referenced during monitoring *This could include; SWMS, Permit, Traffic Management Plans, Methodology documents, Engineering advice, SOP/JSA. Where possible provide the exact name and version number of the document.*	Site Eviro plan
Summary of monitoring *Provide an outline of any positive observations or conversations, work practices being performed well, compliance with the documents reference or a brief outline.*	Run off from site go under hoarding onto foot path
Was work required to be stopped?	No

High Potential Hazard Reporting

High Potential ***Select from the drop down list those which apply. Use the Add button to add one line per issue***	**Trade/process** ***State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'***	**Comments** ***Describe the situation that is classified as High Potential***

Built staff in attendance

Include the person who is logged in to the software in this section as well as the other attendees

Attendee name
Michael Louis

Others in attendance

This could include workers involved in the activity, the subcontractor supervisor or others

Subcontractor name	**Persons name**

Monitoring

Additional

Photos

Attachments

- *No file attachments*

Actions Summary

ID	First name	Last name	Due date	Date closed	Action description	Status	Last Comment
34097	Robbie	Clydesdale	25/05/2020	27/05/2020	Control sediment run off	Closed	

Actions

ID: 34097 **Due date:** 2020-05-25 **Status:** Closed

Actionee: Robbie Clydesdale **Date closed:** 2020-05-27

Action description: Control sediment run off





Attachments

- *No file attachments*

Audit - Internal HSE Plan

Details

Form id	126660
Created at	25/05/2020
Completed at	
Last modified	26/05/2020 08:30:30
Status	In Progress
Respondent	Michael Louis
Division	NSW
Business unit	NSW Construction
Department	
Project	Nihon University Newcastle Campus
Subcontractor	BUILT PTY LIMITED
Score	96%
Built attendees	

Name
Michael Louis

Section 1 -3 HSE Plan and Policy

HSE Plan and Policy Criteria

Plan is signed by CM, PM and HS resource

Document change control is up to date and signed by PM

Details of “General” details plan are correct

Access arrangements to site is identified

Pre-commencement Checklist completed by PM (Optional)

Site establishment self assessment checklist is completed by PM

Policies are current and on display in Induction area and in a prominent location on site

HSE Plan and Policy Notes	HSE Plan signed by all relevant persons. Checklists complete Policies displayed
HSE Plan and Policy Performance	Compliance

Section 4 Management Responsibility and Participation

Management Responsibility and Participation Criteria

Org chart is complete and up to date and identified (Senior Most Person)

Appendix 12 is complete

All staff an CW’s who have role in the HSE Plan have signed their induction into the plan in Appendix 14

The Built Project Team have the minimum “Industry Experience” and Minimum Training Completed” as outlined in table.

Issues with personal behavior are managed as per Item 4.8 of the HSE Plan

Audit - Internal HSE Plan

Management Responsibility and Participation Notes	Org chart complete. appendix 12 complete
Management Responsibility and Participation Performance	Compliance

Section 5-6 HSE Planning and Risk Management

HSE Planning and Risk Management Criteria

The HSE plan has been formally reviewed at 3 month periods.

Project targets are outlined

Appendix 5 “Overview” is completed

Appendix 5 “Project Risk Register” is complete and reflects current activities

Appendix 5 identified the Construction Risks from SIDE

Appendix 5 identifies a “Constructability Review”.

Appendix 5 identifies when High Risk Workshops are to occur

Where work is completed in a client “Live” space, A risk Assessment has been obtained from the stakeholder and included in Appendix 5

High Risk WorkShop Meetings take place

Actions from High Risk Workshops are closed

BSMS are formally reviewed monthly

HSE Planning and Risk Management Notes	HSE Plan last reviewed in March High risk workshops occurring Projects risk register complete BSMS reviews occurring
HSE Planning and Risk Management Performance	Compliance

Section 5-6 HSE Planning and Risk Management (SWMS)

HSE Planning and Risk Management (SWMS) Criteria

SWMS are reviewed against HSE-041

SWMS are “Accepted” by PM or SM

Supervisors have registered their review on the HSE-041

SWMS identifies only HRCW

Workers are inducted to SWMS

Workers understand the controls identified in the SWMS

SWMS in formally Monitored as soon as implemented

SWMS is formally reviewed after a Notifiable Incident

HSE Planning and Risk Management (SWMS) Notes	SWMS are issued and approved through Simpli SWMS SWMS monitored through simpli SWMS
HSE Planning and Risk Management (SWMS) Performance	Compliance

Section 7 Safety In Design Evaluation (SIDE)

Audit - Internal HSE Plan

Safety In Design Evaluation (SIDE) Criteria

Written SIDE document obtained from client (D&C and Construct Only

Consultant Novation Agreements include responsibilities for SIDE

SIDE Workshop facilitated

Safety In Design Meetings are recorded

HSE-111 Completed to record, monitor and track design risks

Design risks are transferred to the Construct risks in Appendix 5

Safety In Design Evaluation (SIDE) Notes	Managed by the design manager Side workshops occuring
Safety In Design Evaluation (SIDE) Performance	Compliance

Section 8 Purchasing

Purchasing Criteria

Purchase orders identify the WHS requirements and verified upon receipt

HSE-130 is completed in full for all labour hire staff on the project

Purchasing Notes

Purchasing Performance	Not Applicable

Section 9 - 10 Subcontractor and Authority Management

Subcontractor and Authority Management

PD11-05B Tender Interview is completed for subcontractors

Pre-commencements Assessment (PCA) issued to all subcontractors

All PCA’s are complete

All PCAs are reviewed by Built

All Meetings identified in the PCA have occurred

All requests for site entry by a Union are recorded in Rapid

All visits to site by a Regulator are recorded in Rapid

All Notices issued by a Regulator are record in Rapid and closed

Subcontractor and Authority Management Notes	PCA's complete and items closed
Subcontractor and Authority Management Performance	Compliance

Section 11 Communication and Consultation

Audit - Internal HSE Plan

Communication and Consultation Critria

Safety Team Meeting recorded monthly

PreStart Meetings recorded

Project Team Meetings held fortnightly and discuss WHS matters

A vote is recorded identifying the Consultative Arrangements for the project

HSE-032 identifies the Consultative Arrangement. HSE-032 is displayed in the induction area and on site.

For WHS Committees, HSE-031 is completed.

HSR Training is completed when requested

Tool Box Meeting or Site Wide Address is completed with all the workforce atleast every 2 weeks

All complaints from members of the public are recorded on Rapid

Hazard Hunt Board is erected, updated daily and includes correct info

Signage is erected and identifies all elements in 11.8.1.

Communication and Consultation Notes	Consultative inspection missed last week due to wet weather. Weekly Built meeting discusses HSE requirements Signage erected as required.
Communication and Consultation Performance	Opportunities For Improvement

Section 12 Induction and Training

Induction and Training Criteria

Workers and staff are inducted

Photo Id, Industry Induction, High Risk Work Licenses and trade licenses are recorded during induction

Appendix 7 is current and available to inductees

Translation solutions are available for workers who non-english speaking

Y&I workers are provided with an identifying hard hat sticker and are addressed by a Senior Staff member prior to commencing works on site.

Site Crane Crew (crane operators and dogmen) are inducted into Built’s lifting and Slinging Guide

A Sign in Register is available to Workers and Visitors

HSE-003 is completed for all new or transferred employees (Wages and Salary staff)

Induction and Training Notes	Inductions occurring as required. Sign in register in place
Induction and Training Performance	Compliance

Section 13 Incident Management

Incident Management Criteria

All incidents are entered into Built’s Rapid Incident Reporting

Corrective actions are closed out in a timely manner

Audit - Internal HSE Plan

Incident Management Notes	Most recent incidents entered in rapid
Incident Management Performance	Compliance

Section 14 Hazardous Substances/Materials

Hazardous Substances/Materials Criteria

A hazardous substance survey is undertaken

Asbestos register established and maintained

A clearance certificate is obtained from a competent person to verify safe removal or treatment

Records are maintained of all contaminated soil/in-situ hazardous material or imported fill

A qualified occupational hygienist been consulted to determine the requirements for air monitoring.

Hazardous Substances/Materials Notes	Demo contractor issues asbestos registers and clearance certificates.
Hazardous Substances/Materials Performance	Compliance

Section 15 Hazardous Chemicals

Hazardous Chemicals Criteria

Register of all hazardous chemicals is established and maintained

SDSs are maintained in the main site office and/or at the first aid

Workers likely to be exposed to hazardous chemicals are made aware

Hazardous Chemicals Notes	SDS located in first aid room
Hazardous Chemicals Performance	Compliance

Section 15 Hazardous Chemicals (Health Surveillance)

Hazardous Chemicals (Health Surveillance) Criteria

Asbestos_Air monitoring results shall be recorded and kept for a period of 30-years

Bio_First aid officers received hepatitis B vaccinations

Aud_Test completed (<3mths & 2yrs)

Health surveillance equipment is calibrated and recorded

Noise_Monitoring completed to identify situations where workers exposed

Hazardous Chemicals (Health Surveillance) Notes	Asbestos monitoring in place as per drumdergs asbestos management plan
Hazardous Chemicals (Health Surveillance) Performance	Compliance

Section 16 Plant and Equipment

Audit - Internal HSE Plan

Plant and Equipment Criteria

All mobile plant is inspected upon arrival to site

Any ROPS and/or FOPS are fitted with compliance plates

POI completed (TC, MC, MH, PMH, MCWP)

Plant Operators meet the competency requirements

Copies of licences recorded

EWP_Protective structures or Sensing device fitted

Daily inspection completed on plant

All keys are removed and quarantined to prevent unauthorised use

Lifting gear is listed on a register

Tags are displayed on lifting gear

VMP complete

Evidence of COR available

Plant and Equipment Notes	Mobile plant added to lucidity and checked before use. Licences and HRWL uploaded to induction records on lucidity. Lifting gear registers obtained from comntractors.
Plant and Equipment Performance	Compliance

Section 16 Plant and Equipment (Mobile Cranes)

Plant and Equipment (Mobile Cranes) Criteria

Risk assessment completed includes; Ground conditions, Need for lifting plans, Lifting of materials and workers.

Lifting procedures completed

Support system for mobile crane loads determined by engineer and marked up.

Engineer has inspected support system

Geotech engineer determined natural and filled ground.

Plant and Equipment (Mobile Cranes) Notes

Plant and Equipment (Mobile Cranes) Performance	Not Applicable

Section 17 Permits To Work

Permits to Work Criteria

Conc cut and drill_issued to the subcontractor prior to any cutting or core drilling

Hot Work_issued before hot work commences.

Conf_ issued before work is undertaken.

Exc_issud where ever identified that services are present

Audit - Internal HSE Plan

Exc_DBYD Complete

Exc_Geo tech inspected trench

Harn_For all arrest and restraint harness work

TC_permit complete

9in_issued before use

Strip_Permit or process in place

Permits To Work Notes	Permits to work in place and administered by the area foremen
Permits To Work Performance	Compliance

Section 21 Work at Heights

Work at Heights Criteria

Platform ladders used

Roof access register used

Roof mesh sign off complete

Workers are trained

Rescue procedure developed

Inspection register for equipment

Fall prevention system installed to design and install cert available

Work at Heights Notes	minimal work at heights at this stage of the project. some ladder and mobile scaffold work.
Work at Heights Performance	Not Applicable

Section 23 Excavations and Trenches

Excavations and Trenches Criteria

stability of adjacent building structures/materials/foundations is assessed before excavation.

Adjoining structures are identified

Dilap survey complete for adjoining buildings

Support system is installed as per engineering

Design of support structure available

Workers are trained / competent in ground support system

Hand over cert is complete for ground support system

Plant is physically protected from falling into excavation

Excavations and Trenches Notes	minimal trench work at this stage of the project
Excavations and Trenches Performance	Compliance

Section 24 Isolation/Protection of Services

Isolation/Protection of Services Criteria

HSE-092 completed for all works in close proximity to live services

Workers inducted into HSE-092

Audit - Internal HSE Plan

Fire impairment has written authorisation from Built

Isolation/Protection of Services Notes	HSE-092 implemented by SKE electrical
Isolation/Protection of Services Performance	Compliance

Section 28 HSE Inspections

HSE Inspections Criteria

Inspections are carried out covering all shifts

Consultative Process Inspection is distributed

All Built items are actioned in a prompt manner

All subcontractor items are actioned in a prompt manner

A supervisor Inspection is completed weekly for all areas of the project

All actions identified in Supervisor Inspections are closed

Long Weekend/Holiday checklists are complete

Site Hazard Reports (HSE-046) are closed

HSE Non Conformance Consultation Records are closed

Actions from Monitoring activities are closed

HSE Inspections Notes	Inspections undertaken as required and outlined as per built requirements. Long weekend/shutdown inspection complete. actions assigned are closed.
HSE Inspections Performance	Compliance

Section 29 First Aid

First Aid Criteria

First Aid Risk Assessment is complete

There are sufficient numbers of First Aid trained staff and workers on site

First aid facilities and equipment is inspected and recorded

Suitable first aid communication arrangements are established.

Any Nurse Call type system is tested weekly using (HSE-061)

HSE-016 or Rapid is used to record first aid treatments

HSE-024 is available for Built Employees

First Aid Notes	nurse calls in place and tested using HSE 061. First aid personnel trained and sufficient for site numbers.
First Aid Performance	Compliance

Section 30 PPCE

PPCE Criteria

Training in the selection of PPCE is complete

Audit - Internal HSE Plan

Instruction in the use of PPCE is complete and recorded

Mandatory PPCE is worn by staff and workers

Task Specific PPCE is worn by staff and workers

All PPCE is in a good state of repair

PPCE Notes	PPCE worn as required and signage displayed.
PPCE Performance	Compliance

Section 31 Emergency Response

Emergency Response Criteria

Project Emergency Response Plan has been developed

Emergency procedures and equipment to be adopted for the site are included in the site-specific induction and displayed on site notice board

App6 includes a schedule for the emergency equipment to be deployed on the project

Emergency procedures have been assess consideration to suitability, location and accessibility

Emergency procedures have been reviewed as works progress

Trial evacuation drills are held within 3 months of the project commencing and then at 6 monthly intervals

Emergency drills are recorded

Evacuation system is tested weekly and results recorded

Fire extinguishers are tested and identified on a register

Fire extinguishers tested are in date

Fire Extinguisher locations have been located following a risk assessment with a trained person

HSE-071 is used to register all fire extinguishers

Crisis Management Flowchart is on display in office and plan is readily accessible

Emergency Response Notes	ERP in place. emergency plan/scenario to be run in June. Equipment tested as required.
Emergency Response Performance	Opportunities For Improvement

Section 32 Injury Management

Injury Management Criteria

First aider notifies Built Management prior to workers being referred to a medical facility

Injury Management Notes	no injuries requiring this at this stage
Injury Management Performance	Not Applicable

Section 33 Traffic and Pedestrian Management

Audit - Internal HSE Plan

Traffic and Pedestrian Management Criteria

Traffic and Pedestrian Management Plan is developed by a suitably qualified person

The Traffic Management Plan is approved, as required, by the relevant statutory authority

Where Traffic Controllers are required they meet the competency requirements as outlined in **Appendix 08 Verification of Competencies**.

Traffic Control Devises are only installed by persons holding the required competency.

Traffic Controllers, or other suitable competent person, are to provide documented confirmation to verify that traffic control devises have been installed in accordance with the relevant traffic control plan or traffic management plan.

Traffic and Pedestrian Management Notes	TMP in place and adhered to by gateshead traffic. High Risk SWMS in place.
Traffic and Pedestrian Management Performance	Compliance

Section 34 Engineers Certification and Design

Engineers Certification and Design Criteria

An engineer’s certificate is to be provided for:

Any cage, bin, box etc. that is to be used to transfer materials around the site by use of a crane.

Prior to any mobile plant being placed on any, or part of any suspended deck or slab that is a part of the permanent or temporary structure

Suspended formwork deck prior to the placement of concrete onto the formwork deck. The certificate is to state that the formwork complies with the requirements of Australian Standard AS 3610.

Scaffolding in accordance with Built.Safe Mandatory Standard **HSE-120 BSMS Scaffolding.**

Fixing of attachments to structures that support workers.

Propping of permanent or temporary structures.

Trench/Excavation Shoring systems

Precast / Tilt-up support systems

Engineers Certification and Design Notes	Engineering provided for minimal temp works on site. Temp works register maintained.
Engineers Certification and Design Performance	Compliance

Section 36 HSE Reporting and Records

Audit - Internal HSE Plan

HSE Reporting and Records Criteria

HSE-020 is prepared in a timely and professional manner with all requirements fulfilled

Project hours are recorded

Safety Debriefs are communicated to project team

All HSE records are kept for 10 years

HSE Reporting and Records Notes	project hours recorded as required. Safety alerts etc. communicated to project team.
HSE Reporting and Records Performance	Compliance

Section 37 Audits

Audit Criteria

Project is identified on the audit schedule HSE-102

HSE-103 Site establishment Self Assessment Checklist

HSE Plan audit completed within 6 months of commencement and 9 month intervals there after

Audit report has been reviewed by Construction Manager

All audit non conformances are closed

Audits Notes	HSE audits on the project have been completed in line with the Built hse audit schedule.
Audits Performance	Compliance

App11 Environmental Management

Audit - Internal HSE Plan

App 11 criteria

The Enviro Plan is reviewed during Project Team Meetings.

The Enviro Plan has been reviewed after significant enviro event or atleast every 12 months.

Project Enviro objectives are outlined.

NABERS and Green Star ratings identified.

Enviro and Sustainabilty events and progress are identified in monthly reports (PCG, PMR etc).

Enviro events are reported via Rapid and closed.

Tool Box and Subcontractor Meetings identify Enviro issues.

Supplementary plans are developed o control specific Enviro risks.

The App12 is supplied to Contractors and all Supplementary Plans.

Contractors have provided ITPs for how Enviro Risks are to be manged in their scope.

Monitoring has been completed on Contractors Enviro Management.

Inspections are completed on Environment Management at intervals outlined in the A&I Register and all action items are closed.

Enviro controls outlined in the Development Consent are incorporated in the Aspects and Impacts Register.

A Contaminated Site Assessment is complete for contaminated sites.

Enviro targets are reviewed on a quarterly basis.

The Site Induction includes an outline of the EMP and site rules related to Enviro Management.

Enviro plans, targets, R&R's reviewed as required.

Audit - Internal HSE Plan

External Stakeholders are outlined in the EMP.

Community Complaints are recorded on Rapid and closed.

App 11 Performance

Compliance

App 11 Environmental Management (A&I Register)

Aspects and impacts register is current and complete.

The Project Environmental Aspects and Impacts Register is complete.

The Aspects and Impacts Register is provided to relevant Contractors.

Inspections are completed on site by Supervisors as outlined in the Aspects and Impacts Register.

Enviro controls outlined in the Development Consent are incorporated in the Aspects and Impacts Register.

App 11 (A&I Register) Performance

Compliance

Additional

Photos

Attachments

- *No file attachments*

Actions Summary

ID	First name	Last name	Due date	Date closed	Action description	Status	Last Comment

Actions

PROJECT NAME:	Nihon University
PROJECT ADDRESS:	9 Church St Newcastle
DATE OF REVIEW:	29 May 2020
REVIEWER:	Michael Cain
REVIEWER CONTACT DETAILS:	michael.cain@built.com.au

Ref	Audit Criteria	Findings	Recommendations
1.	Has a design of the hoarding(s) by a qualified engineer been provided to Built?	Yes, Alessi Consulting, verified by BGE	—
2.	Does the engineer's design reference and take account of relevant Australian Standards (or applicable Code of Practice where such a Code exists), e.g., AS1170.2 Structural Design Actions Part 2: Wind Actions?	Yes	—
3.	Has a structural certificate for the design been issued and a copy retained on site?	Yes	—
4.	Do B Class hoardings meet required design standards, including: • Meet or exceed 10kPa rating for live loads during demolition and construction? • Are adequate for the design life of approximately 52 weeks? • Will withstand wind loads? • Superimposed loads will not exceed 40 per cent of the design live loads? • Has a safety factor of at least 1.5 against overturning and 2 against sliding? • Foundation and footings are adequate?	• Meet 10kpa verified by Alessi Consulting Yes • Hoarding installed as designed • Yes, confirmed by Alessi Consulting inspection Cannot find Yes	— — — — Cannot find ~~*~~ —
	• Are designed so the hoarding will not collapse when the superimposed load on the deck is equivalent to 40 per cent of its rated load with the removal of any one column anywhere in the structure?	Yes, as per design	—
	• Are constructed in a suitable manner where located in close proximity to a traffic corridor?	Yes	—
	• Are fit for purpose?	Yes	—
5.	Are hoardings suitable for their intended purpose?	Yes	—

Ref	Audit Criteria	Findings	Recommendations
6.	Are connections and through bolts (e.g., those used to secure telescopic legs) securely fixed?	Yes	–
7.	Are hoardings securely fixed and stabilised (e.g., to accommodate wind loads and material loadings)?	Yes	–
8.	Hoardings are free from overloading (e.g., material is not placed on or against the hoarding so as to compromise structural integrity?)	Yes	–
9.	Is adequate protection provided where the hoardings are in close proximity to energised electrical equipment (including where power lines pass through the hoarding)?	Yes	–
10.	Are access points to services concealed by the hoarding adequate (e.g., where the hoarding covers a switchboard?)	Yes	–
11.	Is safe pedestrian access provided around the hoarding (e.g., adequate signage, lighting and waterproofing)?	Yes	–
12.	Are ground conditions adequate to support the hoarding?	Yes	–
13.	Does the hoarding cover the full length where the public can directly access site work areas?	Yes	–
14.	Does the hoarding provide access in such a way as to ensure that there's no hazard or nuisance to pedestrians or traffic (e.g., at least 1.5 metres between the fencing and the road for people to walk)?	Yes	–
15.	Is the hoarding designed to ensure that it doesn't interfere with the line of sight of motorists, pedestrians, traffic lights, crossings, ramps or cars entering or leaving the site?	No. Traffic Control in place on street	–
16.	Have the necessary signage and traffic and pedestrian management devices been placed in a way that presents no hazard or obstruction to pedestrians or road traffic?	Yes	See TMP.
17.	Do gates and doors swing	Yes	–

Ref	Audit Criteria	Findings	Recommendations
	inwards where there is a risk of striking members of the public?	–	–
18.	Are signs displayed to show where traffic enters and leaves the site?	No.	Install Signage
19.	Is sufficient space provided so as to allow vehicles to be loaded and unloaded inside of the site boundaries (where possible)?	Yes	–
20.	Is the height of the hoarding adequate?	Yes	–
21.	Has permission been obtained where the hoarding is to encroach on council property?	NA	NA.
22.	Has public liability insurance been obtained for the hoarding and remains current?	TH has PLI	–
23.	Are the controls to prevent the risk of materials falling from the hoarding adequate?	Yes	No materials presently stored.

ALESSI Consulting

Tel: 02 9949 7697
Fax: 02 9949 2880

ABN: 45 163 749 648

1/50 Ponsonby Pde,
Seaforth NSW 2092
orazioa@tpg.com.au

Total Hoardings
22 Powers Road,
Seven Hills NSW 2147

Date: 1st April 2020

AS BUILT
STRUCTURAL CERTIFICATE

Address:
9 Church Street, Newcastle

TOTAL HOARDINGS No: TH10458
For: Built

I hereby confirm that I have inspected the installed "A" &"B" class type hoardings on Church Street frontage and certify that the hoardings comply with the Australian Standards and the Safe Work NSW Code of Practice for Overhead Structures.

The "B" class gantry complies with a 10 kPa Live load overhead protection requirements.

Note the hoarding must not be loaded to more than 40% of the 10 kPa

The codes this work complies with include but are not limited to:

AS4100 Steel Structures.

AS/NZS 1163 Cold-formed Structural Steel Hollow Sections.

AS/NZS 1554 Structural Steel Welding, Welding Of Steel Structures.

AS/NZS 1170 Structural Design Actions.

AS 1720 Timber Structures.

I also hereby confirm that As Built certification is based on revised drawings as listed below.

Drawing Numbers: TH10458: SK01-03, SK02-04, SK03-02 & SK04-01.

Yours Sincerely,

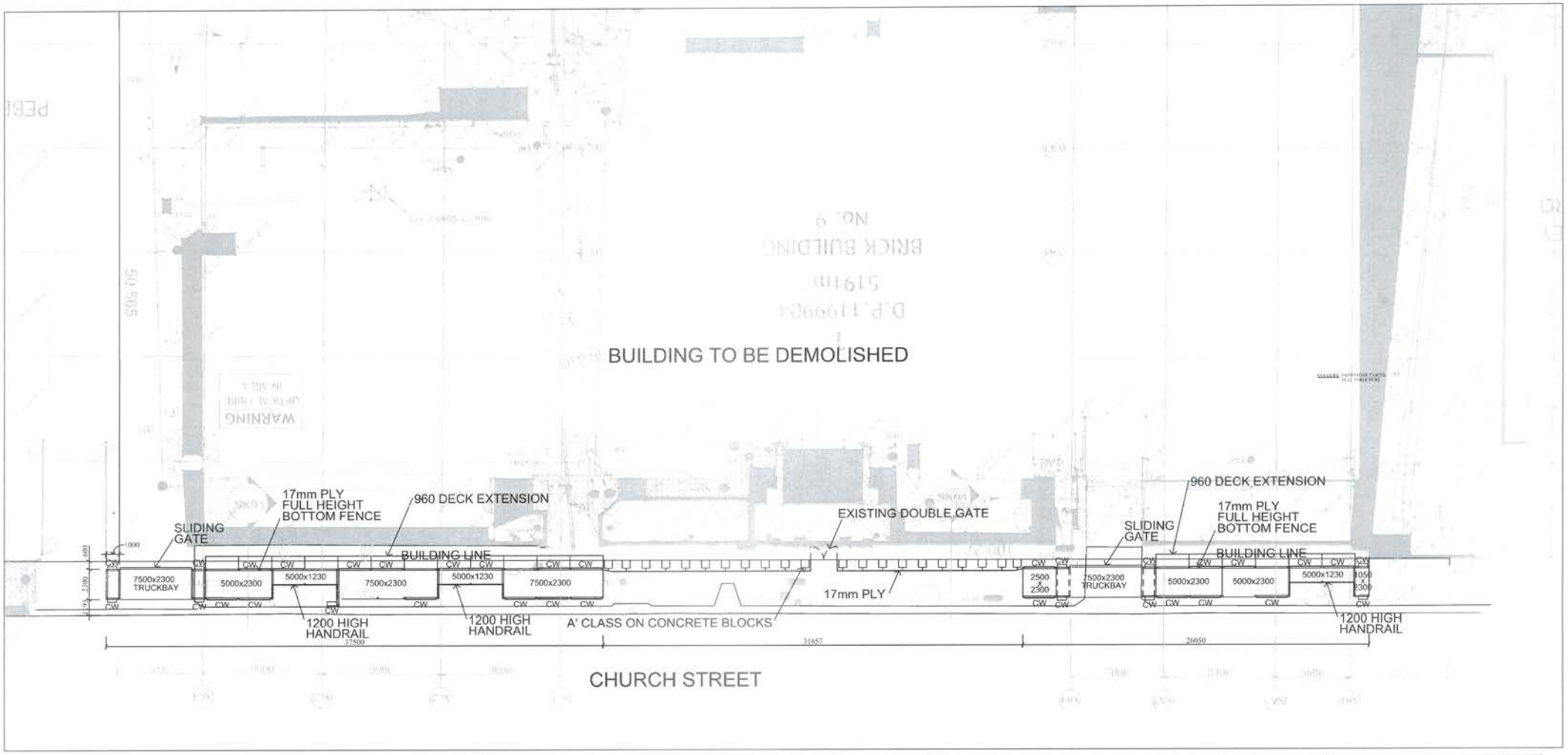
Orazio Alessi
B.E.(Civil) MIE Aust (Structural) CPEng NER 2259681

COLOURS: BLACK STRUCTURE
BLACK FASCIA'S
WHITE ON DECK UNDERSIDE

NORTH

Hoarding Designed to take loads within it's 10Kpa Rating.
Superimposed loads from site sheds/ materials/ scaffold and all items placed on hoarding are not to exceed 40 percent of hoarding 10Kpa design live load capacity.
All loads to be distributed evenly across hoarding.
Ensure scaffold soleboards distribute weight for the full width of the hoarding.

TREES TO BE TRIMMED BY OTHERS



PROJECT LOCATION: 9 CHURCH ST NEWCASTLE	PROPOSED HOARDING FOR: BUILT	DRAWING TITLE: SITE ARRANGEMENT PLAN	ALESSI JOB NO: 207000	HOARDINGS JOB NO: TH10458	DRAWING NO: SK01	ISSUE: 03

HOARDINGS BY:
TOTAL HOARDINGS P/L
22 POWERS ROAD, SEVEN HILLS, NSW 2147
PH: (02) 8811 2900 FAX: (02) 9674 9200
www.hoardings.com.au sales@hoardings.com.au
Postal: PO BOX 908, SEVEN HILLS NSW 1730
ABN 63 083 076 073

REVISION TABLE:

NO	DATE	DESCRIPTION
01	30/01/20	FOR SUBMISSION TO COUNCIL
02	13/02/20	FOR SUBMISSION TO COUNCIL
03	1/04/20	CHANGE C/W LAYOUT

ENGINEER:
ALESSI CONSULTING
1/50 PONSONBY PDE, SEAFORTH NSW 2092
PHONE 9949 7697 / FACSIMILE 9949 2880
orazioa@tpg.com.au
ABN 45 163 749 648

SCALE: 1:300 DATE: 1/04/20

VERIFIED DRAFTSMAN: LM

CHECKED BY: OA

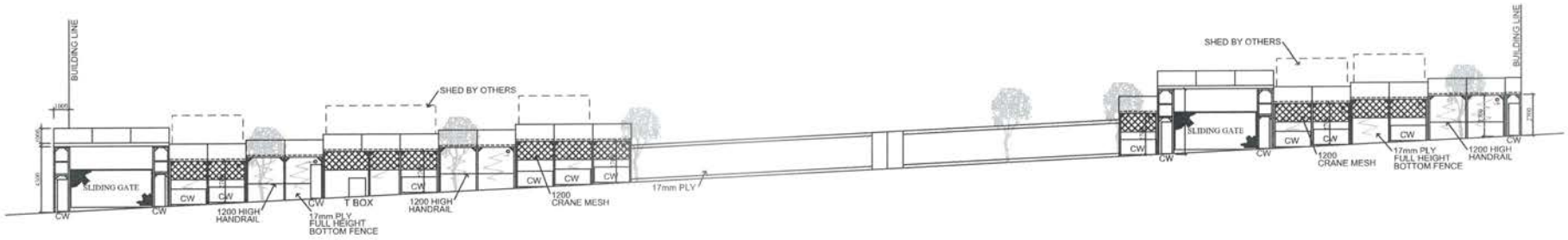
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COLOURS: BLACK STRUCTURE
BLACK FASCIA'S
WHITE ON DECK UNDERSIDE

NORTH

Hoarding Designed to take loads within it's 10Kpa Rating.
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All loads to be distributed evenly across hoarding.
Ensure scaffold soleboards distribute weight for the full width of the hoarding.

TREES TO BE TRIMMED BY OTHERS



PROJECT LOCATION:
9 CHURCH ST
NEWCASTLE

PROPOSED HOARDING FOR:
BUILT

DRAWING TITLE:
ELEVATION CHURCH ST

ALESSI JOB NO: 207000
HOARDINGS JOB NO: TH10458
DRAWING NO: SK02
ISSUE: 04

HOARDINGS BY:
TOTAL HOARDINGS P/L
22 POWERS ROAD, SEVEN HILLS, NSW 2147
PH: (02) 8811 2900 FAX: (02) 9674 9200
www.hoardings.com.au sales@hoardings.com.au
Postal: PO BOX 908, SEVEN HILLS NSW 1730
ABN 63 083 076 073

REVISION TABLE:

NO.	DATE	DESCRIPTION
01	07/02/20	FOR SUBMISSION TO COUNCIL
02	07/02/20	FOR SUBMISSION TO COUNCIL
03	13/02/20	FOR SUBMISSION TO COUNCIL
04	1/04/20	CHANGE C/W LAYOUT

ENGINEER:
ALESSI CONSULTING
1/50 PONSONBY PDE, SEAFORTH NSW 2092
PHONE 9949 7697 / FACSIMILE 9949 2880
orazioa@tpg.com.au
ABN 45 163 749 648

SCALE: 1:300
DATE: 1/04/20

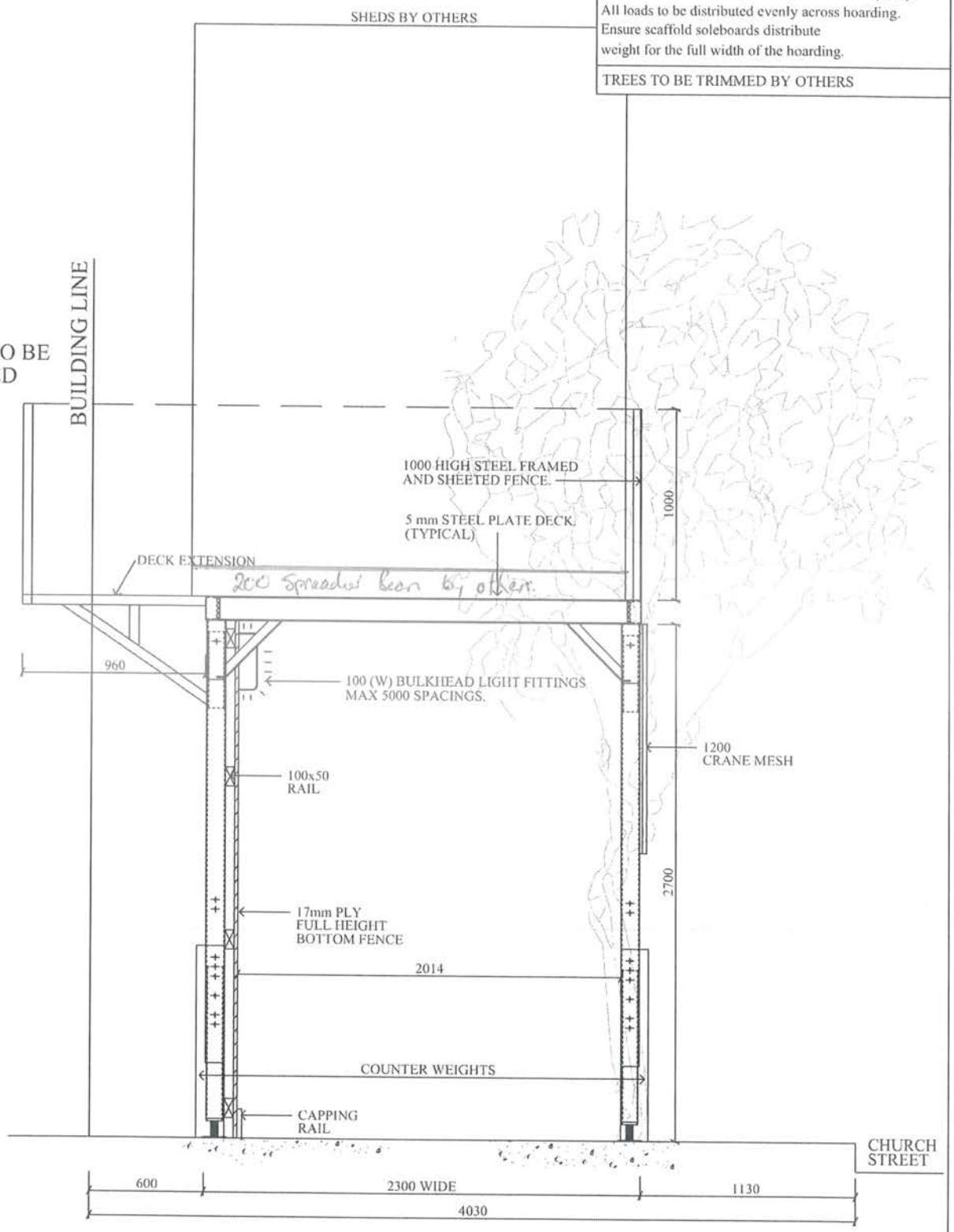
VERIFIED DRAFTSMAN: LM
VERIFIED ENGINEER: OA

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COLOURS: BLACK STRUCTURE
BLACK FASCIA'S
WHITE ON DECK UNDERSIDE

Hoarding Designed to take loads within it's 10Kpa Rating.
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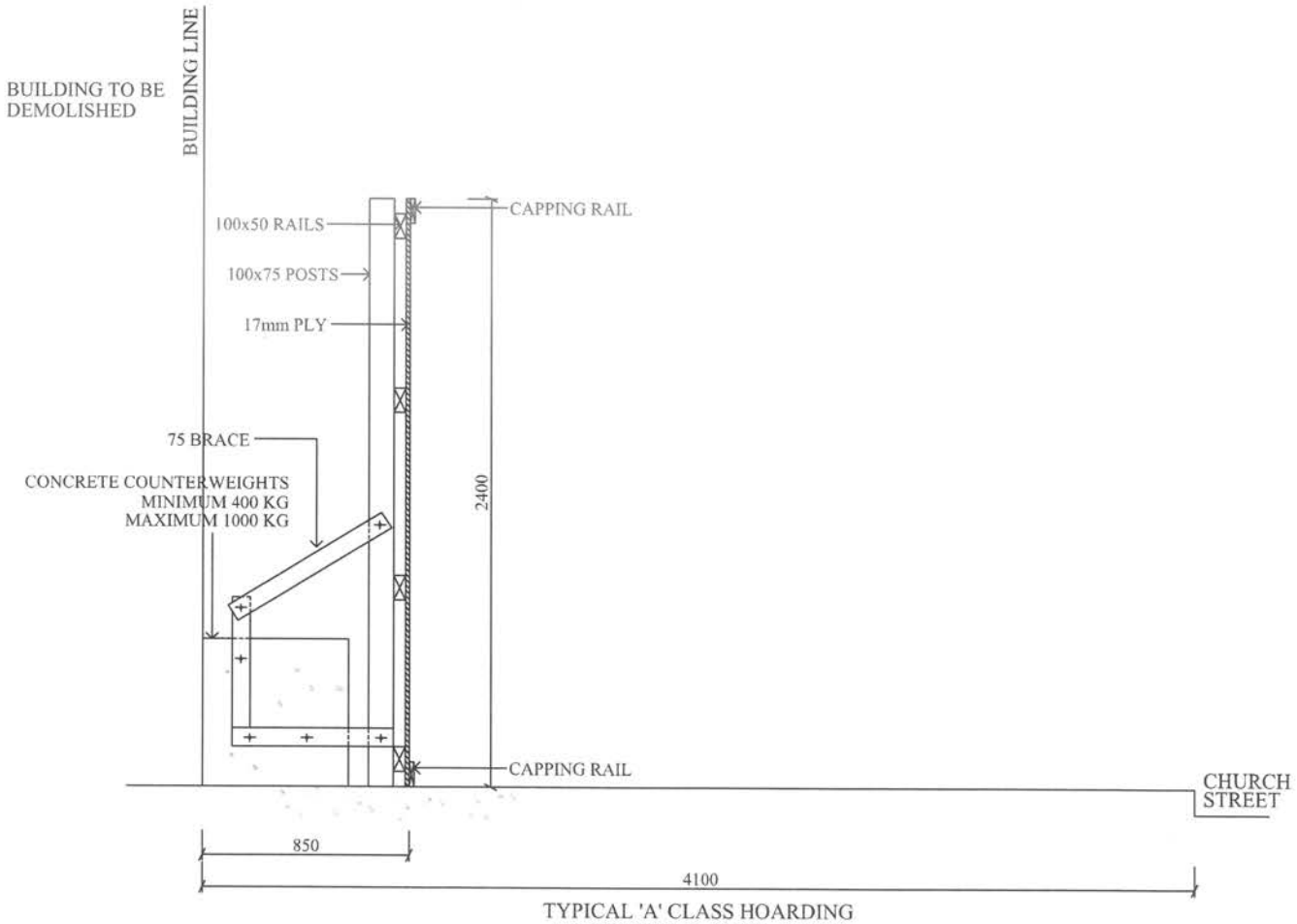
TREES TO BE TRIMMED BY OTHERS



PROJECT LOCATION: 9 CHURCH ST NEW CASTLE	PROPOSED HOARDING FOR: BUILT	DRAWING TITLE: SECTION CHURCH ST	ALESSI JOB NO: 207000	HOARDINGS JOB NO: TH10458	DRAWING NO: SK03	ISSUE: 02
HOARDINGS BY: TOTAL HOARDINGS P/L 22 POWERS ROAD, SEVEN HILLS, NSW 2147 PH: (02) 8811 2900 FAX: (02) 9674 9200 www.hoardings.com.au sales@hoardings.com.au Postal: PO BOX 908, SEVEN HILLS NSW 1730 ABN 63 083 076 073	REVISION TABLE: NO. 01 DATE 07/02/20 DESCRIPTION: FOR SUBMISSION TO COUNCIL	ENGINEER: ALESSI CONSULTING 1/50 PONSONBY PDE, SEAFORTH NSW 2092 PHONE 9949 7697 / FACSIMILE 9949 2880 orazioa@tpg.com.au ABN 93 112 769 759	SCALE: 1:30		DATE: 07/02/20	
			VERIFIED DRAFTSMAN: ZANDER		VERIFIED ENGINEER: OA	

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COLOURS: BLACK FASCIA'S



TYPICAL 'A' CLASS HOARDING
WITH TYPICAL CONC. BLOCK

PROJECT LOCATION: 9 CHURCH ST NEW CASTLE	PROPOSED HOARDING FOR: BUILT	DRAWING TITLE: SECTION CHURCH ST	ALESSI JOB NO: 207000	HOARDINGS JOB NO: TH10458	DRAWING NO: SK04	ISSUE: 01
HOARDINGS BY: TOTAL HOARDINGS P/L 22 POWERS ROAD, SEVEN HILLS, NSW 2147 PH: (02) 8811 2900 FAX: (02) 9674 9200 www.hoardings.com.au sales@hoardings.com.au Postal: PO BOX 908, SEVEN HILLS NSW 1730 ABN 63 083 076 073	REVISION TABLE: NO: DATE: DESCRIPTION: 01 30/01/20 FOR SUBMISSION TO COUNCIL	ENGINEER: ALESSI CONSULTING 1/50 PONSONBY PDE, SEAFORTH NSW 2092 PHONE 9949 7697 / FACSIMILE 9949 2880 orazioa@tpg.com.au ABN 93 112 769 759	SCALE: 1:30 DATE: 30/01/20 VERIFIED DRAFTSMAN: ZANDER VERIFIED ENGINEER: OA			

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SITE INSPECTION REPORT

Client:	Built	Report No:	Front Site Hoarding
Builder:	Built	Project No.:	N19099
Attention:	Ben Moss	Issued by:	Peter Shrewsbury
Date:	8/04/2020	No. of Pages:	1
Distribution:	Leif Aleksic		

Project:	**Nihon Courthouse**

Work Inspected -

Front Site Hoarding

Inspected site hoarding on March 18th and again on 6th of April 2020, based on drawings produced by Alessi Consulting.

The works generally complied with design drawings.

Please ensure that all of the items noted above are corrected prior to pouring of concrete.

Please sign below and return to confirm that all of the above mention items have been rectified prior to pouring concrete to the elements noted.

Name:		Signed:		Date:	

THIS REPORT DOES NOT CONSTITUTE A SITE INSTRUCTION OR CONTRACT VARIATION. REFERENCE SHALL BE MADE TO THE PROJECT MANAGER PRIOR TO UNDERTAKING ANY WORK ARISING FROM THIS REPORT THAT THE BUILDER CONSIDERS BEING A VARIATION.	Prepared by:	Peter Shrewsbury	Date:	8/04/2020
	Signed:			
	Received by:		Date:	



rom top left)
ely, Eleanor



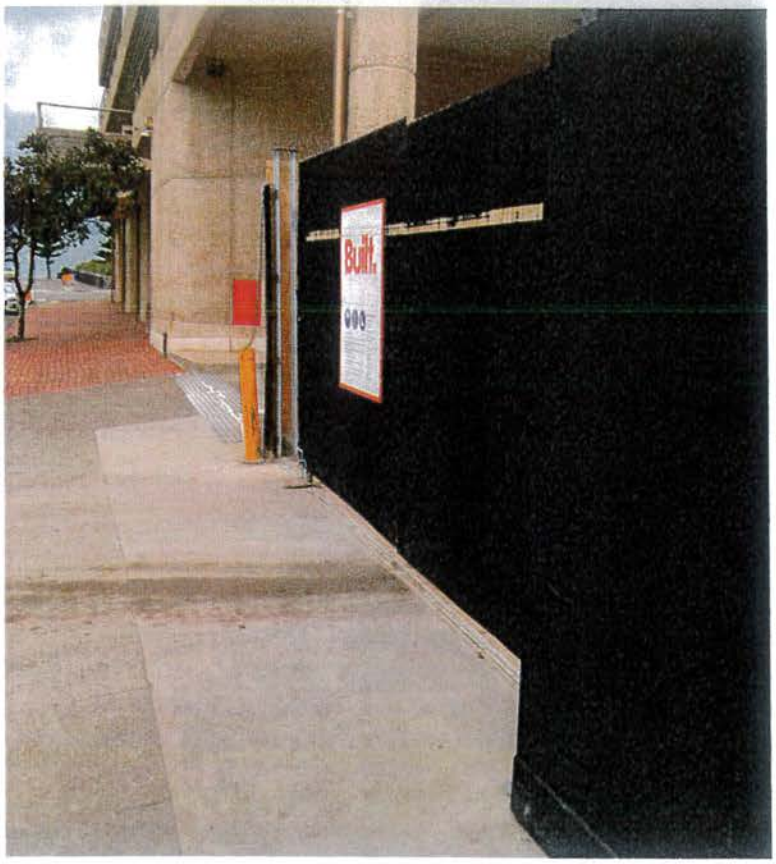


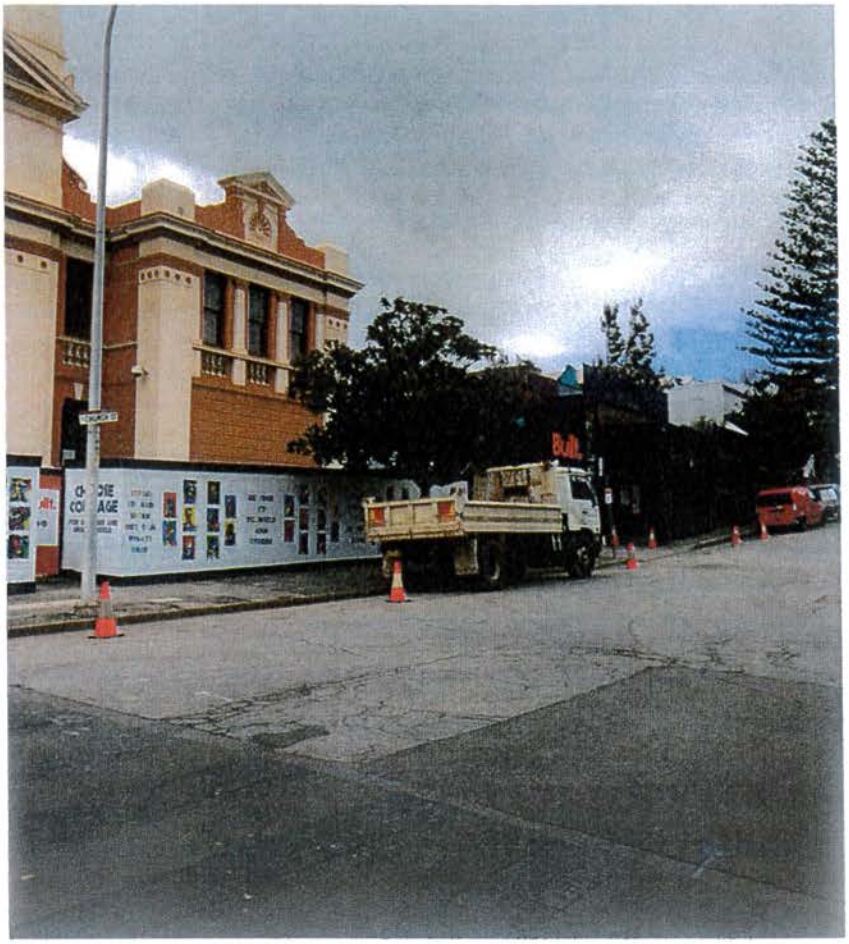









Built




CHOOSE
COURAGE
FOR A KINDER AND
BRAVER WORLD

Site Inspection

Details

Form id	127741
Created at	28/05/2020
Completed at	28/05/2020
Last modified	29/05/2020 18:22:45
Status	Complete
Respondent	Robbie Clydesdale
Division	NSW
Business unit	NSW Fitout
Department	
Project	Nihon University Newcastle Campus
Subcontractor	
Type of Site Inspection	Consultative Process Inspection

Built Attendance

Include the person who is logged in as well.

Name
Benjamin Bates
Robbie Clydesdale
Leif Aleksic
Michael Louis
Liam Tamsett

Others in attendance

Subcontractor Name	Persons Name
ALORRA PILING PTY LTD	Tony Boyton
	Jack Ferguson
SKE ELECTRICAL PTY LIMITED	Cameron
	Hubner Silva
HOWARD RECYCLING SERVICES PTY. LTD.	John howard
HOWARD RECYCLING SERVICES PTY. LTD.	Blake hogan
HOWARD RECYCLING SERVICES PTY. LTD.	Zali Howard’s
HOWARD RECYCLING SERVICES PTY. LTD.	Danny hogan
	Hayden comyns
HOWARD RECYCLING SERVICES PTY. LTD.	Dale Walsh
HOWARD RECYCLING SERVICES PTY. LTD.	Daniel

Site Inspection

Areas or Locations Inspected

Identify the area/s reviewed during the inspection. The may include; whole of project, certain levels or certain locations.

Building A, building C, building B, church street

Summary of inspection

This may include; common checks, activities or items reviewed, good practices observed or general commentary of the inspection.
Note; all actions need to be registered in the "Actions" area at the bottom of this page.

Alorra pilling have asked to Stop hosing drive way it makes more mess then good.
Howard's recycling have asked to cut stair starters down.
All traffic control in place

High Potential Hazard Reporting

High Potential Classification ***Select from the drop down list those which apply. Use the Add button to add one line per issue***	**Trade/Process** ***State the trade who has been identified as being responsible for the hazard. If unknown please state 'Unknown'***	**Comments** ***Describe the situation that is classified as High Potential***

Additional

Photos

Attachments

- *No file attachments*

Actions Summary

ID	First name	Last name	Due date	Date closed	Action description	Status	Last Comment
34402	Mark	Waldron-DrumdergServicesUnitTrust	28/05/2020	29/05/2020	Cut reo down from demolished stair	Closed	

Actions

ID: 34402 **Due date:** 2020-05-28 **Status:** Closed

Actionee: Mark Waldron-DrumdergServicesUnitTrust **Date closed:** 2020-05-29

Action description: Cut reo down from demolished stair



Attachments

- *No file attachments*

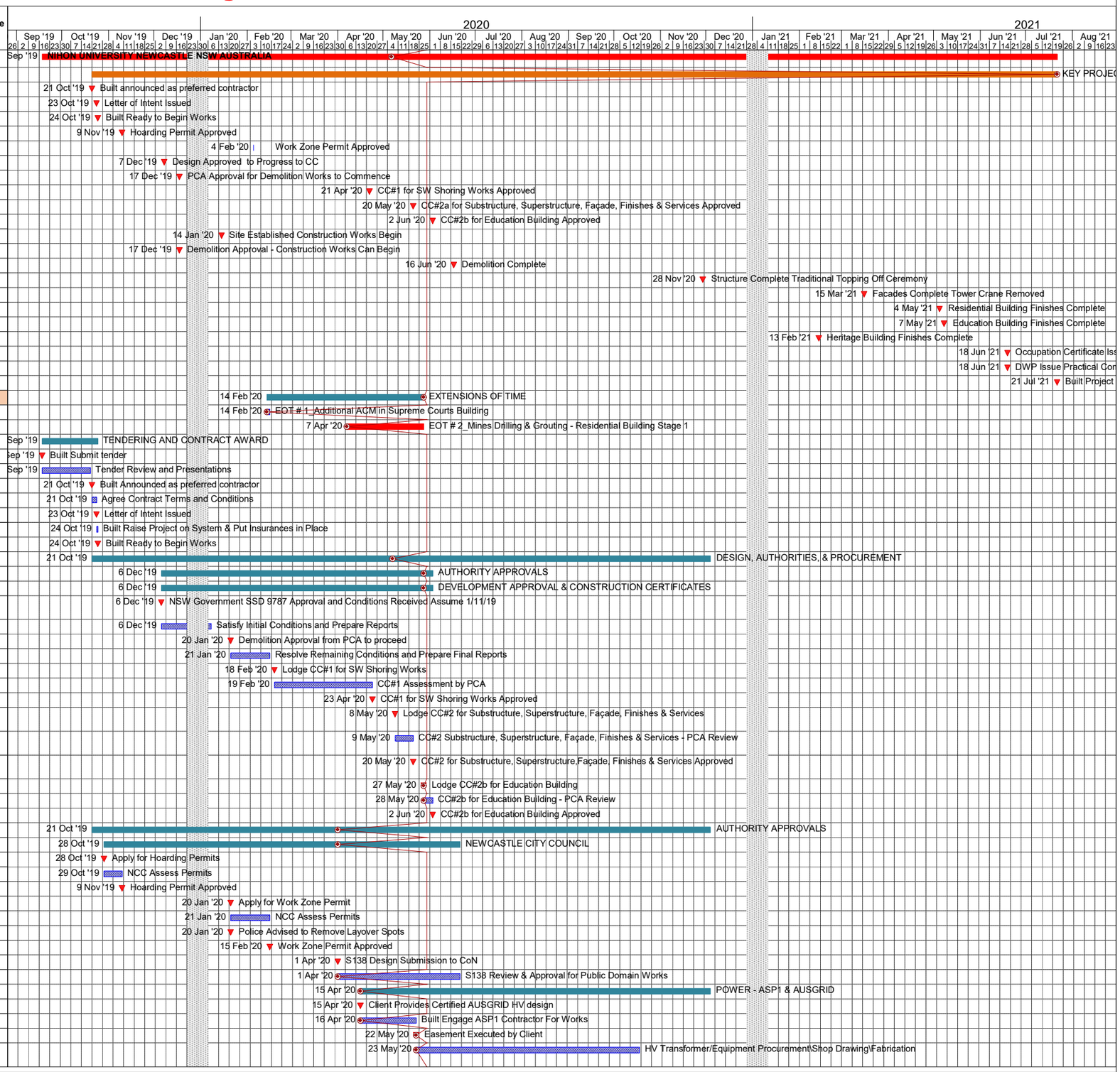
Site Inspection

Appendix D – Statused Contract Programme

Prepared By: RMc
Checked:
Revision : Rev 5 Contract

Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
0	**NIHON UNIVERSITY NEWCASTLE NSW AUSTRALIA**	**508 d**	**Wed 18/09/19**	**Wed 21/07/21**	**28%**
1	**KEY PROJECT MILESTONES**	**477 d**	**Mon 21/10/19**	**Wed 21/07/21**	**99%**
2	Built announced as preferred contractor	0 d	Mon 21/10/19	Mon 21/10/19	*100%*
3	Letter of Intent Issued	0 d	Wed 23/10/19	Wed 23/10/19	*100%*
4	Built Ready to Begin Works	0 d	Thu 24/10/19	Thu 24/10/19	*100%*
5	*Hoarding Permit Approved*	*0 d*	*Sat 9/11/19*	*Sat 9/11/19*	*100%*
6	Work Zone Permit Approved	10 d	Tue 4/02/20	Sat 15/02/20	100%
7	Design Approved to Progress to CC	0 d	Sat 7/12/19	Sat 7/12/19	*100%*
8	*PCA Approval for Demolition Works to Commence*	*0 d*	*Tue 17/12/19*	*Tue 17/12/19*	*100%*
9	*CC#1 for SW Shoring Works Approved*	*0 d*	*Tue 21/04/20*	*Tue 21/04/20*	*100%*
10	*CC#2a for Substructure, Superstructure, Façade, Finishes & Services Ap*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*100%*
11	*CC#2b for Education Building Approved*	*0 d*	*Tue 2/06/20*	*Tue 2/06/20*	*0%*
12	Site Established Construction Works Begin	0 d	Tue 14/01/20	Tue 14/01/20	*100%*
13	Demolition Approval - Construction Works Can Begin	0 d	Tue 17/12/19	Tue 17/12/19	*100%*
14	*Demolition Complete*	*0 d*	*Tue 16/06/20*	*Tue 16/06/20*	*0%*
15	*Structure Complete Traditional Topping Off Ceremony*	*0 d*	*Sat 28/11/20*	*Sat 28/11/20*	*0%*
16	Facades Complete Tower Crane Removed	0 d	Mon 15/03/21	Mon 15/03/21	*0%*
17	*Residential Building Finishes Complete*	*0 d*	*Tue 4/05/21*	*Tue 4/05/21*	*0%*
18	*Education Building Finishes Complete*	*0 d*	*Fri 7/05/21*	*Fri 7/05/21*	*0%*
19	*Heritage Building Finishes Complete*	*0 d*	*Sat 13/02/21*	*Sat 13/02/21*	*0%*
20	*Occupation Certificate Issued*	*0 d*	*Fri 18/06/21*	*Fri 18/06/21*	*0%*
21	*DWP Issue Practical Completion*	*0 d*	*Fri 18/06/21*	*Fri 18/06/21*	*0%*
22	*Built Project Complete*	*0 d*	*Wed 21/07/21*	*Wed 21/07/21*	*0%*
23	**EXTENSIONS OF TIME**	**83 d**	**Fri 14/02/20**	**Wed 27/05/20**	**0%**
24	EOT # 1_Additional ACM in Supreme Courts Building	2 d	Fri 14/02/20	Sat 15/02/20	0%
25	EOT # 2_Mines Drilling & Grouting - Residential Building Stage 1	38 d	Tue 7/04/20	Wed 27/05/20	0%
26	**TENDERING AND CONTRACT AWARD**	**29 d**	**Wed 18/09/19**	**Thu 24/10/19**	**100%**
27	Built Submit tender	0 d	Wed 18/09/19	Wed 18/09/19	*100%*
28	Tender Review and Presentations	25 d	Wed 18/09/19	Sat 19/10/19	100%
29	Built Announced as preferred contractor	0 d	Mon 21/10/19	Mon 21/10/19	*100%*
30	Agree Contract Terms and Conditions	3 d	Mon 21/10/19	Wed 23/10/19	100%
31	Letter of Intent Issued	0 d	Wed 23/10/19	Wed 23/10/19	*100%*
32	Built Raise Project on System & Put Insurances in Place	1 d	Thu 24/10/19	Thu 24/10/19	100%
33	Built Ready to Begin Works	0 d	Thu 24/10/19	Thu 24/10/19	*100%*
34	**DESIGN, AUTHORITIES, & PROCUREMENT**	**318 d**	**Mon 21/10/19**	**Thu 3/12/20**	**71%**
35	**AUTHORITY APPROVALS**	**131 d**	**Fri 6/12/19**	**Tue 2/06/20**	**95%**
36	**DEVELOPMENT APPROVAL & CONSTRUCTION CERTIF**	**131 d**	**Fri 6/12/19**	**Tue 2/06/20**	**95%**
37	*NSW Government SSD 9787 Approval and Conditions Received Assume 1/11/19*	*0 d*	*Fri 6/12/19*	*Fri 6/12/19*	*100%*
38	Satisfy Initial Conditions and Prepare Reports	14 d	Fri 6/12/19	Tue 7/01/20	100%
39	*Demolition Approval from PCA to proceed*	*0 d*	*Mon 20/01/20*	*Mon 20/01/20*	*100%*
40	Resolve Remaining Conditions and Prepare Final Reports	20 d	Tue 21/01/20	Sat 15/02/20	100%
41	Lodge CC#1 for SW Shoring Works	0 d	Tue 18/02/20	Tue 18/02/20	*100%*
42	CC#1 Assessment by PCA	52 d	Wed 19/02/20	Thu 23/04/20	100%
43	*CC#1 for SW Shoring Works Approved*	*0 d*	*Thu 23/04/20*	*Thu 23/04/20*	*100%*
44	Lodge CC#2 for Substructure, Superstructure, Façade, Finishes & Services	0 d	Fri 8/05/20	Fri 8/05/20	*100%*
45	CC#2 Substructure, Superstructure, Façade, Finishes & Services - PCA Review	10 d	Sat 9/05/20	Wed 20/05/20	100%
46	*CC#2 for Substructure, Superstructure,Façade, Finishes & Services Approved*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*100%*
47	Lodge CC#2b for Education Building	0 d	Wed 27/05/20	Wed 27/05/20	*0%*
48	CC#2b for Education Building - PCA Review	5 d	Thu 28/05/20	Tue 2/06/20	0%
49	*CC#2b for Education Building Approved*	*0 d*	*Tue 2/06/20*	*Tue 2/06/20*	*0%*
50	**AUTHORITY APPROVALS**	**318 d**	**Mon 21/10/19**	**Thu 3/12/20**	**53%**
51	**NEWCASTLE CITY COUNCIL**	**172 d**	**Mon 28/10/19**	**Sat 20/06/20**	**33%**
52	*Apply for Hoarding Permits*	*0 d*	*Mon 28/10/19*	*Mon 28/10/19*	*100%*
53	NCC Assess Permits	10 d	Tue 29/10/19	Sat 9/11/19	100%
54	*Hoarding Permit Approved*	*0 d*	*Sat 9/11/19*	*Sat 9/11/19*	*100%*
55	*Apply for Work Zone Permit*	*0 d*	*Mon 20/01/20*	*Mon 20/01/20*	*100%*
56	NCC Assess Permits	20 d	Tue 21/01/20	Sat 15/02/20	100%
57	Police Advised to Remove Layover Spots	0 d	Mon 20/01/20	Mon 20/01/20	*100%*
58	*Work Zone Permit Approved*	*0 d*	*Sat 15/02/20*	*Sat 15/02/20*	*100%*
59	*S138 Design Submission to CoN*	*0 d*	*Wed 1/04/20*	*Wed 1/04/20*	*100%*
60	S138 Review & Approval for Public Domain Works	60 d	Wed 1/04/20	Sat 20/06/20	0%
61	**POWER - ASP1 & AUSGRID**	**190 d**	**Wed 15/04/20**	**Thu 3/12/20**	**0%**
62	Client Provides Certified AUSGRID HV design	0 d	Wed 15/04/20	Wed 15/04/20	*100%*
63	Built Engage ASP1 Contractor For Works	30 d	Thu 16/04/20	Fri 22/05/20	0%
64	*Easement Executed by Client*	*0 d*	*Fri 22/05/20*	*Fri 22/05/20*	*0%*
65	HV Transformer/Equipment Procurement\Shop Drawing\Fabrication	120 d	Sat 23/05/20	Sat 17/10/20	0%

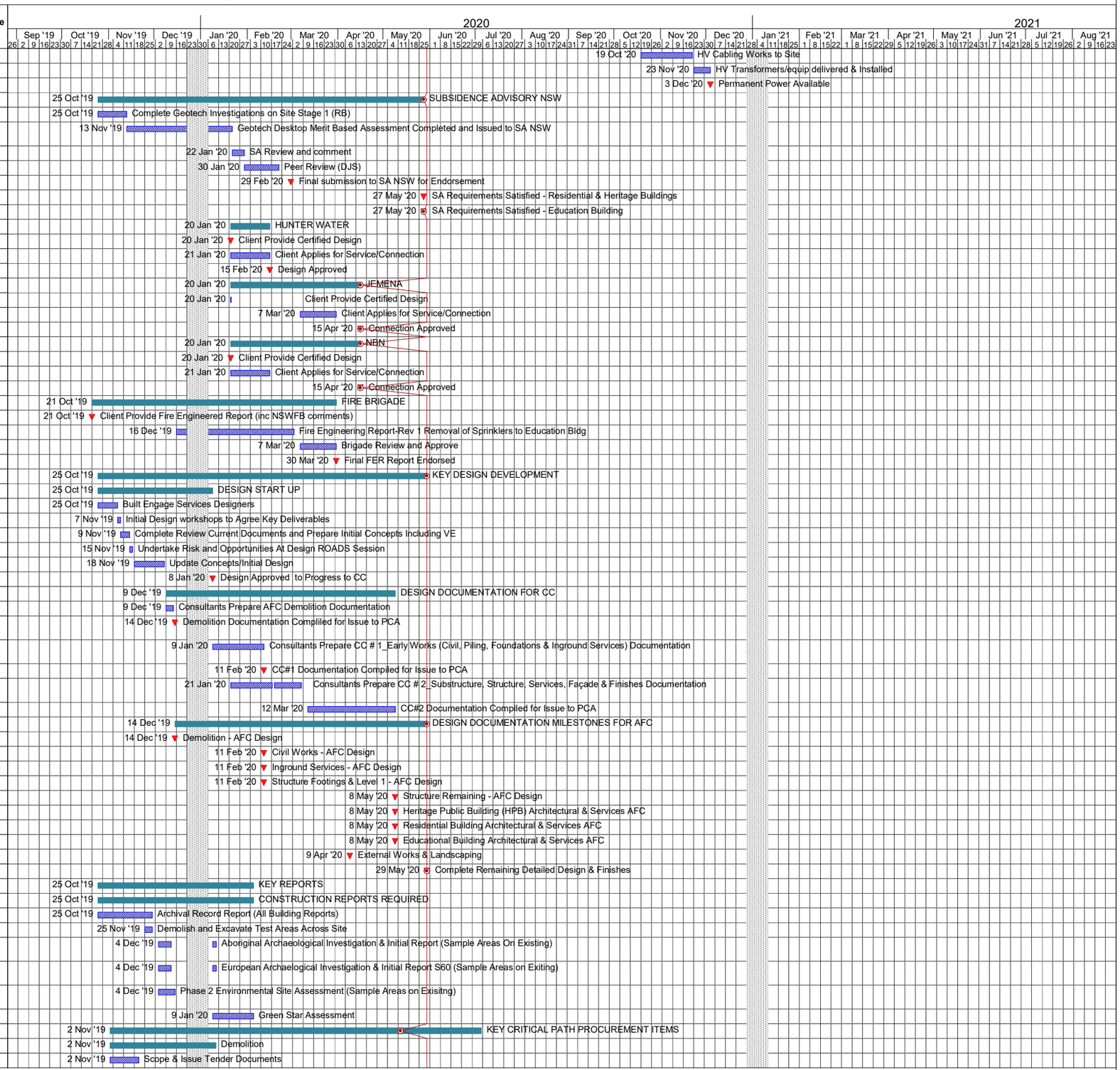


Critical Task | Non-critical | Milestone | Project Summary | Summary

Prepared By: RMc
Checked:
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Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
66	HV Cabling Works to Site	30 d	Mon 19/10/20	Sat 21/11/20	0%
67	HV Transformers/equip delivered & Installed	10 d	Mon 23/11/20	Thu 3/12/20	0%
68	Permanent Power Available	0 d	Thu 3/12/20	Thu 3/12/20	*0%*
69	**SUBSIDENCE ADVISORY NSW**	**158 d**	**Fri 25/10/19**	**Wed 27/05/20**	**99%**
70	Complete Geotech Investigations on Site Stage 1 (RB)	15 d	Fri 25/10/19	Tue 12/11/19	100%
71	Geotech Desktop Merit Based Assessment Completed and Issued to SA NSW	43 d	Wed 13/11/19	Tue 21/01/20	100%
72	SA Review and comment	4 d	Wed 22/01/20	Wed 29/01/20	100%
73	Peer Review (DJS)	20 d	Thu 30/01/20	Fri 21/02/20	100%
74	*Final submission to SA NSW for Endorsement*	*0 d*	*Sat 29/02/20*	*Sat 29/02/20*	*100%*
75	*SA Requirements Satisfied - Residential & Heritage Buildings*	*0 d*	*Wed 27/05/20*	*Wed 27/05/20*	*100%*
76	*SA Requirements Satisfied - Education Building*	*0 d*	*Wed 27/05/20*	*Wed 27/05/20*	*0%*
77	**HUNTER WATER**	**20 d**	**Mon 20/01/20**	**Sat 15/02/20**	**100%**
78	Client Provide Certified Design	0 d	Mon 20/01/20	Mon 20/01/20	*100%*
79	Client Applies for Service/Connection	20 d	Tue 21/01/20	Sat 15/02/20	100%
80	*Design Approved*	*0 d*	*Sat 15/02/20*	*Sat 15/02/20*	*100%*
81	**JEMENA**	**67 d**	**Mon 20/01/20**	**Wed 15/04/20**	**99%**
82	Client Provide Certified Design	37 d	Mon 20/01/20	Fri 6/03/20	100%
83	Client Applies for Service/Connection	20 d	Sat 7/03/20	Mon 30/03/20	100%
84	*Connection Approved*	*0 d*	*Wed 15/04/20*	*Wed 15/04/20*	*0%*
85	**NBN**	**67 d**	**Mon 20/01/20**	**Wed 15/04/20**	**99%**
86	Client Provide Certified Design	0 d	Mon 20/01/20	Mon 20/01/20	*100%*
87	Client Applies for Service/Connection	20 d	Tue 21/01/20	Sat 15/02/20	100%
88	*Connection Approved*	*0 d*	*Wed 15/04/20*	*Wed 15/04/20*	*0%*
89	**FIRE BRIGADE**	**118 d**	**Mon 21/10/19**	**Mon 30/03/20**	**100%**
90	Client Provide Fire Engineered Report (inc NSWFB comments)	0 d	Mon 21/10/19	Mon 21/10/19	*100%*
91	Fire Engineering Report-Rev 1 Removal of Sprinklers to Educatio	50 d	Mon 16/12/19	Mon 2/03/20	100%
92	Brigade Review and Approve	20 d	Sat 7/03/20	Mon 30/03/20	100%
93	*Final FER Report Endorsed*	*0 d*	*Mon 30/03/20*	*Mon 30/03/20*	*100%*
94	**KEY DESIGN DEVELOPMENT**	**160 d**	**Fri 25/10/19**	**Fri 29/05/20**	**99%**
95	**DESIGN START UP**	**47 d**	**Fri 25/10/19**	**Wed 8/01/20**	**100%**
96	Built Engage Services Designers	10 d	Fri 25/10/19	Wed 6/11/19	100%
97	Initial Design workshops to Agree Key Deliverables	2 d	Thu 7/11/19	Fri 8/11/19	100%
98	Complete Review Current Documents and Prepare Initial Concep	5 d	Sat 9/11/19	Thu 14/11/19	100%
99	Undertake Risk and Opportunities At Design ROADS Session	2 d	Fri 15/11/19	Sat 16/11/19	100%
100	Update Concepts/Initial Design	15 d	Mon 18/11/19	Sat 7/12/19	100%
101	Design Approved to Progress to CC	0 d	Wed 8/01/20	Wed 8/01/20	*100%*
102	**DESIGN DOCUMENTATION FOR CC**	**108 d**	**Mon 9/12/19**	**Fri 8/05/20**	**100%**
103	Consultants Prepare AFC Demolition Documentation	5 d	Mon 9/12/19	Fri 13/12/19	100%
104	Demolition Documentation Compliled for Issue to PCA	0 d	Sat 14/12/19	Sat 14/12/19	*100%*
105	Consultants Prepare CC # 1_Early Works (Civil, Piling, Foundations & Inground Services) Documentation	26 d	Thu 9/01/20	Tue 11/02/20	100%
106	CC#1 Documentation Compiled for Issue to PCA	0 d	Tue 11/02/20	Tue 11/02/20	*100%*
107	Consultants Prepare CC # 2_Substructure, Structure, Services, Façade & Finishes Documentation	41 d	Tue 21/01/20	Wed 11/03/20	100%
108	CC#2 Documentation Compiled for Issue to PCA	44 d	Thu 12/03/20	Fri 8/05/20	100%
109	**DESIGN DOCUMENTATION MILESTONES FOR AFC**	**120 d**	**Sat 14/12/19**	**Fri 29/05/20**	**0%**
110	Demolition - AFC Design	0 d	Sat 14/12/19	Sat 14/12/19	*100%*
111	Civil Works - AFC Design	0 d	Tue 11/02/20	Tue 11/02/20	*100%*
112	Inground Services - AFC Design	0 d	Tue 11/02/20	Tue 11/02/20	*100%*
113	Structure Footings & Level 1 - AFC Design	0 d	Tue 11/02/20	Tue 11/02/20	*100%*
114	Structure Remaining - AFC Design	0 d	Fri 8/05/20	Fri 8/05/20	*100%*
115	Heritage Public Building (HPB) Architectural & Services AFC	0 d	Fri 8/05/20	Fri 8/05/20	*100%*
116	Residential Building Architectural & Services AFC	0 d	Fri 8/05/20	Fri 8/05/20	*100%*
117	Educational Building Architectural & Services AFC	0 d	Fri 8/05/20	Fri 8/05/20	*100%*
118	External Works & Landscaping	0 d	Thu 9/04/20	Thu 9/04/20	*100%*
119	*Complete Remaining Detailed Design & Finishes*	*0 d*	*Fri 29/05/20*	*Fri 29/05/20*	*0%*
120	**KEY REPORTS**	**67 d**	**Fri 25/10/19**	**Tue 4/02/20**	**100%**
121	**CONSTRUCTION REPORTS REQUIRED**	**67 d**	**Fri 25/10/19**	**Tue 4/02/20**	**100%**
122	Archival Record Report (All Building Reports)	30 d	Fri 25/10/19	Fri 29/11/19	100%
123	Demolish and Excavate Test Areas Across Site	5 d	Mon 25/11/19	Fri 29/11/19	100%
124	Aboriginal Archaeological Investigation & Initial Report (Sample Areas On Existing)	19.5 d	Wed 4/12/19	Sat 11/01/20	100%
125	European Archaelogical Investigation & Initial Report S60 (Sample Areas on Exiting)	19.5 d	Wed 4/12/19	Sat 11/01/20	100%
126	Phase 2 Environmental Site Assessment (Sample Areas on Exisitng)	10 d	Wed 4/12/19	Sat 14/12/19	100%
127	Green Star Assessment	20 d	Thu 9/01/20	Tue 4/02/20	100%
128	**KEY CRITICAL PATH PROCUREMENT ITEMS**	**180 d**	**Sat 2/11/19**	**Sat 4/07/20**	**71%**
129	**Demolition**	**42 d**	**Sat 2/11/19**	**Fri 10/01/20**	**100%**
130	Scope & Issue Tender Documents	15 d	Sat 2/11/19	Wed 20/11/19	100%



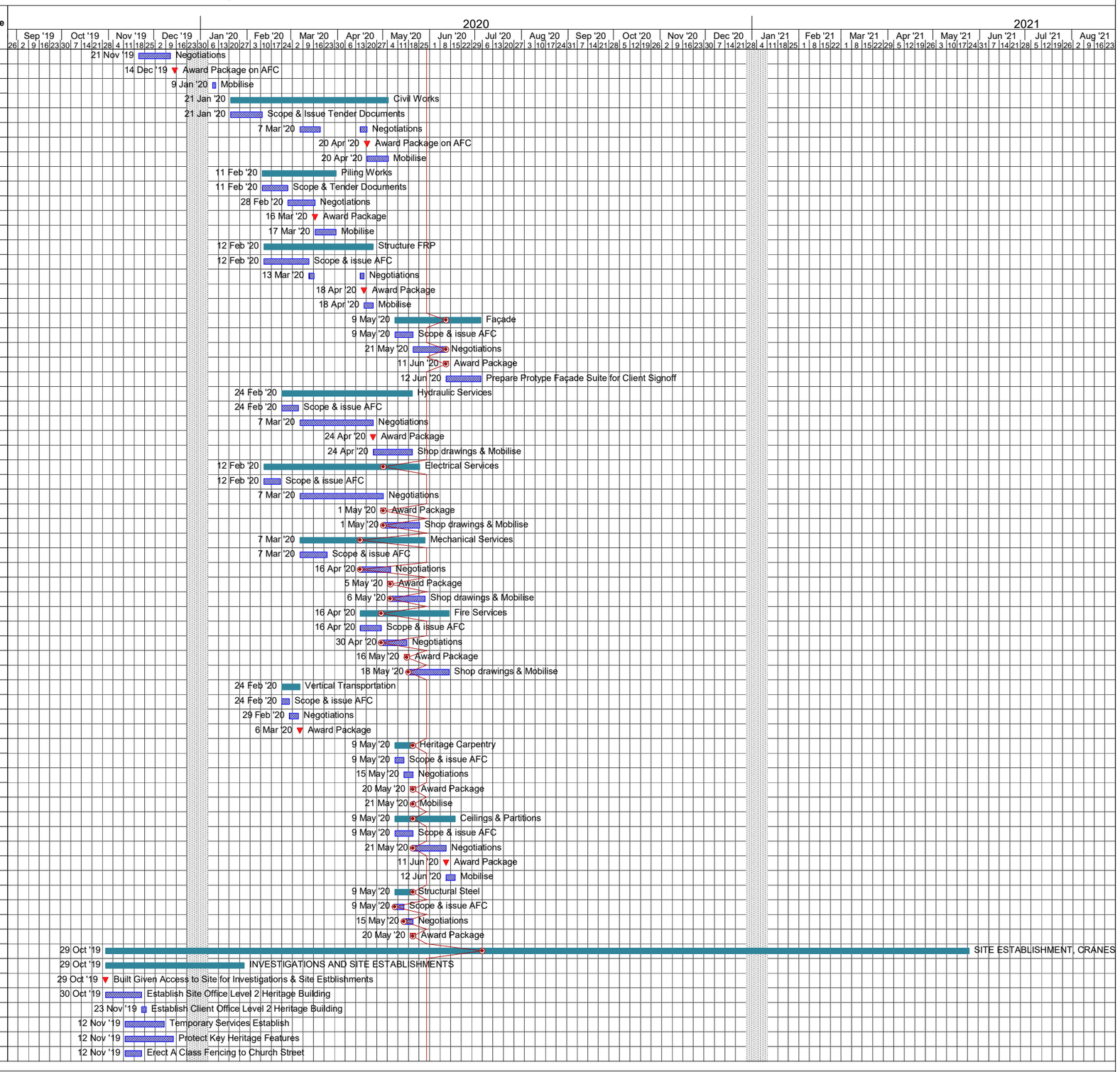
Critical Task | Non-critical | Milestone | Project Summary | Summary

Prepared By: RMc
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Revision : Rev 5 Contract

Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

Built.

ID	Task Name	Dur	Start	Finish	% Complete
131	Negotiations	15 d	Thu 21/11/19	Wed 11/12/19	100%
132	*Award Package on AFC*	*0 d*	*Sat 14/12/19*	*Sat 14/12/19*	*100%*
133	Mobilise	2 d	Thu 9/01/20	Fri 10/01/20	100%
134	**Civil Works**	**80.75 d**	**Tue 21/01/20**	**Mon 4/05/20**	**100%**
135	Scope & Issue Tender Documents	15 d	Tue 21/01/20	Mon 10/02/20	100%
136	Negotiations	15 d	Sat 7/03/20	Mon 20/04/20	100%
137	*Award Package on AFC*	*0 d*	*Mon 20/04/20*	*Mon 20/04/20*	*100%*
138	Mobilise	10 d	Mon 20/04/20	Mon 4/05/20	100%
139	**Piling Works**	**42 d**	**Tue 11/02/20**	**Mon 30/03/20**	**100%**
140	Scope & Tender Documents	15 d	Tue 11/02/20	Thu 27/02/20	100%
141	Negotiations	15 d	Fri 28/02/20	Mon 16/03/20	100%
142	*Award Package*	*0 d*	*Mon 16/03/20*	*Mon 16/03/20*	*100%*
143	Mobilise	12 d	Tue 17/03/20	Mon 30/03/20	100%
144	**Structure FRP**	**58.5 d**	**Wed 12/02/20**	**Fri 24/04/20**	**100%**
145	Scope & issue AFC	26 d	Wed 12/02/20	Thu 12/03/20	100%
146	Negotiations	5 d	Fri 13/03/20	Sat 18/04/20	100%
147	*Award Package*	*0 d*	*Sat 18/04/20*	*Sat 18/04/20*	*100%*
148	Mobilise	5 d	Sat 18/04/20	Fri 24/04/20	100%
149	**Façade**	**45 d**	**Sat 9/05/20**	**Sat 4/07/20**	**56%**
150	Scope & issue AFC	10 d	Sat 9/05/20	Wed 20/05/20	100%
151	Negotiations	15 d	Thu 21/05/20	Thu 11/06/20	100%
152	*Award Package*	*0 d*	*Thu 11/06/20*	*Thu 11/06/20*	*100%*
153	Prepare Protype Façade Suite for Client Signoff	20 d	Fri 12/06/20	Sat 4/07/20	0%
154	**Hydraulic Services**	**68.5 d**	**Mon 24/02/20**	**Wed 20/05/20**	**100%**
155	Scope & issue AFC	10 d	Mon 24/02/20	Thu 5/03/20	100%
156	Negotiations	37.5 d	Sat 7/03/20	Fri 24/04/20	100%
157	*Award Package*	*0 d*	*Fri 24/04/20*	*Fri 24/04/20*	*100%*
158	Shop drawings & Mobilise	20 d	Fri 24/04/20	Wed 20/05/20	100%
159	**Electrical Services**	**82.25 d**	**Wed 12/02/20**	**Mon 25/05/20**	**72%**
160	Scope & issue AFC	10 d	Wed 12/02/20	Sat 22/02/20	100%
161	Negotiations	41.25 d	Sat 7/03/20	Fri 1/05/20	100%
162	*Award Package*	*0 d*	*Fri 1/05/20*	*Fri 1/05/20*	*0%*
163	Shop drawings & Mobilise	20 d	Fri 1/05/20	Mon 25/05/20	0%
164	**Mechanical Services**	**65 d**	**Sat 7/03/20**	**Thu 28/05/20**	**30%**
165	Scope & issue AFC	15 d	Sat 7/03/20	Tue 24/03/20	100%
166	Negotiations	15 d	Thu 16/04/20	Tue 5/05/20	0%
167	*Award Package*	*0 d*	*Tue 5/05/20*	*Tue 5/05/20*	*0%*
168	Shop drawings & Mobilise	20 d	Wed 6/05/20	Thu 28/05/20	0%
169	**Fire Services**	**45 d**	**Thu 16/04/20**	**Sat 13/06/20**	**22%**
170	Scope & issue AFC	10 d	Thu 16/04/20	Wed 29/04/20	100%
171	Negotiations	15 d	Thu 30/04/20	Sat 16/05/20	0%
172	*Award Package*	*0 d*	*Sat 16/05/20*	*Sat 16/05/20*	*0%*
173	Shop drawings & Mobilise	20 d	Mon 18/05/20	Sat 13/06/20	0%
174	**Vertical Transportation**	**11 d**	**Mon 24/02/20**	**Fri 6/03/20**	**100%**
175	Scope & issue AFC	5 d	Mon 24/02/20	Fri 28/02/20	100%
176	Negotiations	5 d	Sat 29/02/20	Thu 5/03/20	100%
177	*Award Package*	*0 d*	*Fri 6/03/20*	*Fri 6/03/20*	*100%*
178	**Heritage Carpentry**	**11 d**	**Sat 9/05/20**	**Thu 21/05/20**	**91%**
179	Scope & issue AFC	5 d	Sat 9/05/20	Thu 14/05/20	100%
180	Negotiations	5 d	Fri 15/05/20	Wed 20/05/20	100%
181	*Award Package*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*0%*
182	Mobilise	1 d	Thu 21/05/20	Thu 21/05/20	0%
183	**Ceilings & Partitions**	**30 d**	**Sat 9/05/20**	**Wed 17/06/20**	**33%**
184	Scope & issue AFC	10 d	Sat 9/05/20	Wed 20/05/20	100%
185	Negotiations	15 d	Thu 21/05/20	Thu 11/06/20	0%
186	*Award Package*	*0 d*	*Thu 11/06/20*	*Thu 11/06/20*	*0%*
187	Mobilise	5 d	Fri 12/06/20	Wed 17/06/20	0%
188	**Structural Steel**	**10 d**	**Sat 9/05/20**	**Wed 20/05/20**	**0%**
189	Scope & issue AFC	5 d	Sat 9/05/20	Thu 14/05/20	0%
190	Negotiations	5 d	Fri 15/05/20	Wed 20/05/20	0%
191	*Award Package*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*0%*
192	**SITE ESTABLISHMENT, CRANES, HOISTS ETC**	**428 d**	**Tue 29/10/19**	**Mon 24/05/21**	**20%**
193	**INVESTIGATIONS AND SITE ESTABLISHMENTS**	**58 d**	**Tue 29/10/19**	**Wed 29/01/20**	**100%**
194	*Built Given Access to Site for Investigations & Site Estblishments*	*0 d*	*Tue 29/10/19*	*Tue 29/10/19*	*100%*
195	Establish Site Office Level 2 Heritage Building	20 d	Wed 30/10/19	Fri 22/11/19	100%
196	Establish Client Office Level 2 Heritage Building	2 d	Sat 23/11/19	Mon 25/11/19	100%
197	Temporary Services Establish	20 d	Tue 12/11/19	Sat 7/12/19	100%
198	Protect Key Heritage Features	25 d	Tue 12/11/19	Fri 13/12/19	100%
199	Erect A Class Fencing to Church Street	10 d	Tue 12/11/19	Fri 22/11/19	100%



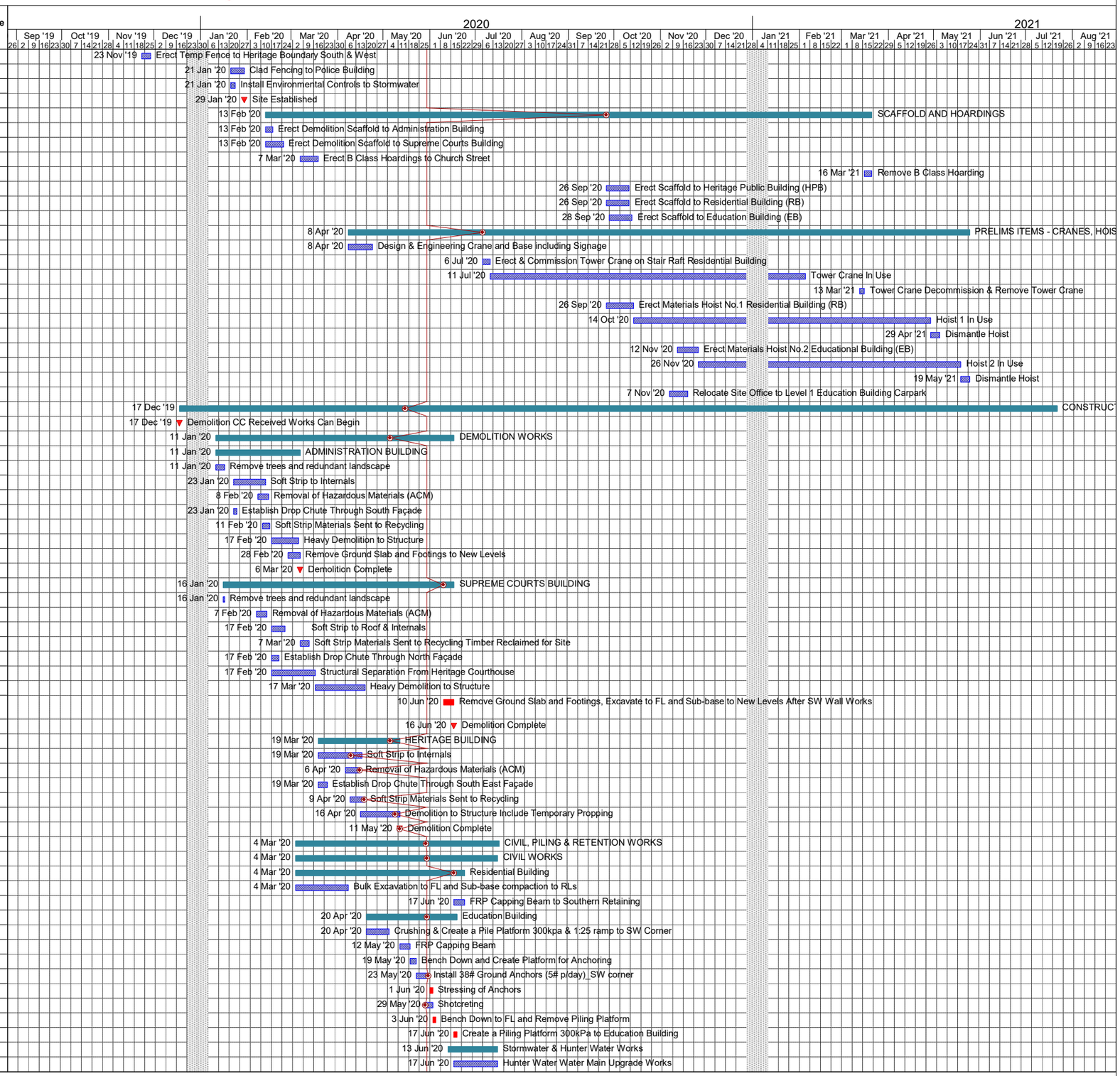
Critical Task | Non-critical | Milestone | Project Summary | Summary

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Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

Built.

ID	Task Name	Dur	Start	Finish	% Complete
200	Erect Temp Fence to Heritage Boundary South & West	5 d	Sat 23/11/19	Thu 28/11/19	100%
201	Clad Fencing to Police Building	5 d	Tue 21/01/20	Wed 29/01/20	100%
202	Install Environmental Controls to Stormwater	3 d	Tue 21/01/20	Thu 23/01/20	100%
203	Site Established	0 d	Wed 29/01/20	Wed 29/01/20	*100%*
204	**SCAFFOLD AND HOARDINGS**	**310 d**	**Thu 13/02/20**	**Sat 20/03/21**	**41%**
205	Erect Demolition Scaffold to Administration Building	4 d	Thu 13/02/20	Mon 17/02/20	100%
206	Erect Demolition Scaffold to Supreme Courts Building	10 d	Thu 13/02/20	Mon 24/02/20	100%
207	Erect B Class Hoardings to Church Street	10 d	Sat 7/03/20	Wed 18/03/20	100%
208	Remove B Class Hoarding	5 d	Tue 16/03/21	Sat 20/03/21	0%
209	Erect Scaffold to Heritage Public Building (HPB)	10 d	Sat 26/09/20	Sat 10/10/20	0%
210	Erect Scaffold to Residential Building (RB)	10 d	Sat 26/09/20	Sat 10/10/20	0%
211	Erect Scaffold to Education Building (EB)	10 d	Mon 28/09/20	Mon 12/10/20	0%
212	**PRELIMS ITEMS - CRANES, HOISTS ETC**	**311 d**	**Wed 8/04/20**	**Mon 24/05/21**	**2%**
213	Design & Engineering Crane and Base including Signage	10 d	Wed 8/04/20	Thu 23/04/20	100%
214	Erect & Commission Tower Crane on Stair Raft Residential Building	5 d	Mon 6/07/20	Fri 10/07/20	0%
215	Tower Crane In Use	154 d	Sat 11/07/20	Thu 4/02/21	0%
216	Tower Crane Decommission & Remove Tower Crane	2 d	Sat 13/03/21	Mon 15/03/21	0%
217	Erect Materials Hoist No.1 Residential Building (RB)	12 d	Sat 26/09/20	Tue 13/10/20	0%
218	Hoist 1 In Use	140 d	Wed 14/10/20	Wed 28/04/21	0%
219	Dismantle Hoist	5 d	Thu 29/04/21	Tue 4/05/21	0%
220	Erect Materials Hoist No.2 Educational Building (EB)	12 d	Thu 12/11/20	Wed 25/11/20	0%
221	Hoist 2 In Use	120 d	Thu 26/11/20	Tue 18/05/21	0%
222	Dismantle Hoist	5 d	Wed 19/05/21	Mon 24/05/21	0%
223	Relocate Site Office to Level 1 Education Building Carpark	10 d	Sat 7/11/20	Wed 18/11/20	0%
224	**CONSTRUCTION WORKS**	**437 d**	**Tue 17/12/19**	**Wed 21/07/21**	**9%**
225	Demolition CC Received Works Can Begin	0 d	Tue 17/12/19	Tue 17/12/19	*100%*
226	**DEMOLITION WORKS**	**122 d**	**Sat 11/01/20**	**Tue 16/06/20**	**95%**
227	**ADMINISTRATION BUILDING**	**45 d**	**Sat 11/01/20**	**Fri 6/03/20**	**100%**
228	Remove trees and redundant landscape	5 d	Sat 11/01/20	Thu 16/01/20	100%
229	Soft Strip to Internals	15 d	Thu 23/01/20	Wed 12/02/20	100%
230	Removal of Hazardous Materials (ACM)	6 d	Sat 8/02/20	Fri 14/02/20	100%
231	Establish Drop Chute Through South Façade	2 d	Thu 23/01/20	Fri 24/01/20	100%
232	Soft Strip Materials Sent to Recycling	5 d	Tue 11/02/20	Sat 15/02/20	100%
233	Heavy Demolition to Structure	16 d	Mon 17/02/20	Thu 5/03/20	100%
234	Remove Ground Slab and Footings to New Levels	7 d	Fri 28/02/20	Fri 6/03/20	100%
235	*Demolition Complete*	*0 d*	*Fri 6/03/20*	*Fri 6/03/20*	*100%*
236	**SUPREME COURTS BUILDING**	**118 d**	**Thu 16/01/20**	**Tue 16/06/20**	**94%**
237	Remove trees and redundant landscape	1 d	Thu 16/01/20	Thu 16/01/20	100%
238	Removal of Hazardous Materials (ACM)	6 d	Fri 7/02/20	Thu 13/02/20	100%
239	Soft Strip to Roof & Internals	20 d	Mon 17/02/20	Tue 10/03/20	100%
240	Soft Strip Materials Sent to Recycling Timber Reclaimed for Site	5 d	Sat 7/03/20	Thu 12/03/20	100%
241	Establish Drop Chute Through North Façade	5 d	Mon 17/02/20	Fri 21/02/20	100%
242	Structural Separation From Heritage Courthouse	25 d	Mon 17/02/20	Mon 16/03/20	100%
243	Heavy Demolition to Structure	25 d	Tue 17/03/20	Sat 18/04/20	100%
244	Remove Ground Slab and Footings, Excavate to FL and Sub-base to New Levels After SW Wall Works	6 d	Wed 10/06/20	Tue 16/06/20	0%
245	*Demolition Complete*	*0 d*	*Tue 16/06/20*	*Tue 16/06/20*	*0%*
246	**HERITAGE BUILDING**	**40 d**	**Thu 19/03/20**	**Mon 11/05/20**	**91%**
247	Soft Strip to Internals	21 d	Thu 19/03/20	Thu 16/04/20	90%
248	Removal of Hazardous Materials (ACM)	5 d	Mon 6/04/20	Wed 15/04/20	90%
249	Establish Drop Chute Through South East Façade	5 d	Thu 19/03/20	Tue 24/03/20	100%
250	Soft Strip Materials Sent to Recycling	5 d	Thu 9/04/20	Sat 18/04/20	90%
251	Demolition to Structure Include Temporary Propping	20 d	Thu 16/04/20	Mon 11/05/20	90%
252	*Demolition Complete*	*0 d*	*Mon 11/05/20*	*Mon 11/05/20*	*0%*
253	**CIVIL, PILING & RETENTION WORKS**	**106 d**	**Wed 4/03/20**	**Thu 16/07/20**	**38%**
254	**CIVIL WORKS**	**105 d**	**Wed 4/03/20**	**Wed 15/07/20**	**49%**
255	**Residential Building**	**86 d**	**Wed 4/03/20**	**Tue 23/06/20**	**83%**
256	Bulk Excavation to FL and Sub-base compaction to RLs	30 d	Wed 4/03/20	Tue 7/04/20	100%
257	FRP Capping Beam to Southern Retaining	6 d	Wed 17/06/20	Tue 23/06/20	0%
258	**Education Building**	**46 d**	**Mon 20/04/20**	**Thu 18/06/20**	**74%**
259	Crushing & Create a Pile Platform 300kpa & 1:25 ramp to SW	11 d	Mon 20/04/20	Mon 4/05/20	100%
260	FRP Capping Beam	6 d	Tue 12/05/20	Mon 18/05/20	100%
261	Bench Down and Create Platform for Anchoring	4 d	Tue 19/05/20	Fri 22/05/20	100%
262	Install 38# Ground Anchors (5# p/day)_SW corner	7 d	Sat 23/05/20	Sat 30/05/20	100%
263	Stressing of Anchors	2 d	Mon 1/06/20	Tue 2/06/20	0%
264	Shotcreting	4 d	Fri 29/05/20	Tue 2/06/20	0%
265	Bench Down to FL and Remove Piling Platform	2 d	Wed 3/06/20	Thu 4/06/20	0%
266	Create a Piling Platform 300kPa to Education Building	2 d	Wed 17/06/20	Thu 18/06/20	0%
267	**Stormwater & Hunter Water Works**	**28 d**	**Sat 13/06/20**	**Wed 15/07/20**	**0%**
268	Hunter Water Water Main Upgrade Works	25 d	Wed 17/06/20	Wed 15/07/20	0%

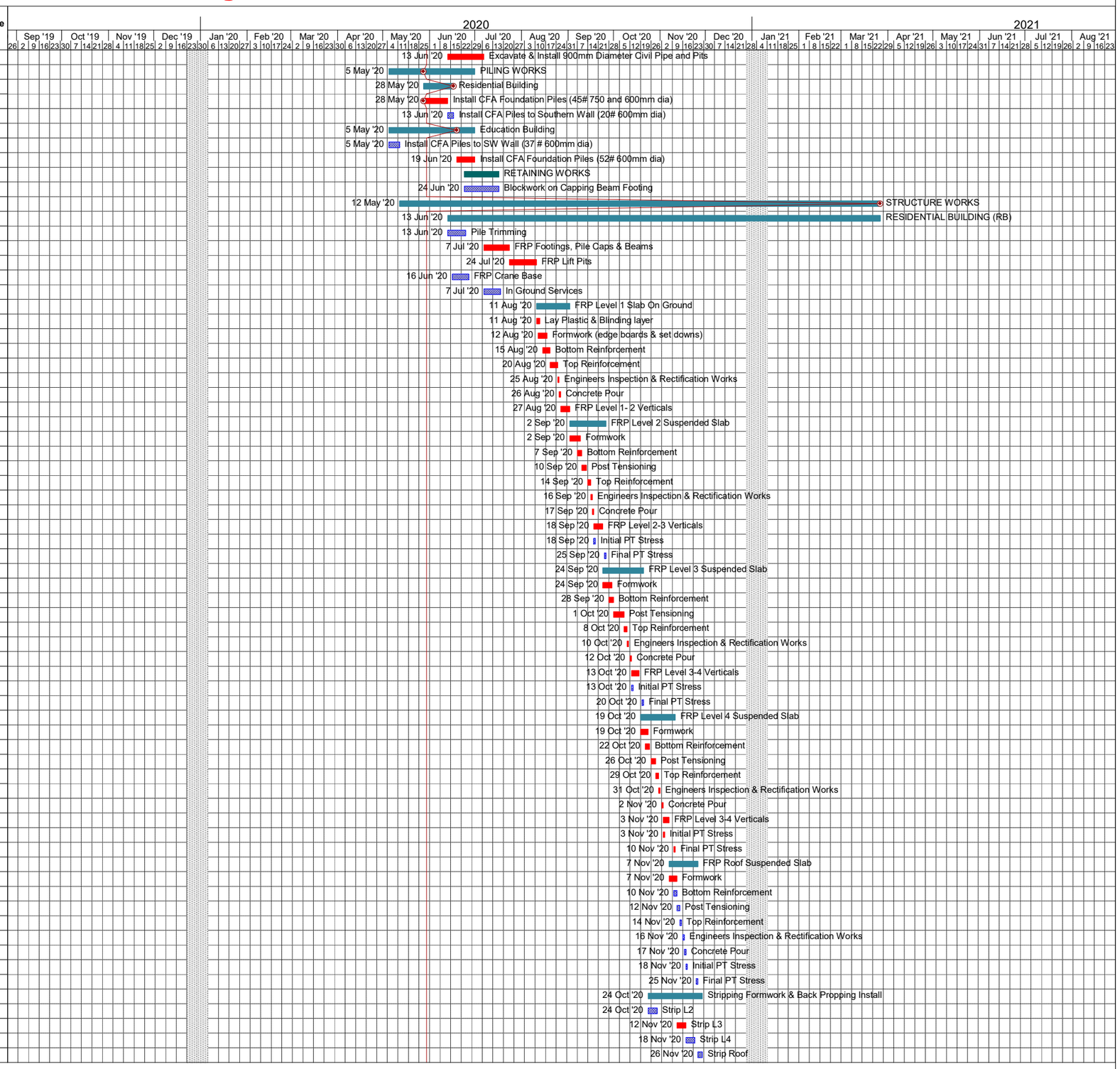


Critical Task | Non-critical | Milestone | Project Summary | Summary

Prepared By: RMc
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Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
269	Excavate & Install 900mm Diameter Civil Pipe and Pits	20 d	Sat 13/06/20	Mon 6/07/20	0%
270	**PILING WORKS**	**45 d**	**Tue 5/05/20**	**Tue 30/06/20**	**21%**
271	**Residential Building**	**13 d**	**Thu 28/05/20**	**Tue 16/06/20**	**0%**
272	Install CFA Foundation Piles (45# 750 and 600mm dia)	10 d	Thu 28/05/20	Fri 12/06/20	0%
273	Install CFA Piles to Southern Wall (20# 600mm dia)	3 d	Sat 13/06/20	Tue 16/06/20	0%
274	**Education Building**	**45 d**	**Tue 5/05/20**	**Tue 30/06/20**	**38%**
275	Install CFA Piles to SW Wall (37 # 600mm dia)	6 d	Tue 5/05/20	Mon 11/05/20	100%
276	Install CFA Foundation Piles (52# 600mm dia)	10 d	Fri 19/06/20	Tue 30/06/20	0%
277	**RETAINING WORKS**	**20 d**	**Wed 24/06/20**	**Thu 16/07/20**	**0%**
278	Blockwork on Capping Beam Footing	20 d	Wed 24/06/20	Thu 16/07/20	0%
279	**STRUCTURE WORKS**	**245 d**	**Tue 12/05/20**	**Fri 26/03/21**	**0%**
280	**RESIDENTIAL BUILDING (RB)**	**221 d**	**Sat 13/06/20**	**Fri 26/03/21**	**0%**
281	Pile Trimming	10 d	Sat 13/06/20	Wed 24/06/20	0%
282	FRP Footings, Pile Caps & Beams	15 d	Tue 7/07/20	Thu 23/07/20	0%
283	FRP Lift Pits	15 d	Fri 24/07/20	Mon 10/08/20	0%
284	FRP Crane Base	10 d	Tue 16/06/20	Fri 26/06/20	0%
285	In Ground Services	10 d	Tue 7/07/20	Fri 17/07/20	0%
286	**FRP Level 1 Slab On Ground**	**19 d**	**Tue 11/08/20**	**Tue 1/09/20**	**0%**
287	Lay Plastic & Blinding layer	2 d	Tue 11/08/20	Wed 12/08/20	0%
288	Formwork (edge boards & set downs)	5 d	Wed 12/08/20	Mon 17/08/20	0%
289	Bottom Reinforcement	4 d	Sat 15/08/20	Wed 19/08/20	0%
290	Top Reinforcement	4 d	Thu 20/08/20	Mon 24/08/20	0%
291	Engineers Inspection & Rectification Works	1 d	Tue 25/08/20	Tue 25/08/20	0%
292	Concrete Pour	1 d	Wed 26/08/20	Wed 26/08/20	0%
293	FRP Level 1- 2 Verticals	5 d	Thu 27/08/20	Tue 1/09/20	0%
294	**FRP Level 2 Suspended Slab**	**21 d**	**Wed 2/09/20**	**Fri 25/09/20**	**0%**
295	Formwork	6 d	Wed 2/09/20	Tue 8/09/20	0%
296	Bottom Reinforcement	3 d	Mon 7/09/20	Wed 9/09/20	0%
297	Post Tensioning	3 d	Thu 10/09/20	Sat 12/09/20	0%
298	Top Reinforcement	2 d	Mon 14/09/20	Tue 15/09/20	0%
299	Engineers Inspection & Rectification Works	1 d	Wed 16/09/20	Wed 16/09/20	0%
300	Concrete Pour	1 d	Thu 17/09/20	Thu 17/09/20	0%
301	FRP Level 2-3 Verticals	5 d	Fri 18/09/20	Wed 23/09/20	0%
302	Initial PT Stress	1 d	Fri 18/09/20	Fri 18/09/20	0%
303	Final PT Stress	1 d	Fri 25/09/20	Fri 25/09/20	0%
304	**FRP Level 3 Suspended Slab**	**20 d**	**Thu 24/09/20**	**Tue 20/10/20**	**0%**
305	Formwork	5 d	Thu 24/09/20	Tue 29/09/20	0%
306	Bottom Reinforcement	3 d	Mon 28/09/20	Wed 30/09/20	0%
307	Post Tensioning	3 d	Thu 1/10/20	Wed 7/10/20	0%
308	Top Reinforcement	2 d	Thu 8/10/20	Fri 9/10/20	0%
309	Engineers Inspection & Rectification Works	1 d	Sat 10/10/20	Sat 10/10/20	0%
310	Concrete Pour	1 d	Mon 12/10/20	Mon 12/10/20	0%
311	FRP Level 3-4 Verticals	5 d	Tue 13/10/20	Sat 17/10/20	0%
312	Initial PT Stress	1 d	Tue 13/10/20	Tue 13/10/20	0%
313	Final PT Stress	1 d	Tue 20/10/20	Tue 20/10/20	0%
314	**FRP Level 4 Suspended Slab**	**20 d**	**Mon 19/10/20**	**Tue 10/11/20**	**0%**
315	Formwork	5 d	Mon 19/10/20	Fri 23/10/20	0%
316	Bottom Reinforcement	3 d	Thu 22/10/20	Sat 24/10/20	0%
317	Post Tensioning	3 d	Mon 26/10/20	Wed 28/10/20	0%
318	Top Reinforcement	2 d	Thu 29/10/20	Fri 30/10/20	0%
319	Engineers Inspection & Rectification Works	1 d	Sat 31/10/20	Sat 31/10/20	0%
320	Concrete Pour	1 d	Mon 2/11/20	Mon 2/11/20	0%
321	FRP Level 3-4 Verticals	4 d	Tue 3/11/20	Fri 6/11/20	0%
322	Initial PT Stress	1 d	Tue 3/11/20	Tue 3/11/20	0%
323	Final PT Stress	1 d	Tue 10/11/20	Tue 10/11/20	0%
324	**FRP Roof Suspended Slab**	**16 d**	**Sat 7/11/20**	**Wed 25/11/20**	**0%**
325	Formwork	4 d	Sat 7/11/20	Wed 11/11/20	0%
326	Bottom Reinforcement	2 d	Tue 10/11/20	Wed 11/11/20	0%
327	Post Tensioning	2 d	Thu 12/11/20	Fri 13/11/20	0%
328	Top Reinforcement	1 d	Sat 14/11/20	Sat 14/11/20	0%
329	Engineers Inspection & Rectification Works	1 d	Mon 16/11/20	Mon 16/11/20	0%
330	Concrete Pour	1 d	Tue 17/11/20	Tue 17/11/20	0%
331	Initial PT Stress	1 d	Wed 18/11/20	Wed 18/11/20	0%
332	Final PT Stress	1 d	Wed 25/11/20	Wed 25/11/20	0%
333	**Stripping Formwork & Back Propping Install**	**31 d**	**Sat 24/10/20**	**Sat 28/11/20**	**0%**
334	Strip L2	5 d	Sat 24/10/20	Thu 29/10/20	0%
335	Strip L3	5 d	Thu 12/11/20	Tue 17/11/20	0%
336	Strip L4	5 d	Wed 18/11/20	Mon 23/11/20	0%
337	Strip Roof	3 d	Thu 26/11/20	Sat 28/11/20	0%

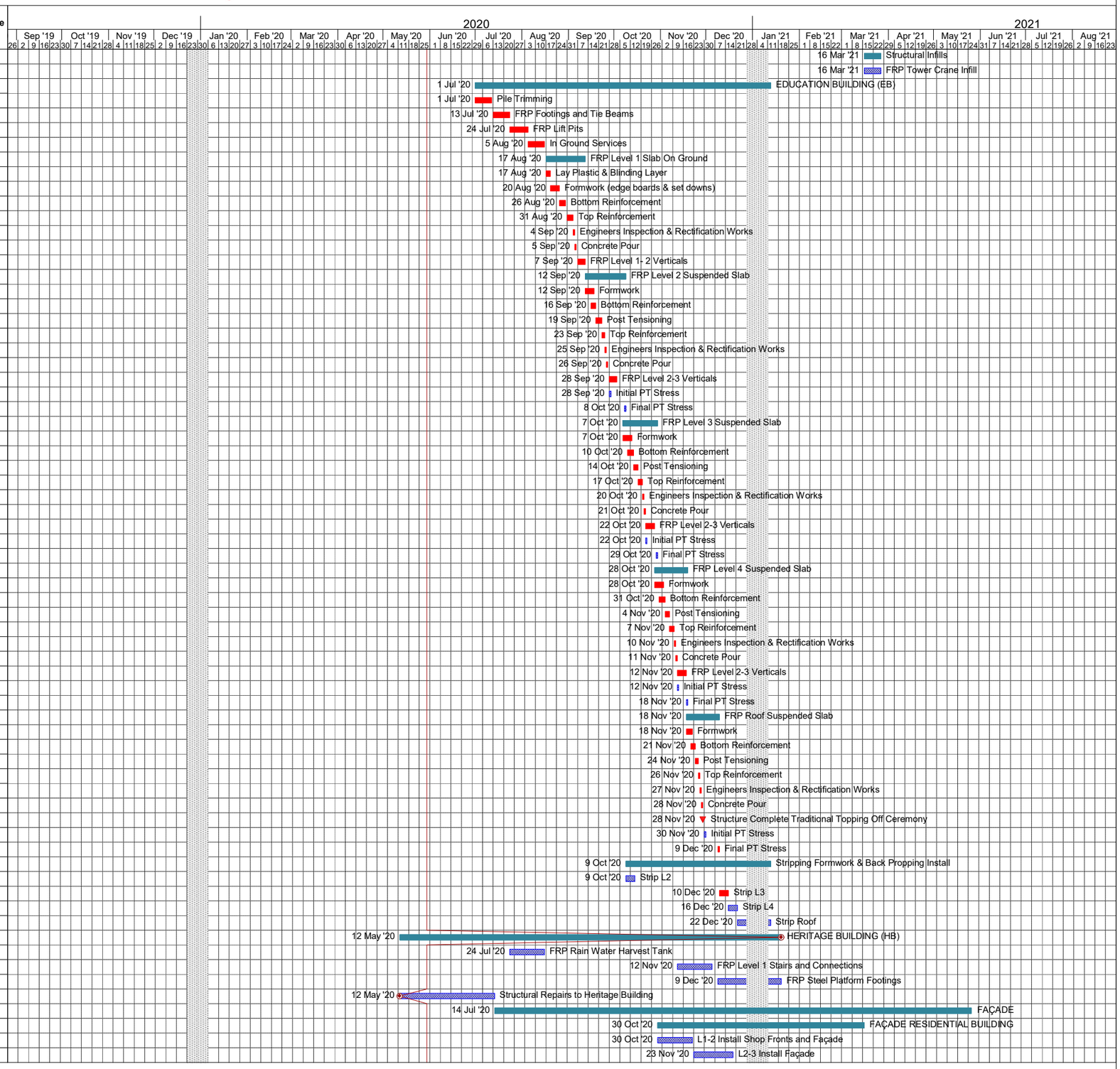


Critical Task | Non-critical | Milestone | Project Summary | Summary

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Checked:
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Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
338	**Structural Infills**	**10 d**	**Tue 16/03/21**	**Fri 26/03/21**	**0%**
339	FRP Tower Crane Infill	10 d	Tue 16/03/21	Fri 26/03/21	0%
340	**EDUCATION BUILDING (EB)**	**146 d**	**Wed 1/07/20**	**Tue 12/01/21**	**0%**
341	Pile Trimming	10 d	Wed 1/07/20	Sat 11/07/20	0%
342	FRP Footings and Tie Beams	10 d	Mon 13/07/20	Thu 23/07/20	0%
343	FRP Lift Pits	10 d	Fri 24/07/20	Tue 4/08/20	0%
344	In Ground Services	10 d	Wed 5/08/20	Sat 15/08/20	0%
345	**FRP Level 1 Slab On Ground**	**23 d**	**Mon 17/08/20**	**Fri 11/09/20**	**0%**
346	Lay Plastic & Blinding Layer	3 d	Mon 17/08/20	Wed 19/08/20	0%
347	Formwork (edge boards & set downs)	5 d	Thu 20/08/20	Tue 25/08/20	0%
348	Bottom Reinforcement	4 d	Wed 26/08/20	Sat 29/08/20	0%
349	Top Reinforcement	4 d	Mon 31/08/20	Thu 3/09/20	0%
350	Engineers Inspection & Rectification Works	1 d	Fri 4/09/20	Fri 4/09/20	0%
351	Concrete Pour	1 d	Sat 5/09/20	Sat 5/09/20	0%
352	FRP Level 1- 2 Verticals	5 d	Mon 7/09/20	Fri 11/09/20	0%
353	**FRP Level 2 Suspended Slab**	**20 d**	**Sat 12/09/20**	**Thu 8/10/20**	**0%**
354	Formwork	5 d	Sat 12/09/20	Thu 17/09/20	0%
355	Bottom Reinforcement	3 d	Wed 16/09/20	Fri 18/09/20	0%
356	Post Tensioning	3 d	Sat 19/09/20	Tue 22/09/20	0%
357	Top Reinforcement	2 d	Wed 23/09/20	Thu 24/09/20	0%
358	Engineers Inspection & Rectification Works	1 d	Fri 25/09/20	Fri 25/09/20	0%
359	Concrete Pour	1 d	Sat 26/09/20	Sat 26/09/20	0%
360	FRP Level 2-3 Verticals	5 d	Mon 28/09/20	Fri 2/10/20	0%
361	Initial PT Stress	1 d	Mon 28/09/20	Mon 28/09/20	0%
362	Final PT Stress	1 d	Thu 8/10/20	Thu 8/10/20	0%
363	**FRP Level 3 Suspended Slab**	**20 d**	**Wed 7/10/20**	**Thu 29/10/20**	**0%**
364	Formwork	5 d	Wed 7/10/20	Mon 12/10/20	0%
365	Bottom Reinforcement	3 d	Sat 10/10/20	Tue 13/10/20	0%
366	Post Tensioning	3 d	Wed 14/10/20	Fri 16/10/20	0%
367	Top Reinforcement	2 d	Sat 17/10/20	Mon 19/10/20	0%
368	Engineers Inspection & Rectification Works	1 d	Tue 20/10/20	Tue 20/10/20	0%
369	Concrete Pour	1 d	Wed 21/10/20	Wed 21/10/20	0%
370	FRP Level 2-3 Verticals	5 d	Thu 22/10/20	Tue 27/10/20	0%
371	Initial PT Stress	1 d	Thu 22/10/20	Thu 22/10/20	0%
372	Final PT Stress	1 d	Thu 29/10/20	Thu 29/10/20	0%
373	**FRP Level 4 Suspended Slab**	**19 d**	**Wed 28/10/20**	**Wed 18/11/20**	**0%**
374	Formwork	5 d	Wed 28/10/20	Mon 2/11/20	0%
375	Bottom Reinforcement	3 d	Sat 31/10/20	Tue 3/11/20	0%
376	Post Tensioning	3 d	Wed 4/11/20	Fri 6/11/20	0%
377	Top Reinforcement	2 d	Sat 7/11/20	Mon 9/11/20	0%
378	Engineers Inspection & Rectification Works	1 d	Tue 10/11/20	Tue 10/11/20	0%
379	Concrete Pour	1 d	Wed 11/11/20	Wed 11/11/20	0%
380	FRP Level 2-3 Verticals	5 d	Thu 12/11/20	Tue 17/11/20	0%
381	Initial PT Stress	1 d	Thu 12/11/20	Thu 12/11/20	0%
382	Final PT Stress	1 d	Wed 18/11/20	Wed 18/11/20	0%
383	**FRP Roof Suspended Slab**	**16 d**	**Wed 18/11/20**	**Wed 9/12/20**	**0%**
384	Formwork	4 d	Wed 18/11/20	Sat 21/11/20	0%
385	Bottom Reinforcement	2 d	Sat 21/11/20	Mon 23/11/20	0%
386	Post Tensioning	2 d	Tue 24/11/20	Wed 25/11/20	0%
387	Top Reinforcement	1 d	Thu 26/11/20	Thu 26/11/20	0%
388	Engineers Inspection & Rectification Works	1 d	Fri 27/11/20	Fri 27/11/20	0%
389	Concrete Pour	1 d	Sat 28/11/20	Sat 28/11/20	0%
390	*Structure Complete Traditional Topping Off Ceremony*	*0 d*	*Sat 28/11/20*	*Sat 28/11/20*	*0%*
391	Initial PT Stress	1 d	Mon 30/11/20	Mon 30/11/20	0%
392	Final PT Stress	1 d	Wed 9/12/20	Wed 9/12/20	0%
393	**Stripping Formwork & Back Propping Install**	**63 d**	**Fri 9/10/20**	**Tue 12/01/21**	**0%**
394	Strip L2	5 d	Fri 9/10/20	Wed 14/10/20	0%
395	Strip L3	5 d	Thu 10/12/20	Tue 15/12/20	0%
396	Strip L4	5 d	Wed 16/12/20	Mon 21/12/20	0%
397	Strip Roof	3 d	Tue 22/12/20	Tue 12/01/21	0%
398	**HERITAGE BUILDING (HB)**	**191 d**	**Tue 12/05/20**	**Tue 19/01/21**	**0%**
399	FRP Rain Water Harvest Tank	20 d	Fri 24/07/20	Sat 15/08/20	0%
400	FRP Level 1 Stairs and Connections	20 d	Thu 12/11/20	Fri 4/12/20	0%
401	FRP Steel Platform Footings	20 d	Wed 9/12/20	Tue 19/01/21	0%
402	Structural Repairs to Heritage Building	50 d	Tue 12/05/20	Mon 13/07/20	0%
403	**FAÇADE**	**239 d**	**Tue 14/07/20**	**Tue 25/05/21**	**0%**
404	**FAÇADE RESIDENTIAL BUILDING**	**95 d**	**Fri 30/10/20**	**Mon 15/03/21**	**0%**
405	L1-2 Install Shop Fronts and Façade	20 d	Fri 30/10/20	Sat 21/11/20	0%
406	L2-3 Install Façade	20 d	Mon 23/11/20	Fri 18/12/20	0%



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Contract Programme - EOT # 2

Built.

ID	Task Name	Dur	Start	Finish	% Complete
407	L3-4 Install Façade	20 d	Sat 19/12/20	Tue 2/02/21	0%
408	L4-Roof Façade Install	10 d	Wed 3/02/21	Sat 13/02/21	0%
409	Paint External All Levels	15 d	Mon 15/02/21	Wed 3/03/21	0%
410	Aluminium Louvres, Fins and Assoc. Attachments Install	10 d	Thu 4/03/21	Mon 15/03/21	0%
411	Void Curtain Wall Steelwork Install	10 d	Mon 30/11/20	Mon 14/12/20	0%
412	Void Curtain Wall Glazing Install	10 d	Tue 15/12/20	Wed 13/01/21	0%
413	**FAÇADE EDUCATIONAL BUILDING**	**100 d**	**Thu 15/10/20**	**Fri 5/03/21**	**0%**
414	L1-2 Install Shop Fronts and Façade	20 d	Thu 15/10/20	Fri 6/11/20	0%
415	L2-3 Install Façade	20 d	Sat 7/11/20	Mon 30/11/20	0%
416	L3-4 Install Façade	20 d	Tue 1/12/20	Thu 14/01/21	0%
417	L4-Roof Façade Install	20 d	Fri 15/01/21	Wed 10/02/21	0%
418	Paint External All Levels	10 d	Thu 11/02/21	Mon 22/02/21	0%
419	Aluminium Louvres, Fins and Assoc. Attachments Install	10 d	Tue 23/02/21	Fri 5/03/21	0%
420	Void Curtain Wall Steelwork Install	10 d	Wed 13/01/21	Wed 27/01/21	0%
421	Void Curtain Wall Glazing Install	10 d	Thu 28/01/21	Mon 8/02/21	0%
422	**FAÇADE HERITAGE / PUBLIC BUILDING**	**80 d**	**Mon 12/10/20**	**Sat 6/02/21**	**0%**
423	Paint and Repairs Northern Face	20 d	Mon 12/10/20	Tue 3/11/20	0%
424	Paint and Repairs Eastern Face	20 d	Wed 4/11/20	Thu 26/11/20	0%
425	Paint and Repairs Western Face	20 d	Fri 27/11/20	Mon 11/01/21	0%
426	Paint and Repairs Southern Face	20 d	Tue 12/01/21	Sat 6/02/21	0%
427	**CONNECTION CANOPIES**	**239 d**	**Tue 14/07/20**	**Tue 25/05/21**	**0%**
428	Install Heritage - Residential Building Connection Canopy	20 d	Sat 19/12/20	Tue 2/02/21	0%
429	Install Heritage - Educational Building Connection Canopy	20 d	Tue 12/01/21	Sat 6/02/21	0%
430	Facades Complete Tower Crane Removed	0 d	Mon 15/03/21	Mon 15/03/21	0%
431	**SERVICES**	**239 d**	**Tue 14/07/20**	**Tue 25/05/21**	**0%**
432	**SERVICES RESIDENTIAL BUILDING**	**147 d**	**Mon 2/11/20**	**Tue 25/05/21**	**0%**
433	L1 Run High Level Services	6 d	Mon 2/11/20	Sat 7/11/20	0%
434	L2 Run High Level Services	10 d	Thu 19/11/20	Mon 30/11/20	0%
435	L3 Run High Level Services	10 d	Tue 1/12/20	Tue 15/12/20	0%
436	L4 Run High Level Services	8 d	Wed 16/12/20	Tue 12/01/21	0%
437	L1 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	10 d	Fri 20/11/20	Tue 1/12/20	0%
438	L2 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	10 d	Wed 16/12/20	Thu 14/01/21	0%
439	L3 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	10 d	Fri 15/01/21	Fri 29/01/21	0%
440	L4 Rough In Trades Sequence, Hydraulic, Mechanical, Fi	6 d	Sat 30/01/21	Fri 5/02/21	0%
441	Roof Plant Install Services	10 d	Sat 6/02/21	Wed 17/02/21	0%
442	Level 1 Fitoff Services	10 d	Fri 26/02/21	Tue 9/03/21	0%
443	Level 2 Fitoff Services	10 d	Thu 1/04/21	Fri 16/04/21	0%
444	Level 3 Fitoff Services	10 d	Sat 17/04/21	Sat 1/05/21	0%
445	Level 4 Fitoff Services	10 d	Mon 3/05/21	Thu 13/05/21	0%
446	Commission Services	10 d	Fri 14/05/21	Tue 25/05/21	0%
447	**SERVICES EDUCATION BUILDING**	**159 d**	**Thu 15/10/20**	**Fri 21/05/21**	**0%**
448	L1 Run High Level Services	6 d	Thu 15/10/20	Wed 21/10/20	0%
449	L2 Run High Level Services	10 d	Thu 17/12/20	Fri 15/01/21	0%
450	L3 Run High Level Services	10 d	Sat 16/01/21	Sat 30/01/21	0%
451	L4 Run High Level Services	8 d	Mon 1/02/21	Tue 9/02/21	0%
452	L1 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	10 d	Thu 22/10/20	Mon 2/11/20	0%
453	L2 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	10 d	Wed 3/02/21	Sat 13/02/21	0%
454	L3 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	10 d	Mon 15/02/21	Thu 25/02/21	0%
455	L4 Rough In Trades Sequence, Hydraulic, Mechanical, Fi	6 d	Sat 13/03/21	Fri 19/03/21	0%
456	Roof Plant Install Services	10 d	Sat 20/03/21	Wed 31/03/21	0%
457	Level 2 Fitoff Services	10 d	Wed 31/03/21	Thu 15/04/21	0%
458	Level 3 Fitoff Services	10 d	Fri 16/04/21	Fri 30/04/21	0%
459	Level 4 Fitoff Services	10 d	Sat 1/05/21	Wed 12/05/21	0%
460	Commission Services	8 d	Thu 13/05/21	Fri 21/05/21	0%
461	**SERVICES HERITAGE BUILDING**	**136 d**	**Tue 14/07/20**	**Wed 13/01/21**	**0%**
462	L1 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	12 d	Tue 14/07/20	Mon 27/07/20	0%
463	L2 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	12 d	Tue 28/07/20	Mon 10/08/20	0%
464	L3 Rough In Trades Sequence, Hydraulic, Mechanical, Fir	12 d	Tue 11/08/20	Mon 24/08/20	0%
465	Level 1 Fitoff Services	10 d	Fri 6/11/20	Tue 17/11/20	0%
466	Level 2 Fitoff Services	10 d	Wed 18/11/20	Sat 28/11/20	0%
467	Level 3 Fitoff Services	10 d	Mon 30/11/20	Mon 14/12/20	0%
468	Commission Services	10 d	Tue 15/12/20	Wed 13/01/21	0%
469	**FINISHES**	**274 d**	**Tue 12/05/20**	**Fri 7/05/21**	**0%**
470	**FINISHES RESIDENTIAL BUILDING STUDENT ACCOMM**	**131 d**	**Fri 30/10/20**	**Tue 4/05/21**	**0%**
471	L1 Mark Up Slab	2 d	Fri 30/10/20	Sat 31/10/20	0%
472	L1 Frame Partitions	10 d	Mon 9/11/20	Thu 19/11/20	0%
473	L1 Frame Ceilings	10 d	Wed 18/11/20	Sat 28/11/20	0%
474	L1 Sheet, Set & Sand Partitions	10 d	Mon 30/11/20	Mon 14/12/20	0%
475	L1 Sheet, Set & Sand Ceilings	10 d	Tue 15/12/20	Wed 13/01/21	0%



Critical Task | Non-critical | Milestone | Project Summary | Summary

Prepared By: RMc
Checked:
Revision : Rev 5 Contract

Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
476	L1 Membrane and Tiling	10 d	Mon 11/01/21	Thu 21/01/21	0%
477	L1 Door Hardware	10 d	Wed 20/01/21	Wed 3/02/21	0%
478	L1 Joinery	10 d	Tue 2/02/21	Fri 12/02/21	0%
479	L1 Floor Finishes	10 d	Thu 11/02/21	Mon 22/02/21	0%
480	L1 Paint	5 d	Sat 20/02/21	Thu 25/02/21	0%
481	L1 FFE	5 d	Fri 26/02/21	Wed 3/03/21	0%
482	L1 Clean and Defects	5 d	Thu 4/03/21	Tue 9/03/21	0%
483	L1 Cafeteria and Kitchen Fitout	40 d	Wed 10/03/21	Mon 3/05/21	0%
484	L2 Mark Up Slab	1 d	Wed 18/11/20	Wed 18/11/20	0%
485	L2 Frame Partitions	10 d	Tue 1/12/20	Tue 15/12/20	0%
486	L2 Frame Ceilings	10 d	Mon 14/12/20	Tue 12/01/21	0%
487	L2 Sheet, Set & Sand Partitions	10 d	Wed 13/01/21	Wed 27/01/21	0%
488	L2 Sheet, Set & Sand Ceilings	10 d	Thu 28/01/21	Mon 8/02/21	0%
489	L2 Membrane and Tiling	10 d	Fri 5/02/21	Tue 16/02/21	0%
490	L2 Door Hardware	10 d	Mon 15/02/21	Thu 25/02/21	0%
491	L2 Joinery	10 d	Wed 24/02/21	Sat 6/03/21	0%
492	L2 Floor Finishes	15 d	Fri 5/03/21	Mon 22/03/21	0%
493	L2 Paint	10 d	Sat 20/03/21	Wed 31/03/21	0%
494	L2 FFE	5 d	Thu 1/04/21	Sat 10/04/21	0%
495	L2 Clean and Defects	5 d	Mon 12/04/21	Fri 16/04/21	0%
496	L3 Mark Up Slab	2 d	Tue 24/11/20	Wed 25/11/20	0%
497	L3 Frame Partitions	10 d	Wed 16/12/20	Thu 14/01/21	0%
498	L3 Frame Ceilings	10 d	Wed 13/01/21	Wed 27/01/21	0%
499	L3 Sheet, Set & Sand Partitions	10 d	Thu 28/01/21	Mon 8/02/21	0%
500	L3 Sheet, Set & Sand Ceilings	10 d	Tue 9/02/21	Fri 19/02/21	0%
501	L3 Membrane and Tiling	10 d	Wed 17/02/21	Sat 27/02/21	0%
502	L3 Door Hardware	10 d	Fri 26/02/21	Tue 9/03/21	0%
503	L3 Joinery	10 d	Mon 8/03/21	Thu 18/03/21	0%
504	L3 Floor Finishes	10 d	Wed 17/03/21	Sat 27/03/21	0%
505	L3 Paint	10 d	Fri 26/03/21	Sat 10/04/21	0%
506	L3 FFE	10 d	Mon 12/04/21	Thu 22/04/21	0%
507	L3 Clean and Defects	4 d	Fri 23/04/21	Fri 30/04/21	0%
508	L4 Mark Up Slab	2 d	Mon 30/11/20	Tue 1/12/20	0%
509	L4 Frame Partitions	7 d	Fri 15/01/21	Fri 22/01/21	0%
510	L4 Frame Ceilings	7 d	Thu 28/01/21	Thu 4/02/21	0%
511	L4 Sheet, Set & Sand Partitions	7 d	Tue 9/02/21	Tue 16/02/21	0%
512	L4 Sheet , Set & Sand Ceilings	7 d	Sat 20/02/21	Sat 27/02/21	0%
513	L4 Membrane and Tiling	10 d	Mon 1/03/21	Thu 11/03/21	0%
514	L4 Door Hardware	5 d	Wed 10/03/21	Mon 15/03/21	0%
515	L4 Joinery	5 d	Fri 19/03/21	Wed 24/03/21	0%
516	L4 Floor Finishes	5 d	Mon 29/03/21	Wed 7/04/21	0%
517	L4 Paint	3 d	Mon 12/04/21	Wed 14/04/21	0%
518	L4 FFE	3 d	Fri 23/04/21	Thu 29/04/21	0%
519	L4 Clean and Defects	3 d	Sat 1/05/21	Tue 4/05/21	0%
520	L4 Zen Garden and Decking	15 d	Fri 12/03/21	Mon 29/03/21	0%
521	*Residential Building Finishes Complete*	*0 d*	*Tue 4/05/21*	*Tue 4/05/21*	*0%*
522	**FINISHES EDUCATIONAL BUILDING**	**141 d**	**Thu 22/10/20**	**Fri 7/05/21**	**0%**
523	L2 Mark Up Slab	1 d	Wed 16/12/20	Wed 16/12/20	0%
524	L2 Frame Partitions	6 d	Sat 16/01/21	Fri 22/01/21	0%
525	L2 Frame Ceilings	6 d	Wed 27/01/21	Tue 2/02/21	0%
526	L2 Sheet, Set & Sand Partitions	8 d	Fri 12/02/21	Sat 20/02/21	0%
527	L2 Sheet, Set & Sand Ceilings	8 d	Mon 22/02/21	Tue 2/03/21	0%
528	L2 Membrane and Tiling	6 d	Sat 27/02/21	Fri 5/03/21	0%
529	L2 Door Hardware	5 d	Thu 4/03/21	Tue 9/03/21	0%
530	L2 Joinery	5 d	Mon 8/03/21	Fri 12/03/21	0%
531	L2 Floor Finishes	6 d	Thu 11/03/21	Wed 17/03/21	0%
532	L2 Paint	8 d	Tue 16/03/21	Wed 24/03/21	0%
533	L2 FFE	5 d	Thu 25/03/21	Tue 30/03/21	0%
534	L2 Clean and Defects	5 d	Wed 31/03/21	Fri 9/04/21	0%
535	L3 Mark Up Slab	1 d	Tue 22/12/20	Tue 22/12/20	0%
536	L3 Frame Partitions	6 d	Mon 1/02/21	Sat 6/02/21	0%
537	L3 Frame Ceilings	6 d	Mon 8/02/21	Sat 13/02/21	0%
538	L3 Sheet, Set & Sand Partitions	8 d	Wed 24/02/21	Thu 4/03/21	0%
539	L3 Sheet, Set & Sand Ceilings	8 d	Fri 5/03/21	Sat 13/03/21	0%
540	L3 Membrane and Tiling	6 d	Thu 11/03/21	Wed 17/03/21	0%
541	L3 Door Hardware	5 d	Tue 16/03/21	Sat 20/03/21	0%
542	L3 Joinery	5 d	Fri 19/03/21	Wed 24/03/21	0%
543	L3 Floor Finishes	6 d	Tue 23/03/21	Mon 29/03/21	0%
544	L3 Paint	8 d	Sat 27/03/21	Fri 9/04/21	0%

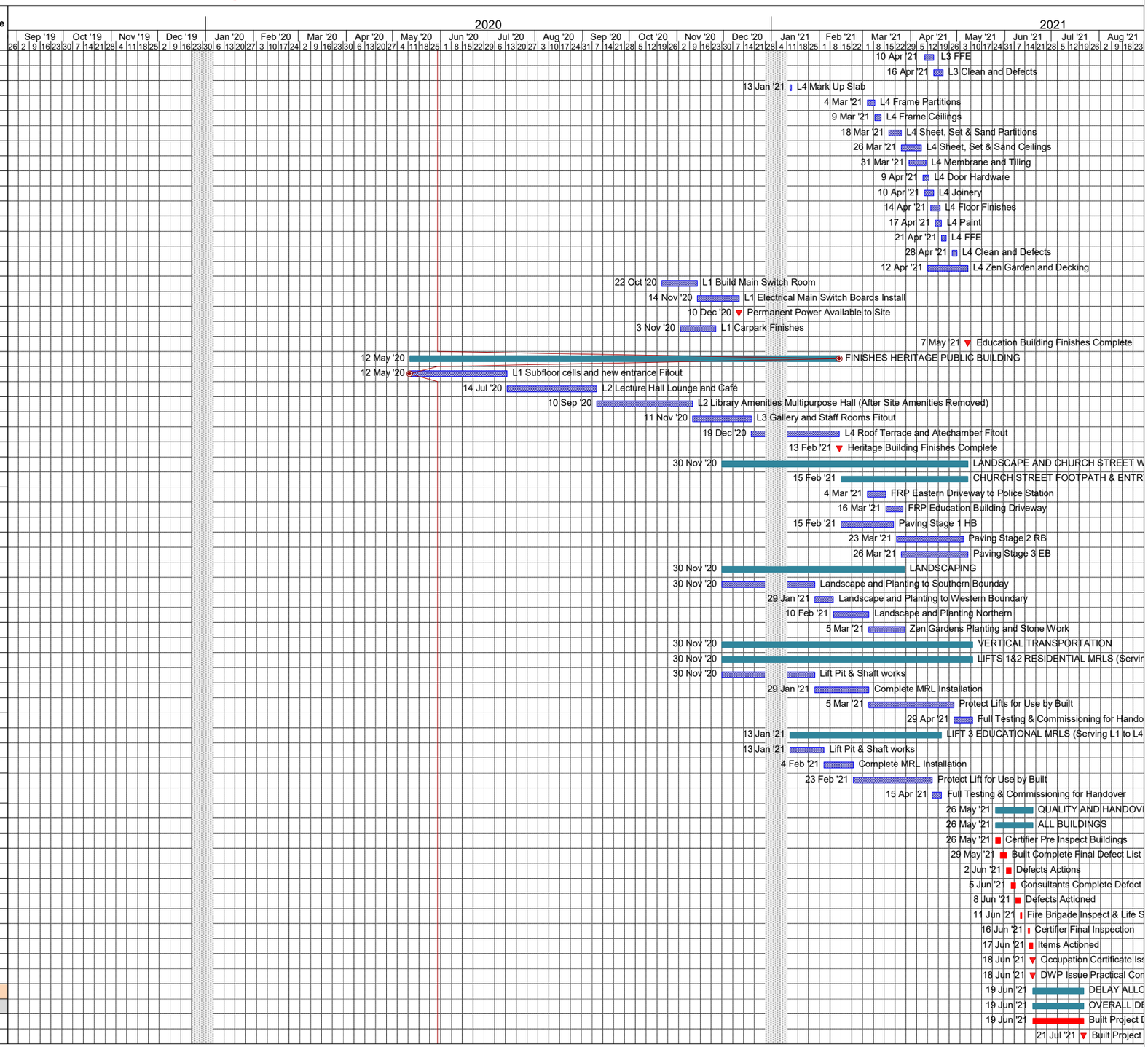


Critical Task | Non-critical | Milestone | Project Summary | Summary

Prepared By: RMc
Checked:
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Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
545	L3 FFE	5 d	Sat 10/04/21	Thu 15/04/21	0%
546	L3 Clean and Defects	5 d	Fri 16/04/21	Wed 21/04/21	0%
547	L4 Mark Up Slab	1 d	Wed 13/01/21	Wed 13/01/21	0%
548	L4 Frame Partitions	4 d	Thu 4/03/21	Mon 8/03/21	0%
549	L4 Frame Ceilings	4 d	Tue 9/03/21	Fri 12/03/21	0%
550	L4 Sheet, Set & Sand Partitions	7 d	Thu 18/03/21	Thu 25/03/21	0%
551	L4 Sheet, Set & Sand Ceilings	7 d	Fri 26/03/21	Wed 7/04/21	0%
552	L4 Membrane and Tiling	6 d	Wed 31/03/21	Sat 10/04/21	0%
553	L4 Door Hardware	3 d	Fri 9/04/21	Mon 12/04/21	0%
554	L4 Joinery	5 d	Sat 10/04/21	Thu 15/04/21	0%
555	L4 Floor Finishes	5 d	Wed 14/04/21	Mon 19/04/21	0%
556	L4 Paint	3 d	Sat 17/04/21	Tue 20/04/21	0%
557	L4 FFE	3 d	Wed 21/04/21	Fri 23/04/21	0%
558	L4 Clean and Defects	3 d	Wed 28/04/21	Fri 30/04/21	0%
559	L4 Zen Garden and Decking	20 d	Mon 12/04/21	Fri 7/05/21	0%
560	L1 Build Main Switch Room	20 d	Thu 22/10/20	Fri 13/11/20	0%
561	L1 Electrical Main Switch Boards Install	20 d	Sat 14/11/20	Thu 10/12/20	0%
562	*Permanent Power Available to Site*	*0 d*	*Thu 10/12/20*	*Thu 10/12/20*	*0%*
563	L1 Carpark Finishes	20 d	Tue 3/11/20	Wed 25/11/20	0%
564	*Education Building Finishes Complete*	*0 d*	*Fri 7/05/21*	*Fri 7/05/21*	*0%*
565	**FINISHES HERITAGE PUBLIC BUILDING**	**210 d**	**Tue 12/05/20**	**Sat 13/02/21**	**0%**
566	L1 Subfloor cells and new entrance Fitout	50 d	Tue 12/05/20	Mon 13/07/20	0%
567	L2 Lecture Hall Lounge and Café	50 d	Tue 14/07/20	Wed 9/09/20	0%
568	L2 Library Amenities Multipurpose Hall (After Site Amenities Rem	50 d	Thu 10/09/20	Tue 10/11/20	0%
569	L3 Gallery and Staff Rooms Fitout	30 d	Wed 11/11/20	Fri 18/12/20	0%
570	L4 Roof Terrace and Atechamber Fitout	30 d	Sat 19/12/20	Sat 13/02/21	0%
571	*Heritage Building Finishes Complete*	*0 d*	*Sat 13/02/21*	*Sat 13/02/21*	*0%*
572	**LANDSCAPE AND CHURCH STREET WORKS**	**108 d**	**Mon 30/11/20**	**Fri 7/05/21**	**0%**
573	**CHURCH STREET FOOTPATH & ENTRY WORKS**	**64 d**	**Mon 15/02/21**	**Fri 7/05/21**	**0%**
574	FRP Eastern Driveway to Police Station	10 d	Thu 4/03/21	Mon 15/03/21	0%
575	FRP Education Building Driveway	10 d	Tue 16/03/21	Fri 26/03/21	0%
576	Paving Stage 1 HB	30 d	Mon 15/02/21	Sat 20/03/21	0%
577	Paving Stage 2 RB	30 d	Tue 23/03/21	Tue 4/05/21	0%
578	Paving Stage 3 EB	30 d	Fri 26/03/21	Fri 7/05/21	0%
579	**LANDSCAPING**	**80 d**	**Mon 30/11/20**	**Sat 27/03/21**	**0%**
580	Landscape and Planting to Southern Bounday	30 d	Mon 30/11/20	Thu 28/01/21	0%
581	Landscape and Planting to Western Boundary	10 d	Fri 29/01/21	Tue 9/02/21	0%
582	Landscape and Planting Northern	20 d	Wed 10/02/21	Thu 4/03/21	0%
583	Zen Gardens Planting and Stone Work	20 d	Fri 5/03/21	Sat 27/03/21	0%
584	**VERTICAL TRANSPORTATION**	**110 d**	**Mon 30/11/20**	**Mon 10/05/21**	**0%**
585	**LIFTS 1&2 RESIDENTIAL MRLS (Serving L1 to L4)**	**110 d**	**Mon 30/11/20**	**Mon 10/05/21**	**0%**
586	Lift Pit & Shaft works	30 d	Mon 30/11/20	Thu 28/01/21	0%
587	Complete MRL Installation	30 d	Fri 29/01/21	Thu 4/03/21	0%
588	Protect Lifts for Use by Built	40 d	Fri 5/03/21	Wed 28/04/21	0%
589	Full Testing & Commissioning for Handover	10 d	Thu 29/04/21	Mon 10/05/21	0%
590	**LIFT 3 EDUCATIONAL MRLS (Serving L1 to L4)**	**77 d**	**Wed 13/01/21**	**Tue 20/04/21**	**0%**
591	Lift Pit & Shaft works	16 d	Wed 13/01/21	Wed 3/02/21	0%
592	Complete MRL Installation	16 d	Thu 4/02/21	Mon 22/02/21	0%
593	Protect Lift for Use by Built	40 d	Tue 23/02/21	Wed 14/04/21	0%
594	Full Testing & Commissioning for Handover	5 d	Thu 15/04/21	Tue 20/04/21	0%
595	**QUALITY AND HANDOVER PLANNING**	**18 d**	**Wed 26/05/21**	**Fri 18/06/21**	**0%**
596	**ALL BUILDINGS**	**18 d**	**Wed 26/05/21**	**Fri 18/06/21**	**0%**
597	Certifier Pre Inspect Buildings	3 d	Wed 26/05/21	Fri 28/05/21	0%
598	Built Complete Final Defect List	3 d	Sat 29/05/21	Tue 1/06/21	0%
599	Defects Actions	3 d	Wed 2/06/21	Fri 4/06/21	0%
600	Consultants Complete Defect List	2 d	Sat 5/06/21	Mon 7/06/21	0%
601	Defects Actioned	3 d	Tue 8/06/21	Thu 10/06/21	0%
602	Fire Brigade Inspect & Life Safety Measures In Place	1 d	Fri 11/06/21	Fri 11/06/21	0%
603	Certifier Final Inspection	1 d	Wed 16/06/21	Wed 16/06/21	0%
604	Items Actioned	2 d	Thu 17/06/21	Fri 18/06/21	0%
605	*Occupation Certificate Issued*	*0 d*	*Fri 18/06/21*	*Fri 18/06/21*	*0%*
606	*DWP Issue Practical Completion*	*0 d*	*Fri 18/06/21*	*Fri 18/06/21*	*0%*
607	**DELAY ALLOWANCE**	**28 d**	**Sat 19/06/21**	**Wed 21/07/21**	**0%**
608	**OVERALL DELAY ALLOWANCE**	**28 d**	**Sat 19/06/21**	**Wed 21/07/21**	**0%**
609	Built Project Delay Allowance	28 d	Sat 19/06/21	Wed 21/07/21	0%
610	*Built Project Complete*	*0 d*	*Wed 21/07/21*	*Wed 21/07/21*	*0%*



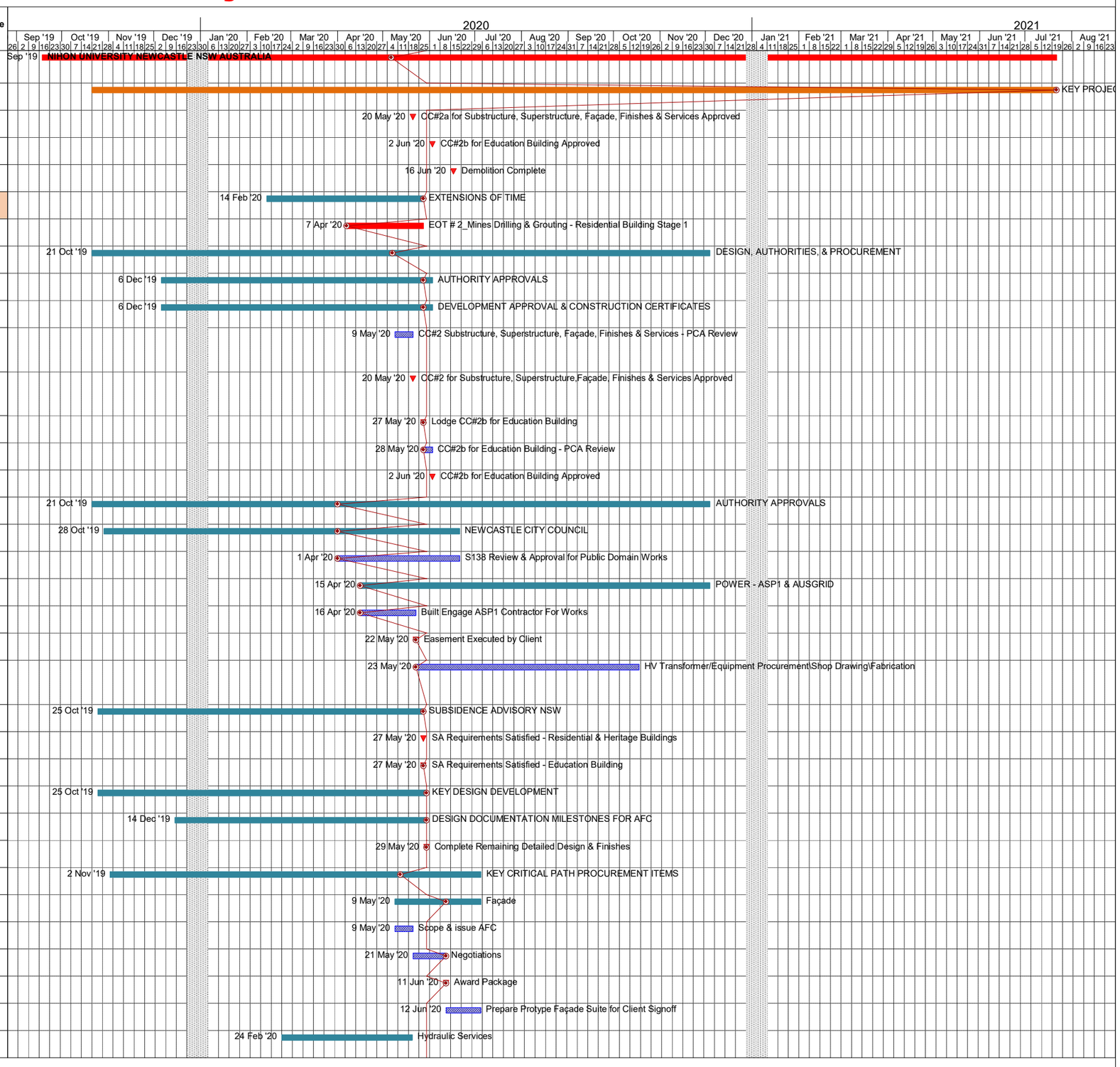
Critical Task | Non-critical | Milestone | Project Summary | Summary

Appendix E – Four Week Programme

Prepared By: RMc
Checked:
Revision : Rev 5 Contract

Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
0	**NIHON UNIVERSITY NEWCASTLE NSW AUSTRALIA**	**508 d**	**Wed 18/09/19**	**Wed 21/07/21**	**28%**
1	**KEY PROJECT MILESTONES**	**477 d**	**Mon 21/10/19**	**Wed 21/07/21**	**99%**
10	*CC#2a for Substructure, Superstructure, Façade, Finishes & Services Ap*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*100%*
11	*CC#2b for Education Building Approved*	*0 d*	*Tue 2/06/20*	*Tue 2/06/20*	*0%*
14	*Demolition Complete*	*0 d*	*Tue 16/06/20*	*Tue 16/06/20*	*0%*
23	**EXTENSIONS OF TIME**	**83 d**	**Fri 14/02/20**	**Wed 27/05/20**	**0%**
25	EOT # 2_Mines Drilling & Grouting - Residential Building Stage 1	38 d	Tue 7/04/20	Wed 27/05/20	0%
34	**DESIGN, AUTHORITIES, & PROCUREMENT**	**318 d**	**Mon 21/10/19**	**Thu 3/12/20**	**71%**
35	**AUTHORITY APPROVALS**	**131 d**	**Fri 6/12/19**	**Tue 2/06/20**	**95%**
36	**DEVELOPMENT APPROVAL & CONSTRUCTION CERTIF**	**131 d**	**Fri 6/12/19**	**Tue 2/06/20**	**95%**
45	CC#2 Substructure, Superstructure, Façade, Finishes & Services - PCA Review	10 d	Sat 9/05/20	Wed 20/05/20	100%
46	*CC#2 for Substructure, Superstructure,Façade, Finishes & Services Approved*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*100%*
47	Lodge CC#2b for Education Building	0 d	Wed 27/05/20	Wed 27/05/20	*0%*
48	CC#2b for Education Building - PCA Review	5 d	Thu 28/05/20	Tue 2/06/20	0%
49	*CC#2b for Education Building Approved*	*0 d*	*Tue 2/06/20*	*Tue 2/06/20*	*0%*
50	**AUTHORITY APPROVALS**	**318 d**	**Mon 21/10/19**	**Thu 3/12/20**	**53%**
51	**NEWCASTLE CITY COUNCIL**	**172 d**	**Mon 28/10/19**	**Sat 20/06/20**	**33%**
60	S138 Review & Approval for Public Domain Works	60 d	Wed 1/04/20	Sat 20/06/20	0%
61	**POWER - ASP1 & AUSGRID**	**190 d**	**Wed 15/04/20**	**Thu 3/12/20**	**0%**
63	Built Engage ASP1 Contractor For Works	30 d	Thu 16/04/20	Fri 22/05/20	0%
64	*Easement Executed by Client*	*0 d*	*Fri 22/05/20*	*Fri 22/05/20*	*0%*
65	HV Transformer/Equipment Procurement\Shop Drawing\Fabrication	120 d	Sat 23/05/20	Sat 17/10/20	0%
69	**SUBSIDENCE ADVISORY NSW**	**158 d**	**Fri 25/10/19**	**Wed 27/05/20**	**99%**
75	*SA Requirements Satisfied - Residential & Heritage Buildings*	*0 d*	*Wed 27/05/20*	*Wed 27/05/20*	*100%*
76	*SA Requirements Satisfied - Education Building*	*0 d*	*Wed 27/05/20*	*Wed 27/05/20*	*0%*
94	**KEY DESIGN DEVELOPMENT**	**160 d**	**Fri 25/10/19**	**Fri 29/05/20**	**99%**
109	**DESIGN DOCUMENTATION MILESTONES FOR AFC**	**120 d**	**Sat 14/12/19**	**Fri 29/05/20**	**0%**
119	*Complete Remaining Detailed Design & Finishes*	*0 d*	*Fri 29/05/20*	*Fri 29/05/20*	*0%*
128	**KEY CRITICAL PATH PROCUREMENT ITEMS**	**180 d**	**Sat 2/11/19**	**Sat 4/07/20**	**71%**
149	**Façade**	**45 d**	**Sat 9/05/20**	**Sat 4/07/20**	**56%**
150	Scope & issue AFC	10 d	Sat 9/05/20	Wed 20/05/20	100%
151	Negotiations	15 d	Thu 21/05/20	Thu 11/06/20	100%
152	*Award Package*	*0 d*	*Thu 11/06/20*	*Thu 11/06/20*	*100%*
153	Prepare Protype Façade Suite for Client Signoff	20 d	Fri 12/06/20	Sat 4/07/20	0%
154	**Hydraulic Services**	**68.5 d**	**Mon 24/02/20**	**Wed 20/05/20**	**100%**

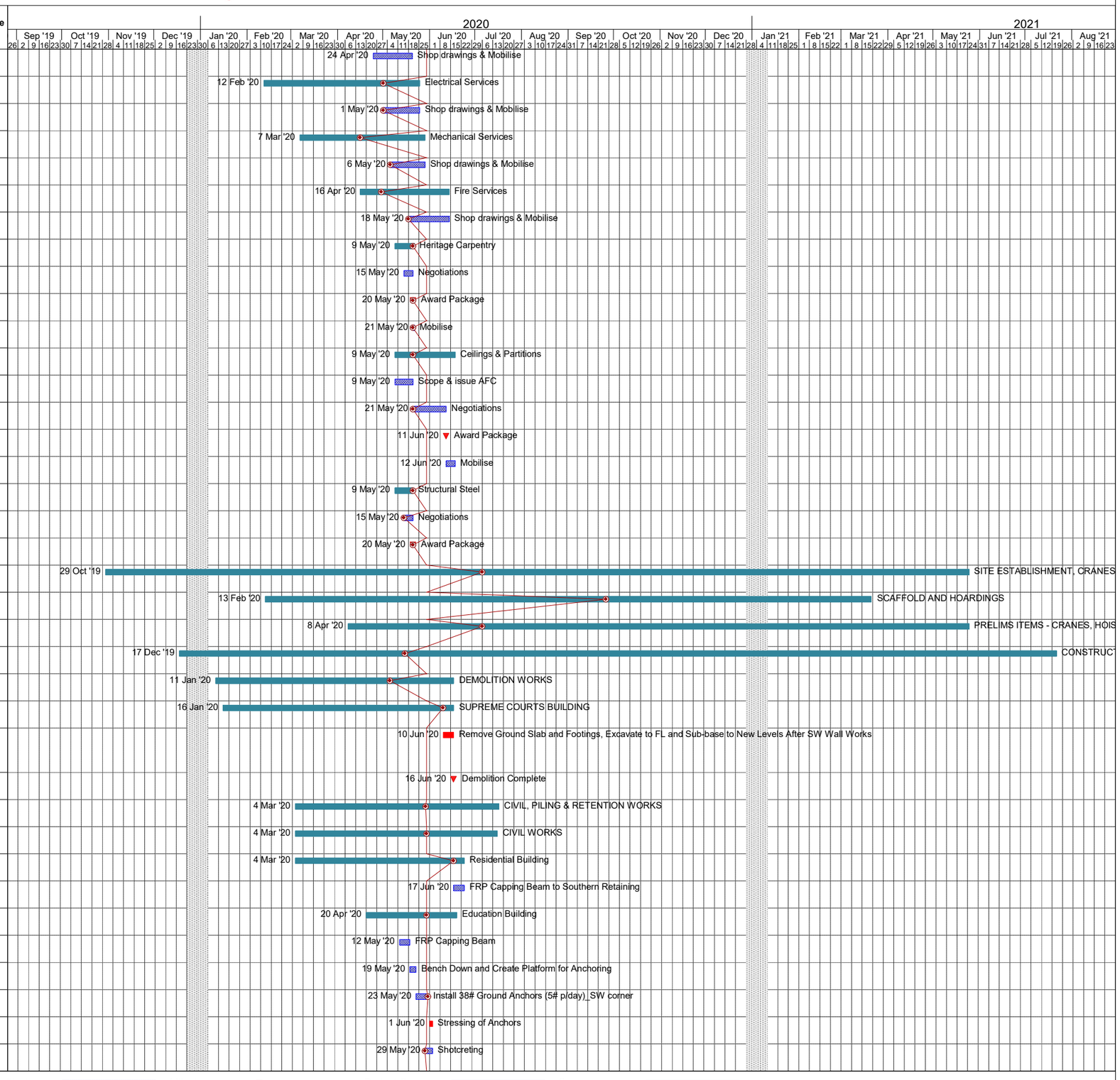


Critical Task | Non-critical | Milestone | Project Summary | Summary

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Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
158	Shop drawings & Mobilise	20 d	Fri 24/04/20	Wed 20/05/20	100%
159	**Electrical Services**	**82.25 d**	**Wed 12/02/20**	**Mon 25/05/20**	**72%**
163	Shop drawings & Mobilise	20 d	Fri 1/05/20	Mon 25/05/20	0%
164	**Mechanical Services**	**65 d**	**Sat 7/03/20**	**Thu 28/05/20**	**30%**
168	Shop drawings & Mobilise	20 d	Wed 6/05/20	Thu 28/05/20	0%
169	**Fire Services**	**45 d**	**Thu 16/04/20**	**Sat 13/06/20**	**22%**
173	Shop drawings & Mobilise	20 d	Mon 18/05/20	Sat 13/06/20	0%
178	**Heritage Carpentry**	**11 d**	**Sat 9/05/20**	**Thu 21/05/20**	**91%**
180	Negotiations	5 d	Fri 15/05/20	Wed 20/05/20	100%
181	*Award Package*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*0%*
182	Mobilise	1 d	Thu 21/05/20	Thu 21/05/20	0%
183	**Ceilings & Partitions**	**30 d**	**Sat 9/05/20**	**Wed 17/06/20**	**33%**
184	Scope & issue AFC	10 d	Sat 9/05/20	Wed 20/05/20	100%
185	Negotiations	15 d	Thu 21/05/20	Thu 11/06/20	0%
186	*Award Package*	*0 d*	*Thu 11/06/20*	*Thu 11/06/20*	*0%*
187	Mobilise	5 d	Fri 12/06/20	Wed 17/06/20	0%
188	**Structural Steel**	**10 d**	**Sat 9/05/20**	**Wed 20/05/20**	**0%**
190	Negotiations	5 d	Fri 15/05/20	Wed 20/05/20	0%
191	*Award Package*	*0 d*	*Wed 20/05/20*	*Wed 20/05/20*	*0%*
192	**SITE ESTABLISHMENT, CRANES, HOISTS ETC**	**428 d**	**Tue 29/10/19**	**Mon 24/05/21**	**20%**
204	**SCAFFOLD AND HOARDINGS**	**310 d**	**Thu 13/02/20**	**Sat 20/03/21**	**41%**
212	**PRELIMS ITEMS - CRANES, HOISTS ETC**	**311 d**	**Wed 8/04/20**	**Mon 24/05/21**	**2%**
224	**CONSTRUCTION WORKS**	**437 d**	**Tue 17/12/19**	**Wed 21/07/21**	**9%**
226	**DEMOLITION WORKS**	**122 d**	**Sat 11/01/20**	**Tue 16/06/20**	**95%**
236	**SUPREME COURTS BUILDING**	**118 d**	**Thu 16/01/20**	**Tue 16/06/20**	**94%**
244	Remove Ground Slab and Footings, Excavate to FL and Sub-base to New Levels After SW Wall Works	6 d	Wed 10/06/20	Tue 16/06/20	0%
245	*Demolition Complete*	*0 d*	*Tue 16/06/20*	*Tue 16/06/20*	*0%*
253	**CIVIL, PILING & RETENTION WORKS**	**106 d**	**Wed 4/03/20**	**Thu 16/07/20**	**38%**
254	**CIVIL WORKS**	**105 d**	**Wed 4/03/20**	**Wed 15/07/20**	**49%**
255	**Residential Building**	**86 d**	**Wed 4/03/20**	**Tue 23/06/20**	**83%**
257	FRP Capping Beam to Southern Retaining	6 d	Wed 17/06/20	Tue 23/06/20	0%
258	**Education Building**	**46 d**	**Mon 20/04/20**	**Thu 18/06/20**	**74%**
260	FRP Capping Beam	6 d	Tue 12/05/20	Mon 18/05/20	100%
261	Bench Down and Create Platform for Anchoring	4 d	Tue 19/05/20	Fri 22/05/20	100%
262	Install 38# Ground Anchors (5# p/day)_SW corner	7 d	Sat 23/05/20	Sat 30/05/20	100%
263	Stressing of Anchors	2 d	Mon 1/06/20	Tue 2/06/20	0%
264	Shotcreting	4 d	Fri 29/05/20	Tue 2/06/20	0%

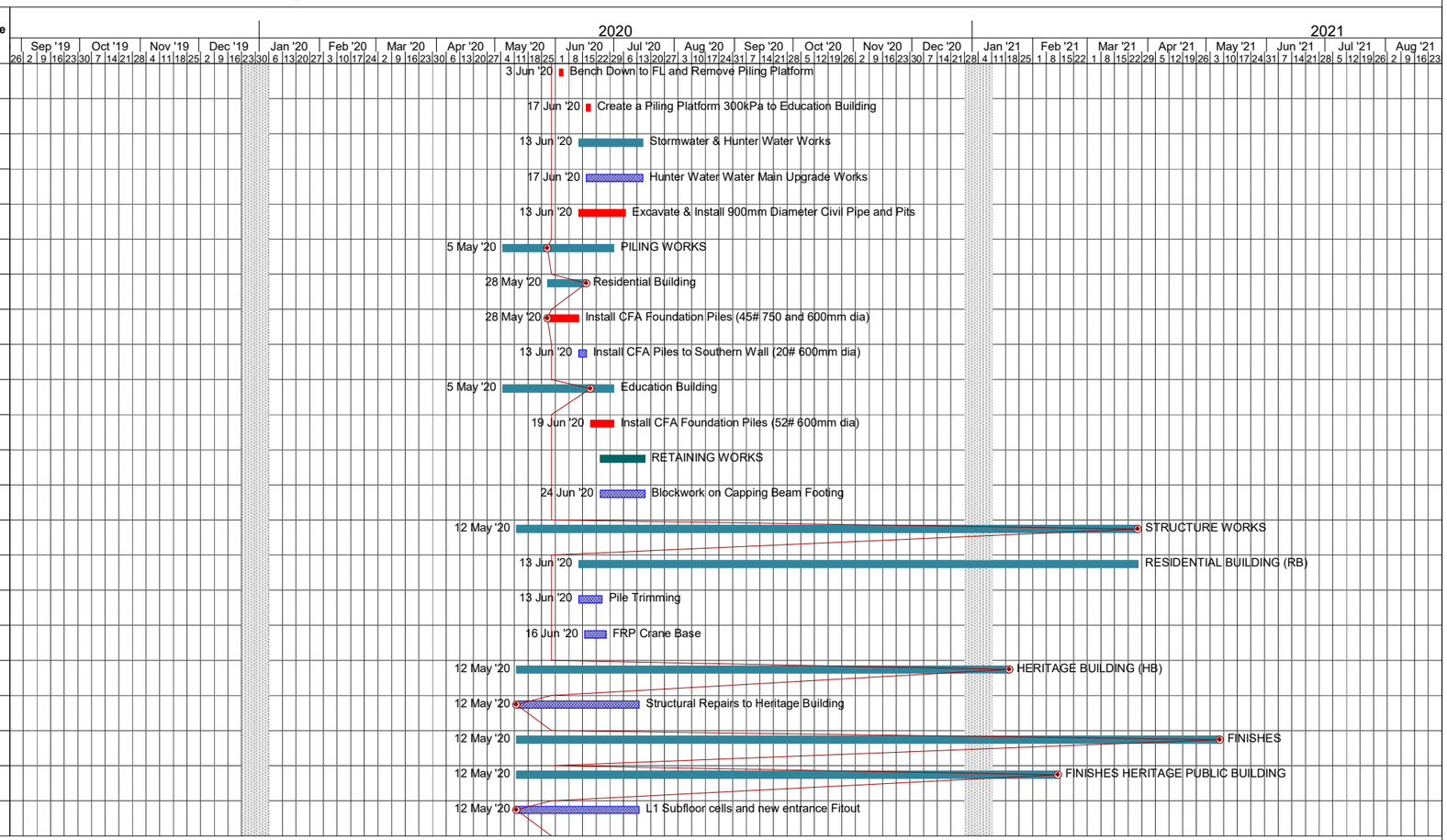


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Built NIHON UNIVERSITY
9 CHURCH STREET NEWCASTLE 2300
Contract Programme - EOT # 2

ID	Task Name	Dur	Start	Finish	% Complete
265	Bench Down to FL and Remove Piling Platform	2 d	Wed 3/06/20	Thu 4/06/20	0%
266	Create a Piling Platform 300kPa to Education Building	2 d	Wed 17/06/20	Thu 18/06/20	0%
267	**Stormwater & Hunter Water Works**	**28 d**	**Sat 13/06/20**	**Wed 15/07/20**	**0%**
268	Hunter Water Water Main Upgrade Works	25 d	Wed 17/06/20	Wed 15/07/20	0%
269	Excavate & Install 900mm Diameter Civil Pipe and Pits	20 d	Sat 13/06/20	Mon 6/07/20	0%
270	**PILING WORKS**	**45 d**	**Tue 5/05/20**	**Tue 30/06/20**	**21%**
271	**Residential Building**	**13 d**	**Thu 28/05/20**	**Tue 16/06/20**	**0%**
272	Install CFA Foundation Piles (45# 750 and 600mm dia)	10 d	Thu 28/05/20	Fri 12/06/20	0%
273	Install CFA Piles to Southern Wall (20# 600mm dia)	3 d	Sat 13/06/20	Tue 16/06/20	0%
274	**Education Building**	**45 d**	**Tue 5/05/20**	**Tue 30/06/20**	**38%**
276	Install CFA Foundation Piles (52# 600mm dia)	10 d	Fri 19/06/20	Tue 30/06/20	0%
277	**RETAINING WORKS**	**20 d**	**Wed 24/06/20**	**Thu 16/07/20**	**0%**
278	Blockwork on Capping Beam Footing	20 d	Wed 24/06/20	Thu 16/07/20	0%
279	**STRUCTURE WORKS**	**245 d**	**Tue 12/05/20**	**Fri 26/03/21**	**0%**
280	**RESIDENTIAL BUILDING (RB)**	**221 d**	**Sat 13/06/20**	**Fri 26/03/21**	**0%**
281	Pile Trimming	10 d	Sat 13/06/20	Wed 24/06/20	0%
284	FRP Crane Base	10 d	Tue 16/06/20	Fri 26/06/20	0%
398	**HERITAGE BUILDING (HB)**	**191 d**	**Tue 12/05/20**	**Tue 19/01/21**	**0%**
402	Structural Repairs to Heritage Building	50 d	Tue 12/05/20	Mon 13/07/20	0%
469	**FINISHES**	**274 d**	**Tue 12/05/20**	**Fri 7/05/21**	**0%**
565	**FINISHES HERITAGE PUBLIC BUILDING**	**210 d**	**Tue 12/05/20**	**Sat 13/02/21**	**0%**
566	L1 Subfloor cells and new entrance Fitout	50 d	Tue 12/05/20	Mon 13/07/20	0%



Critical Task | Non-critical | Milestone | Project Summary | Summary

Appendix F – Green Star Pathway Status

Green Star - Design & As Built Scorecard v 1.2

4 Star Pathway

Date:	Monday, 18 May 2020
Targeted Rating:	4 Star - Best Practice
PROJECT:	Nihon University

Points Available		4 Star Pathway	Design Achieved	As-Built Points
97		53.5	38.5	

CATEGORY / CREDIT	AIM OF THE CREDIT / SELECTION	CODE	CREDIT CRITERIA	Available	Target 4 Star	Actual	Support Documentation Received	Dated Provided	Status	Dated Approved
Management							Y/N			
Green Star Accredited Professional	To recognise the appointment and active involvement of a Green Star Accredited Professional in order to ensure that the rating tool is applied effectively and as intended.	1.0	Accredited Professional	1	1	1	YES	02.04.20	APPROVED	02.04.20
Commissioning and Tuning	To encourage and recognise commissioning, handover and tuning initiatives that ensure all building services operate to their full potential.	2.0	Environmental Performance Targets	-	Complies	0				
		2.1	Services and Maintainability Review	1	1	1	YES	21.04.20	APPROVED - Review meetings to be scheduled ASAP	23.04.2020
Building Information	To recognise the development and provision of building information that facilitates understanding of a building's systems, operation and maintenance requirements, and environmental targets to enable optimised performance.	4.1	Building Information	1	1	1	YES	21.04.20	APPROVED	24.04.20
Responsible Construction Practices	To reward projects that use best practice formal environmental management procedures during construction.	7.0	Environmental Management Plan	-	Complies	0	YES	02.04.20	APPROVED	02.04.20
		7.1	Formalised Environmental Management System	1	1	1	YES	02.04.20	APPROVED	02.04.20
		7.2	High Quality Staff Support	1	1	1	YES	06.05.20	APPROVED	08.05.20
Operational Waste	Prescriptive pathway	8B	Prescriptive Pathway - Facilities	1	1	1	YES	06.04.20	APPROVED	07.04.20
Indoor Environment Quality										
Indoor Air Quality	To recognise projects that provide high air quality to occupants.	9.3	Exhaust or Elimination of Pollutants	1	1	1	YES	06.04.20	APPROVED	07.04.20
Lighting Comfort	To encourage and recognise well-lit spaces that provide a high degree of comfort to users.	11.0	Minimum Lighting Comfort	-	complies	0	YES	03.04.20	APPROVED	07.04.20
		11.1	General Illuminance and Glare Reduction	1	1	1	YES	21.04.20	APPROVED	05.05.20
		11.3	Localised Lighting Control	1	1	1	YES	03.04.20	APPROVED	07.04.20
Visual Comfort	To recognise the delivery of well-lit spaces that provide high levels of visual comfort to building occupants.	12.0	Glare Reduction	-	complies	0	YES	21.04.20	APPROVED	08.05.20
		12.2	Views	1	1	1	YES	14.04.20	APPROVED	15.04.20
Indoor Pollutants	To recognise projects that safeguard occupant health through the reduction in internal air pollutant levels.	13.1	Paints, Adhesives, Sealants and Carpets	1	1	1	YES	21.04.20	Some items on finishes schedule do not meet Greenstar requiremets - they have been identified and we are working towards obtaining information or alternatives to ensure compliance - Porters Paint for sealer to be	24.04.20
		13.2	Engineered Wood Products	1	1				Issues with this credit - currently reviewing product verification data sheets	
Energy										
Greenhouse Gas Emissions	Modelled Performance Pathway	15E.0	Conditional Requirement: Reference Building Pathway	-	complies	0	YES	03.04.20	APPROVED	07.04.20
		15E.1	Comparison to a Reference Building Pathway	20	5.5	5.5	YES	03.04.20	APPROVED	07.04.20
Peak Electricity Demand Reduction	Performance Pathway	16B	Performance Pathway - Reference Building	2	2	2	YES	03.04.20	APPROVED	07.04.20
Transport										
Sustainable Transport	Performance Pathway	17B	Prescriptive Pathway - Facilities	7	7	7	YES	07.04.20	Technical query has been lodged with GBCA - waiting on response 8th May 2020	
Water										
Potable Water	Performance Pathway	18B	Potable Water - Prescriptive Pathway	12	6	6	YES	03.04.20	Further documentation provided - Updated FFE schedule provided. Wels Certification for some item. Washing Machine information - obtaining Wels Certificate	15.04.20
Materials										
Life Cycle Impacts	Prescriptive Pathway - Life Cycle Impacts	19B.1	Life Cycle Impacts- Concrete	3	2	2	YES	21.04.20	APPROVED	24.04.20
		19B.2	Life Cycle Impacts- Steel	2	1				Pending certificates from Northrop	
		19B.3	Life Cycle Impacts- Building Re-Use	2	1				Submitting 06.05.20	
		20.1	Structural and Reinforcing Steel	1	1	1	YES	05.05.20	APPROVED - Notes to be updated in specification to ensure 60% compliance	08.05.20
Responsible Building	To reward projects that include materials that are responsibly sourced or have a sustainable supply	20.3	Permanent Formwork, Pipes, Flooring, Blinds and Cables	1	1	1	YES	14.04.20	APPROVED	15.04.20

Green Star - Design & As Built Scorecard v 1.2

4 Star Pathway

Date:	Monday, 18 May 2020
Targeted Rating:	4 Star - Best Practice
PROJECT:	Nihon University

Points Available		4 Star Pathway	Design Achieved	As-Built Points
97		53.5	38.5	

CATEGORY / CREDIT	AIM OF THE CREDIT / SELECTION	CODE	CREDIT CRITERIA	Available	Target 4 Star	Actual	Support Documentation Received	Dated Provided	Status	Dated Approved
Materials	responsibly sourced or have a sustainable supply chain.	21.1	Product Transparency and Sustainability	3	2	2	YES	04.05.20	APPROVED	08.05.20
		22B	Percentage Benchmark	1	1	1	YES	21.04.20	APPROVED	08.05.20
Land Use & Ecology										
Ecological Value	To reward projects that improve the ecological value of their site.	23.0	Endangered, Threatened or Vulnerable Species	-	complies	0	YES	06.04.20	APPROVED	07.04.20
Sustainable Sites	To reward projects that choose to develop sites that have limited ecological value, re-use previously developed land and remediate	24.0	Conditional Requirement	-	Complies	0	YES	21.04.20	APPROVED	24.04.20
		24.1	Reuse of Land	1	1	1	YES	21.04.20	APPROVED	24.04.20
		24.2	Contamination and Hazardous Materials	1	1	1	YES	21.04.20	APPROVED	24.04.20
Emissions										
Stormwater	To reward projects that minimise peak stormwater flows and reduce pollutants entering public sewer infrastructure.	26.1	Reduced Peak Discharge	1	1	1	YES	06.05.20	APPROVED	08.05.20
		26.2	Reduced Pollution Targets	1	1				Cardno advised this won't be achievable	
Light Pollution	To reward projects that minimise light pollution.	27.0	Light Pollution to Neighbouring Bodies	-	Complies				Erco / Northrop - Issues design not meeting target	
		B	Light Pollution to Night Sky	1	1				Erco / Northrop - Issues design not meeting target	
Microbial Control	To recognise projects that implement systems to minimise the impacts associated with harmful microbes in building systems.	28.0	Legionella Impacts from Cooling Systems	1	1	1	YES	03.04.20	APPROVED	07.04.20
Innovation										
Financial Transparency (D)		Innovation	Providing anonymous design and construction cost data to the GBCA confidentially.	1	1	1	YES	21.04.2020	APPROVED	24.04.20
Sustainable Transport		Innovation	No new carparks on site	1	1	1	YES	07.04.20	APPROVED	23.04.20
Stormwater Pollution Targets (C)		Innovation	Exceeding the Stormwater targets	2	1				Cardno	
Culture, Identity and Heritage		Innovation	To encourage the use, interpretation and celebration of buildings with cultural heritage	1	1	1	YES	24.04.20	APPROVED	01.05.20
Beauty		Innovation	Requires narrative to be put together by Architect	1	1				Information provide Built to finalise submission	
Reconciliation Action Plan		Innovation	To encourage organisations to take formalised steps to provide opportunities for Aboriginal and Torres Strait Islander peoples.	1	1		Waiting on information about costs of RAP- Left a message again 06.05.20		Waiting on feedback of cost implications to persue. 12 month process. Require imput from external parties and working groups	
Total				10	6					

TOTALS	AVAILABLE	4 Star
CORE POINTS	97	48
CATEGORY PERCENTAGE SCORE		49.0
INNOVATION POINTS	10	6.0
TOTAL SCORE TARGETED		53.5

SUBMITTED	45.5
APPROVED	38.5
INFO REQUIRED	7.0
TO BE ASSESSED	0.0

Green star Credits with issues	5.0
Yet to be submitted	3.0

Note: The project is continuing with a future provision PV cells that could be included should there be issues with Green Star targets
Pathway amendment shown in RED
Greenstar credits with issues - bring total down to 48.5 points - need to satisfy 48 points as per submitted to Planning
45 points required for 4 star

Appendix G – Statused SSD-9787 Conditions Matrix

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
	PART A - ADMINISTRATIVE CONDITIONS										
	Obligation to Minimise Harm to the Environment										
A1	In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasbible 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.	Note	Note		21-Jan-20						Noted
	Terms of Consent										
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 Planning Secretary; (c) generally in accordance with the EIS and Response to Submissions; (d) in accordance with the approved plans in the table below:	Note	Note		23-Jan-20						Noted
A3	Consistent with the requirements in this consent, the Planning 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 Planning Secretary; (b) any reports, reviews or audits commissioned by the Planning Secretary regarding compliance with this approval; and (c) the implementation of any actions or measures contained in any such document referred to in (a) above.	Note	Note								Noted
A4	The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the documents listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	Note	Note								Noted
	Limits of Consent										
A5	This consent lapses five years after the date of consent unless work is physically commenced.	Note	Note		21-Jan-20						Noted
	Prescribed Conditions										
A6	The Applicant must comply with all relevant prescribed conditions of development consent under Part 6, Division 8A of the EP&A Regulation.	Note	Note		21-Jan-20						Noted
	Planning Secretary as Moderator										
A7	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 Planning Secretary for resolution. The Planning Secretary's resolution of the matter must be binding on the parties.	Note	Note								Noted
	Evidence of Consultation										
A8	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 information or approval; and (b) provide details of the consultation undertaken including: (i) the outcome of that consultation, matters resolved and unresolved; and (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	Note	Note		21-Jan-20			✓			Noted - will form part of relevant CC submissions as or when required
	Staging										
A9	The project may be constructed and operated in stages. Where staged construction or operation is proposed, a Staging Report (for either or both construction and operation as the case may be) must be prepared and submitted for the information of the Planning Secretary. The Staging Report must be submitted to the Planning Secretary no later than one month before the commencement of construction of the first of the proposed stages of construction (or if only staged operation is proposed, one month before the commencement of operation of the first of the proposed stages of operation).	Note	Note		23-Jan-20			✓			Submitted to Planning Secretary with acknowledgment of receipt from DoP 18/02/20 noting no further comment at this time
A10	A Staging Report prepared in accordance with condition A9 must: (a) if staged construction is proposed, set out how the construction of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when construction of each stage will commence and finish; (b) if staged operation is proposed, set out how the operation of the whole of the project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish (if relevant); (c) specify how compliance with conditions will be achieved across and between each of the stages of the project; and (d) set out mechanisms for managing any cumulative impacts arising from the proposed staging.										Submitted to Planning Secretary - awaiting endorsement
	[i] The Built construction staging triggers this condition - Planning Secretary to be advised		**Note**	**dwp**	31-Jan-20						
	[ii] Nihon is not planning a staged operation - no action required - no staging documentation to be forwarded to the Planning Sectretary	**Note**		**dwp**	31-Jan-20						
A11	Where staging is proposed, the project must be staged in accordance with the Staging Report, as submitted to the Planning Secretary.	Note	Note								Noted
A12	Where staging is proposed, the terms of this approval that apply or are relevant to the works or activities to be carried out in a specific stage must be complied with at the relevant time for that stage.	Note	Note								Noted
	Staging, Combining and Updating Strategies, Plans or Programs										
A13	With the approval of the Planning Secretary, the Applicant may: (a) prepare and submit any strategy, plan (including management plan, architectural or design plan) or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan (including management plan, architectural or design plan) or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan (including management plan, architectural or design plan) or program); (b) combine any strategy, plan (including management plan, architectural or design plan), or program required by this consent (if a clear relationship is demonstrated between the strategies, plans (including management plan, architectural or design plan) or programs that are proposed to be combined); and (c) update any strategy, plan (including management plan, architectural or design plan), or program required by this consent (to ensure the strategies, plans (including management plan, architectural or design plan), or programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).	Note	Note					✓			Submitted to Planning Secretary - awaiting endorsement
A14	If the Planning Secretary agrees, a strategy, plan (including management plan, architectural or design plan), or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.	Note	Note								Noted
A15	If approved by the Planning Secretary, updated strategies, plans (including management plan, architectural or design plan), or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan, program or drawing.	Note	Note								Noted
	Structural Adequacy										

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
A16	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 and any additional requirements of the Subsidence Advisory NSW where the building or structure is located on land within a declared Mine Subsidence District. Notes: • Part 8 of the EP&A Regulation sets out the requirements for the certification of the development. • Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain the Chief Executive of Subsidence Advisory NSW's approval before carrying out certain development in a Mine Subsidence District.							✓			Refer Cardno and Northrop certifications and updated drawings of 15/04/20 and 16/04/20
	[i] Structural adequacy of new buildings engineering certification required to the Certifier		**Built**	**Northrop**							
	[ii] Structural adequacy of existing courthouse - certification required for earthquake strengthening + termite repairs - passed to the Certifier	**Nihon**		**Cardno | dwp**							
	External Walls and Cladding										
A17	The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA.								✓		Refer dwp design statement 01 dated 16/04/20
	[i] Design certification of external walls including insulation		**Built**	**dwp | Northrop**							
	Site Contamination										
A18	Following the completion of demolition works and prior to the commencement of all other construction, additional site investigations of previously untested or inaccessible areas of the site must be undertaken in accordance with: (a) interim advice dated12 November 2019 and prepared by NSW EPA Accredited Site Auditor Ian Gregson, Principal Environmental Consultant, GHD; (b) the recommendations provided in the Phase 1 Environmental Site Assessment – Technical Note dated 29 April 2019 and prepared by Cardno; (c) NSW EPA Sampling Design Guidelines; (d) Guidelines for the NSW Site Auditor Scheme (3rd edition) 2017 https://www.epa.nsw.gov.au/publications/contaminatedland/17p0269-guidelines-for- thensw-site-auditor-scheme-third-edition; (e) Guidelines for Consultants Reporting on Contaminated Sites, 2011 www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf; (f) The National Environment Protection (assessment of contamination) Measures 2013 as amended; and (g) testing must include assessment of both the soil and groundwater profile.							✓			Noted - Douglas have completed testing for both the new residential building and the new education building (March '20) and included within the amended and final RAP - issued to the PCA 31/03/20
	[i] Additional site testing and reporting to be undertaken once demolition completed		**Built**	**Douglas Partners**							
	[ii] Reviewing and advice on test methods	**Nihon**		**GHD | dwp**							
A19	The additional site investigations report must be reviewed by a NSW EPA Accredited Site Auditor and the Conceptual Remediation Action Plan dated 28 May 2019, prepared by Cardno must be updated to reflect the findings of the additional site investigations required by condition A18. The updated remediation action plan must be approved by a NSW EPA Accredited Site Auditor and submitted to the Planning Secretary prior to the commencement of remediation works.								✓		Approved RAP & DSI submitted to DPIE by dwp on 28/04/2020
	[i] Remedial Action Plan required to be updated and to be submitted to site auditor		**Built**	**Douglas Partners**							
	[ii] Updated report to be reviewed and approved and forwarded to EPA + planning secretary	**Nihon**		**GHD | dwp**							
A20	Remediation works approved as part of this development consent must be carried out in accordance with the remediation action plan approved by a NSW EPA Accredited Site Auditor pursuant to condition A19.										Noted
	[i] Remedial works to be carried out in accordance with the approved RAP - certification required		**Built**	**Douglas Partners**							
	[ii] Review of completed remedial works documentation	**Nihon**		**GHD | dwp**							
	Applicability of Guidelines										
A21	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	Note								Noted
A22	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	Note								Noted
	Monitoring and Environmental Audits										
A23	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, Site audit report and independent auditing. 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.	Note	Note		21-Jan-20						Noted
	Access to Information										
A24	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 Planning Secretary, the Applicant must: (a) make the following information and documents (as they are 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 audit of the development and the Applicant's response to the recommendations in any audit report; (x) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary.				23-Jan-20			✓			Closed out
	[i] Information required from contractor to be supplied throughout the construction phase - information website to be displayed on site		**Built**								
	[ii] Web site to be established and maintained with current documents - updated with construction inputs - before the commencement of construction	**Nihon**		**Azusa | dwp**							

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
	Compliance										
A25	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.	Note	Note		21-Jan-20						Noted - to be provided to all consultants and subcontractors
	Incident Notification, Reporting and Response										
A26	The Planning Secretary must be notified in writing to compliance@planning.nsw.gov.au immediately 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.	Note	Note								
A27	Subsequent notification must be given and reports submitted in accordance with the requirements set out in **Appendix 2.**	Note	Note								Noted
	Non-Compliance Notification										
A28	The Planning Secretary 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 Planning Secretary in writing to compliance@planning.nsw.gov.au within seven days after they identify any non-compliance.	Note	Note								Noted - dwp \ Built to communicate and co-ordinate any non compliances
A29	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.	Note	Note								Noted
A30	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	Note	Note								
	Revision Strategies, Plans and Programs										
A31	Within three months of: (a) the submission of a compliance report under condition C22; (b) the submission of an incident report under condition A27; (c) the submission of an Independent Audit under condition C32; (d) the approval of any modification of the conditions of this consent; or (e) the issue of a direction of the Planning Secretary under condition A2 which requires a review, the strategies, plans and programs required under this consent must be reviewed, and the Planning Secretary and the Certifier must be notified in writing that a review is being carried out. If necessary to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans, programs or drawings required under this consent must be revised, to the satisfaction of the Planning Secretary and/or Certifier (where relevant). Where revisions are required, the revised document must be submitted to the Planning Secretary and/or Certifier for approval and/or information (where relevant) within six weeks of the review. 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.										Noted
	[i] Review and report strategy to be put in place		**Built**								
	[ii] Review and report strategy to be put in place	**Nihon**		**Azusa | dwp**							
	PART B - PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE										
	Certified Drawings										
B1	Prior to the issue of the relevant Construction Certificate, the Applicant must submit to the satisfaction of the Certifier structural drawings prepared and signed by a suitably qualified practising Structural Engineer that demonstrates compliance with this development consent.							✓	✓		Closed out for CC#1 & CC#2
	[i] Structural certification of compliance of new buildings - issued to the Certifier		**Built**	**Northrop**							
	[ii] Structural certification of compliance of existing courthouse building - issued to the Certifier	**Nihon**		**Cardno**							
	Development Contributions										
B2	Prior to the issue of any Construction Certificate (not including demolition or site remediation works), a Section 7.12 levy totalling **$288,992**, is to be paid to Council in accordance with Section 7.12 of the EP&A Act and City of Newcastle Section 7.12 Newcastle Local Infrastructure Contributions Plan 2019. Prior to payment Council can provide the value of the indexed levy.							✓			Required for CC#1
	[i] Developer contribution to be paid prior to commencement of construction	**Nihon**		**Azusa | dwp**							
	External Walls and Cladding										
B3	Prior to the issue of any Construction Certificate, the Applicant must provide the Certifier with documented evidence that the products and systems proposed for use or used in the construction of external walls, including finishes and claddings such as synthetic or aluminium composite panels, comply with the requirements of the BCA. The Applicant must provide a copy of the documentation given to the Certifier to the Planning Secretary within seven days after the Certifier accepts it.								✓		Refer dwp design statement 01 dated 16/04/20
	[i] Documented evidence to the Certifier and a copy to the Planning Secretary required	**Nihon**		**dwp | Azusa**							
	Protection of Public Infrastructure										
B4	Prior to the issue of the relevant Construction Certificate, the Applicant must: (a) consult with the relevant owner and provider of services that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure; (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and (c) submit a copy of the dilapidation report to the Planning Secretary, Certifier and Council.				23-Jan-20			✓	✓	✓	Closed-out
	[i] Communications strategies and dilapidation survey to be undertaken - copy of dilapidation report to Certifier + Council		**Built**		**21-Jan-20**						
	[ii] Copy of dilapidation report forwarded to Planning Secretary	**Nihon**		**dwp**	**21-Jan-20**						
	Pre-Construction Dilapidation Report										
B5	Prior to the issue of the relevant Construction Certificate, the Applicant must submit a pre- commencement dilapidation report to Council, NSW Heritage Division and the Certifier. The report must provide an accurate record of the existing condition of adjoining private properties, heritage items and Council assets that are likely to be impacted by the proposed works.				23-Jan-20			✓	✓	✓	Closed out
	[i] Dilapidation survey to be undertaken - copy of dilapidation report to Certifier + Council		**Built**		**21-Jan-20**						
	[ii] Copy of dilapidation report forwarded to Planning Secretary	**Nihon**		**dwp**	**21-Jan-20**						
	Ecologically Sustainable Development										

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
B6	Prior to the issue of any Construction Certificate, unless otherwise agreed by the Planning Secretary, the Applicant must demonstrate that ESD is being achieved by either: (a) registering for a minimum 4 star Green Star rating with the Green Building Council Australia and submit evidence of registration to the Certifier; or (b) seeking approval from the Planning Secretary for an alternative certification process.				23-Jan-20			✓	✓		Planning Secretary endorsement received 10/02/20. PCA requires certification from designers that the pathway has been included in their design and achieved.
	[i] Management of the green star process - assistance with alternative certification process		**Built**	**dwp|Northrop**							
	[ii] Resolution of alternative certification process - notification to Planning Secretary for approval	**Nihon**		**Azusa | dwp**	**17-Jan-20**						
	Operational Waste Storage and Processing										
B7	Prior to the issue of the relevant Construction Certificate, the Applicant must obtain agreement from Council for the design of the operational waste storage area (where waste removal will be undertaken by Council). Where waste removal will be undertaken by a third party, the design of the operational waste storage area must be in accordance with Council's standards. Evidence of the design and Council endorsement (where relevant) must be provided to the Certifier.								✓		Closed out by dwp Aconex of 6/04/20 ref: dwp AU-GCOR-000296 and dwp design statement 01 dated 16/04/20
	[i] DA approved stormwater drawings to be fowarded to Certifier		**Built**	**dwp|Northrop**							
	[ii] Evidence of design and Council endorsement of operational waste storage and processing to be submitted to Certifier	**Nihon**		**Azusa | dwp**							
	Rainwater Harvesting										
B8	Prior to the issue of the relevant Construction Certificate, the Applicant must ensure that a rainwater reuse/harvesting system for the development is developed for the site. A rainwater re- use plan must be prepared and certified by an experienced hydraulic engineer.								✓		Will form part of CC#2 documentation
	[i] Rainwater reuse has been designed installation to be finalised + provided to the Certifier		**Built**	**Cardno | Northrop**							
	Operational Car Parking and Service Vehicle Layout										
B9	Prior to the issue of the relevant Construction Certificate, compliance with the following requirements must be submitted to the satisfaction of the Certifier: (a) all vehicles must enter and leave the Site in a forward direction; (b) a minimum of 20 on-site car parking spaces for use during operation of the development and designed in accordance with the latest versions of AS 2890.1 and AS 2890.6; (c) the swept path of the longest construction vehicle entering and exiting the Site in association with the new work, as well as manoeuvrability through the Site, must be in accordance with the latest version of AS 2890.2; (d) the safety of vehicles and pedestrians accessing adjoining properties, where shared vehicle and pedestrian access occurs, is to be addressed; and (e) traffic management devices in the form of 'Stop' and 'Give Way to Pedestrian' signs and line marking must be installed at the entry of proposed driveways within the site and constructed in accordance with AS 2890.1:2004: Parking facilities 0 Off-street car parking.								✓		Refer dwp design statement 01 dated 16/04/20
	[i] Final car parking and service layouts to be design certified + provided to the Certifier		**Built**	**dwp | Northrop**							
	Bicycle Parking and End of Trip Facilities										
B10	Prior to the issue of the relevant Construction Certificate, compliance with the following requirements for secure bicycle parking and end-of-trip facilities must be submitted to the satisfaction of the Certifier: (a) the provision of a minimum 22 bicycle parking spaces; (b) the layout, design and security of bicycle facilities must comply with the minimum requirements of the latest version of AS 2890.3:2015 Parking facilities - Bicycle parking, and be located in easy to access, well-lit areas that incorporate passive surveillance; (c) the provision of end-of-trip facilities for staff; (d) appropriate pedestrian and cyclist advisory signs are to be provided; and (e) all works/regulatory signposting associated with the proposed developments shall be at no cost to the relevant roads authority								✓		Refer dwp design statement 01 dated 16/04/20
	[i] Final bicycle parking and service facilities to be design certified + provided to the Certifier		**Built**	**Cardno | Northrop**							
	PART C - PRIOR TO COMMENCMENT OF CONSTRUCTION										
	Notice of Commencement										
C1	The Applicant must notify the Planning Secretary in writing of the dates of commencement of physical work and operation at least 48 hours before those dates.	Note	Note		22-Jan-20			✓	✓	✓	To be advised prior to commencement of each stage
	[i] Notification of commencement required to the Planning Secretary		**Built**	**dwp**	**22-Jan-20**						
C2	If the construction or operation of the development is to be staged, the Planning Secretary 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.	Note	Note					✓	✓	✓	Noted - to be provided for each CC
	[i] Notification of commencement of each construction stage required to the Planning Secretary		**Built**	**dwp**							
	Construction Certificate										
C3	Work must not commence until a Construction Certificate in respect of the work has been issued.							✓	✓	✓	Noted - staged CC's to meet programme
	[i] Construction certification process to be managed		**Built**	**dwp**							
	Outdoor Lighting										
C4	Prior to commencement of lighting installation, evidence must be submitted to the satisfaction of the Certifier that all outdoor lighting within the site has been designed to comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-2019 Control of the obtrusive effects of outdoor lighting.								✓		dwp to either provide the necessary certification that the ASP3 design complies with the applicable Australian Standards or confirm with the PCA that it will form part of CC#3 submission rather than CC#2
	[i] Finalise in outdoor lighting design process and submit to the Certifier		**Built**	**dwp|Northrop**							
	Demolition										
C5	Prior to the commencement of construction, demolition work plans required by AS 2601-2001 The demolition of structures (Standards Australia, 2001) must be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard. The work plans and the statement of compliance must be submitted to the Certifier and Planning Secretary.				21-Jan-20			✓			Closed out
	[i] Demolition work plans and statement submitted to the certifier		**Built**	**Northrop**	**21-Jan-20**						
	[ii] Copy of works plans and statement forwarded to Planning Secretary	**Nihon**		**dwp**	**21-Jan-20**						
C6	Prior to the commencement of internal demolition works within the State heritage listed former Newcastle Courthouse, evidence must be submitted to the satisfaction of the Certifier confirming works planned are required to make the existing building compliant with the fire and Life Safety Upgrade Strategy, prepared by Design Confidence, dated 12 June 2019, and that impacts to areas of high significant fabric have been limited.								✓		Revised and updated FER completed by Design Confidence & issued to the PCA
	[i] Fire and life safety strategy to be confirmed through fire engineering and forwarded to the Certifier		**Built**	**dwp|Northrop**							
	Environment Management Plan Requirements										

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
C7	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include: (a) detailed baseline data; (b) details of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria; (d) a program to monitor and report on the: (i) impacts and environmental performance of the development; (ii) effectiveness of the management measures set out pursuant to paragraph (c) above; (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and (h) a protocol for periodic review / update of the plan and any updates in response to incidents or matters of non-compliance. Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans				23-Jan-20			✓			Closed out
	[i] Plan requirements incorporated in construction works		Built								
	[ii] Assessment of plan requirements following on from occupation	**Nihon**		**Azusa | dwp**							
	Construction Environmental Management Plan										
C8	Prior to the commencement of construction, the Applicant must submit a Construction Environmental Management Plan (CEMP) to the Certifier and provide a copy to the Planning Secretary. The CEMP must include, but not be limited to, the following: (a) Details of: (i) hours of work; (ii) 24-hour contact details of site manager; (iii) management of dust and odour to protect the amenity of the neighbourhood; (iv) stormwater control and discharge; (v) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site; (vi) groundwater management plan including measures to prevent groundwater contamination; (vii) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting; (viii) community consultation and complaints handling; (b) Construction Traffic and Pedestrian Management Sub-Plan (see condition C10); (c) Construction Noise and Vibration Management Sub-Plan (see condition C11); (d) Construction Waste Management Sub-Plan (see condition C11(g)); (e) an unexpected finds protocol for contamination and associated communications procedure; (f) an unexpected finds protocol for non-Aboriginal heritage and associated communications procedure; (g) 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				23-Jan-20			✓			Closed out
	[i] CEMP developed by contractor + submission to the Certifier		**Built**		**22-Jan-20**						
	[ii] Copy of Camp forwarded to Planning Secretary	**Nihon**		**dwp**	**22-Jan-20**						
C9	The Applicant must not commence construction of the development until the CEMP is submitted to the Certifier and a copy submitted to the Planning Secretary.	Note	Note		23-Jan-20			✓			Closed out
C10	The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must address, but not be limited to, the following: (a) be prepared by a suitably qualified and experienced person(s); (b) be prepared in consultation with Council; (c) detail the measures that are to be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services; (d) detail heavy vehicle routes, access and parking arrangements; (e) include a Driver Code of Conduct to: (i) minimise the impacts of earthworks and construction on the local and regional road network; (ii) minimise conflicts with other road users; (iii) minimise road traffic noise; and (iv) ensure truck drivers use specified routes; (f) include a program to monitor the effectiveness of these measures; and (g) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.				23-Jan-20			✓			Closed out - CoN confirmation of consultation provided 12/02/20
	[i] CTPMSP developed by contractor + submission to Certifier		**Built**								
	[ii] Submission to the Planning Secretary required	**Nihon**		**dwp**							
C11	The Construction Noise and Vibration Management Sub-Plan must address, but not be limited to, the following: (a) be prepared by a suitably qualified and experienced noise expert; (b) describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009); (c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers; (d) include strategies that have been developed with the community for managing high noise generating works; (e) describe the community consultation undertaken to develop the strategies in condition C11(d); (f) include a complaints management system that would be implemented for the duration of the construction; and (g) include a program to monitor and report on the impacts and environmental performance of the development and the effectiveness of the management measures in accordance with condition C7(d). The program should be developed in accordance with the report titled Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting, and included, but not limited: (i) alert triggers where project trigger noise levels are exceeded; and (ii) procedures for respite periods when sensitive receivers become 'highly noise affected' (i.e. noise levels exceed 75 dB(A).				23-Jan-20			✓			Closed out
	[i] CNVMS-P developed by contractor + submission to PCA		Built	EMM	22-Jan-20						

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		Owner	Contractor								
C12	The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the following: (a) detail the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations; and (b) removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, 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.				23-Jan-20			✓			Closed out
	[i] CWPMSP developed by contractor + submission to PCA		**Built**								
	Aboriginal Cultural Heritage Management Plan										
C13	Prior to the commencement of construction (excluding demolition works), an Aboriginal Cultural Heritage Management Plan (ACHMP) must be prepared and address, but not be limited to, the following: (a) be prepared by a suitably qualified and experienced expert in consultation with the Registered Aboriginal Parties; (b) be endorsed by the Planning Secretary prior to construction (excluding demolition works) of any part of the development; (c) describe the measures to protect any Aboriginal cultural deposits or relics uncovered during sub surface archaeological testing in accordance with the relevant legislation.							✓			Closed, site works closed out and report issued to PCA. AI # 11 provides confirmation of acceptance from DoP rec'd 16/04/20
	[i] ACHMSP developed by contractor + submission to PCA		**Built**	**AMAC**							
	[ii] Submission to and endorsement by the Planning Secretary required	**Nihon**		**dwp**							
	Construction Worker Transportation Strategy										
C14	Prior to the commencement of construction, the Applicant must submit a Construction Worker Transportation Strategy to the satisfaction of the Certifier. The Strategy must detail the provision of sufficient parking facilities or other travel arrangements for construction workers in order to minimise demand for parking in nearby public and residential streets or public parking facilities.				23-Jan-20			✓			Closed out
	[i] Strategy developed by contractor + submission to the Certifier		**Built**		**22-Jan-20**						
	[ii] Submission to the Planning Secretary required	**Nihon**		**dwp**	**22-Jan-20**						
	Stormwater Management System										
C15	Prior to the commencement of construction, the Applicant must design an operational stormwater management system for the development and submit it to the satisfaction of the Certifier. The system must: (a) be designed by a suitably qualified and experienced person(s); (b) be design in consultation with and to the satisfaction of Council; (c) be generally in accordance with the conceptual design in the EIS as amended by the RtS; (d) be in accordance with applicable Australian Standards; (e) ensure that the system capacity has been designed in accordance with Australian Rainfall and Runoff (Engineers Australia, 2019) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines; (f) divert existing clean surface water around operational areas of the site; (g) direct all sediment laden water in overland flow away from the leachate management system; (h) prevent cross-contamination of clean and sediment or leachate laden water; (i) include details of all on-site retention/detention and water quality treatment systems are to be individually signposted in accordance with Council's Stormwater and Water Efficiency for Development Technical Manual.							✓			Closed in CC#1 submission
	[i] Stormwater management system developed + submission to the Certifier		**Built**	**Cardno | Northrop**							
	Operational Noise – Design of Mechanical Plant and Equipment										
C16	Prior to installation of mechanical plant and equipment, the Applicant must incorporate the noise mitigation recommendations in the Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting, into the detailed design drawings. The Certifier must verify that all noise mitigation measures have been incorporated into the design to ensure the development will not exceed the recommended operational noise levels identified in the Noise and Vibration Assessment – Operational and Construction report dated May 2019 and prepared by EMM Consulting.								✓		In progress - to be incorporated in Northrop mechanical CC#2 design documentation
	[i] Mechanical services design developed for compliance + submission to Certifier		**Built**	**Northrop**							
	[ii] The Certifier to verify the submitted design	**Nihon**		**Dix Gardner**							
	Archaeological Salvage - Historic Archaeology										
C17	Following the completion of demolition works and prior to the commencement of construction works, all affected historical archaeological deposits are to be subject to professional archaeological excavation and recording. An Archaeological Research Design and Excavation methodology must be prepared to guide the archaeological program. This must be prepared in accordance with Heritage Council of NSW Guidelines and in consultation with Heritage NSW, Department of Premier and Cabinet.							✓			Complete. Field work for Bldg A complete, Bldg B and C to follow. AI # 11 provides formal confirmation of approval from DoP dated 16/04/20
	[i] Methodology developed for compliance - consultation required with Heritage NSW + Premiers Department		**Built**	**AMAC**							
C18	The Archaeological program must be directed by a suitably qualified and experienced Archaeologist (Excavation Director). The nominated Excavation Director must be able to demonstrate their ability to undertake this work through a response to the Heritage Council's Excavation Director Criteria (July 2011) for salvage excavation for a site of local heritage significance.		-					✓			Closed - issued to PCA via Aconex 14/02/20. AI # 11 provides formal confirmation of approval from DoP dated 16/03/20 and 15/04/20.
	[i] AMAC credentials identified for compliance		**Built**	**AMAC**							
	Landscaping										
C19	Prior to the commencement of construction, the Applicant must prepare a revised Landscape Plan that provides a streetscape treatment that does not impede on the understanding of the former Newcastle Courthouse and its relationship to its environment and setting, and submit a copy to the Planning Secretary. The plan must (a) be prepared by a qualified heritage landscape consultant and submitted to the NSW Heritage Council, or its delegate, for endorsement; (b) provide an analysis of the existing site frontage hardstand, fences and gates, colours and finishes and landscape elements within the precinct; (c) demonstrate the retention of the existing heritage cast iron fence along the site frontage, including the iron palisade fence, sandstone plinth and sandstone piers, unless removal of sections is demonstrated to be essential for the functional requirements of the proposal (e.g. clearance required to establish the approved additional driveway crossover); (d) provide for the planting of eight trees that are sympathetic to the heritage values of the item and ensure no planting grow higher than 1.5 m in directly in front of the former Newcastle Courthouse; (e) detail the location, species, maturity and height at maturity of plants to be planted on-site; (f) include species (trees, shrubs and groundcovers) indigenous to the local area; (g) include the planting of trees with a pot container of 100 litres or greater; (h) include the provision of street tree planting. Species and spacing of trees are to be sympathetic to the heritage values of the item and are to be determined in consultation with Council.								✓		dwp confirmed condition met and closed out via Aconex of 27/04/20 (NB PCA had previously accepted this as part of the S138 approval and CC#3 submission rather than CC#2).
	[i] Landscape requirements to be worked through for resolution with Council + Heritage NSW	**Nihon**		**dwp | Moir**							
	Public Domain Works										

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
C20	Prior to the commencement of any footpath or public domain works, the Applicant must engage a suitably qualified practicing engineer to design the following public domain works within the Church Street frontage of the site at no cost to Council and in accordance with the Newcastle City Centre Public Domain Manual guideline, design specifications and relevant Australian Standards: (a) new full width footpath and streetscape works and driveway; (b) reconstruct kerb and gutter, including associated road shoulder pavement and any associated drainage works; (c) new street trees and tree planting vaults in accordance with Council's requirement and adjust service pit levels to match new footpath levels; (d) kerb blisters and raised pedestrian crossings at the intersection of Bolton Street and Church Street; (e) upgrade street lighting across the frontage of the site to provide P3 Pedestrian Lighting Category in accordance with Australian Standard 1158.1; (f) upgrade of pedestrian crossing lighting to comply with Australian Standard 1158.4; (g) any necessary adjustments to regulatory signage.									✓	dwp confirmed that the PCA will accept this as part of the S138 approval and CC#3 submission rather than CC#2
	[i] Public domain works to be worked through for final resolution	**Nihon**		**dwp | Moir | Cardno**							
C21	Prior to the commencement of any footpath or public domain works, the Applicant must consult with Council and demonstrate to the Certifier that the public domain design and treatment, as required by condition C20, meets the Council's requirements, including addressing pedestrian management. The Applicant must submit documentation of approval for each stage from Council to the Certifier.									✓	dwp confirmed that the PCA will accept this as part of the S138 approval and CC#3 submission rather than CC#2
	[i] Public domain works to be worked through for final resolution - approval from Council submitted to the Certifier	**Nihon**		**dwp | Moir | cardno**							
	Compliance Reporting										
C22	No later than two weeks before the date notified for the commencement of construction, a Compliance Monitoring and Reporting Program prepared in accordance with the Compliance Reporting Post Approval Requirements (Department 2018) must be submitted to the Planning Secretary and the Certifier.				23-Jan-20			✓			Closed out
	[i] Compliance monitoring and reporting program prepared + provided to the Certifier		**Built**	**dwp | Northrop**							
	[ii] Submission of report to the Planning Secretary required	**Nihon**		**dwp**	**16-Jan-20**						
C23	Compliance Reports of the project must be carried out in accordance with the Compliance Reporting Post Approval Requirements (Department 2018).	Noted	Noted								Noted
C24	The Applicant must make each Compliance Report publicly available 60 days after submitting it to the Planning Secretary and notify the Planning Secretary and the Certifying Authority in writing at least seven days before this is done.										Noted
	[i] Compliance report made available publically and advise Planning Secretary + Certifier	**Nihon**		**Azusa | dwp**							
C25	Notwithstanding the requirements of the Compliance Reporting Post Approval Requirements (Department 2018), the Planning Secretary may approve a request for ongoing annual operational compliance reports to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an operational compliance report has demonstrated operational compliance.	Note	Note								Noted
	PART D - DURING CONSTRUCTION										
	Site Notice										
D1	A site notice(s): (a) must be prominently displayed at the boundaries of the site during construction for the purposes of informing the public of project details including, but not limited to the details of the Builder, Certifier and Structural Engineer is to satisfy the following requirements; (b) minimum dimensions of the notice must measure 841 mm x 594 mm (A1) with any text on the notice to be a minimum of 30-point type size; (c) the notice is to be durable and weatherproof and is to be displayed throughout the works period; (d) 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 must be displayed on the site notice; and (e) the notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.							✓			Closed out
	[i] Site notices developed by contractor + submission to the Certifier		**Built**								
	Operation of Plant and Equipment										
D2	All construction plant and equipment used on site must be maintained in a proper and efficient condition and operated in a proper and efficient manner.										Noted
	[i] Site plant maintained and equipment maintenance by contractor		**Built**								
	Demolition										
D3	Demolition work must comply with the demolition work plans required by Australian Standard AS 2601-2001 The demolition of structures (Standards Australia, 2001) and endorsed by a suitably qualified person as required by Condition C5.				21-Jan-20			✓			Closed out
	[i] Demolition processes developed by contractor		**Built**								
	Construction Hours										
D4	Construction, including the delivery of materials to and from the site, may only be carried out between the following hours: (a) between 7 am and 6 pm, Mondays to Fridays inclusive; and (b) between 8 am and 1 pm, Saturdays. No work may be carried out on Sundays or public holidays.										Noted
	[i] Construction hours factored into construction program		**Built**								
D5	Construction activities may be undertaken outside of the hours in condition D4 if required: (a) by the Police or a public authority for the delivery of vehicles, plant or materials; or (b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or (c) where the works are inaudible at the nearest sensitive receivers; or (d) where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works.	Note	Note								Noted
D6	Notification of such construction activities as referenced in condition D5 must be given to affected residents before undertaking the activities or as soon as is practical afterwards.										
	[i] Notification to affected residents required		**Built**								
D7	Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours: (a) 9am to 12pm, Monday to Friday; (b) 2pm to 5pm Monday to Friday; and (c) 9am to 12pm, Saturday.										Noted
	[i] Check advice with the Certifier - demolition processes not considered as rock breaking or rock hammering - to be monitored		**Built**								
	Implementation of Management Plans										
D8	The Applicant must carry out the construction of the development in accordance with the most recent version of the approved CEMP (including Sub-Plans) and ACHMP.										Noted
	[i] Monitoring of compliance with management plans		**Built**								
	Construction Traffic										
D9	All construction vehicles (excluding site personnel vehicles) are to be contained wholly within the site, except if located in an approved on-street work zone, and vehicles must enter the site before stopping.		**Built**								Noted
	Hoarding Requirements										

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
D10	The following hoarding requirements must be complied with: (a) no third-party advertising is permitted to be displayed on the subject hoarding/ fencing; and (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.		**Built**								Noted
	No Obstruction of Public Way										
D11	The public way (outside of any approved construction works zone) must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances.		Built								Noted
	Construction Noise Limits										
D12	The development must be constructed to achieve the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 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 management and mitigation measures identified in the approved Construction Noise and Vibration Management Plan.		**Built**	**EMM \ RAPT**							Noted
D13	The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition D4.		**Built**								Noted
D14	The Applicant must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.		**Built**								Noted
	Vibration Criteria										
D15	Vibration caused by construction at any residence or structure outside the site must be limited to: (a) for structural damage, the latest version of DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures (German Institute for Standardisation, 1999); and (b) for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: a technical guideline (DEC, 2006) (as may be updated or replaced from time to time).		**Built**	**EMM \ RAPT**							Noted
D16	Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in condition D15.		**Built**								Noted
D17	The limits in conditions D15 and D16 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by condition C11 of this consent.		**Built**	**EMM**							Noted
	Tree Protection										
D18	For the duration of the construction works: (a) street trees, with the exception of the one nominated street tree approved for removal to accommodate the new driveway crossover, must not be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property; (b) all street trees to be retained must be protected at all times during construction. Any tree on the footpath, which is damaged or removed during construction due to an emergency, must be replaced, to the satisfaction of Council; (c) all trees on the site that are not approved for removal must be suitably protected during construction as per recommendations of the Aboricultural Impact Assessment Report dated 17 November 2019 and prepared by Joseph Pidutti Consulting Arborist; and (d) if access to the area within any protective barrier is required during the works, it must be carried out under the supervision of a qualified arborist. Alternative tree protection measures must be installed, as required. The removal of tree protection measures, following completion of the works, must be carried out under the supervision of a qualified arborist and must avoid both direct mechanical injury to the structure of the tree and soil compaction within the canopy or the limit of the former protective fencing, whichever is the greater.		**Built**								Closed
	Air Quality										
D19	The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.		**Built**								Noted
D20	During construction, the Applicant must ensure that: (a) exposed surfaces and stockpiles are suppressed by regular watering; (b) all trucks entering or leaving the site with loads have their loads covered; (c) trucks associated with the development do not track dirt onto the public road network; (d) public roads used by these trucks are kept clean; and (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.		**Built**								Noted
	Erosion and Sediment Control										
D21	All erosion and sediment control measures must 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. Erosion and sediment control techniques, as a minimum, are to be in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom, 2004) commonly referred to as the 'Blue Book'.		**Built**								Noted
	Imported Soil										
D22	The Applicant must: (a) ensure that only VENM, ENM, or other material approved in writing by EPA is brought onto the site; (b) keep accurate records of the volume and type of fill to be used; and (c) make these records available to the Certifier upon request.		**Built**								Noted
	Disposal of Seepage and Stormwater										
D23	Adequate provisions must be made to collect and discharge stormwater drainage during construction of the building to the satisfaction of the principal Certifier. The prior written approval of Council must be obtained to connect or discharge site stormwater to Council's stormwater drainage system or street gutter.		**Built**								Noted
	Unexpected Finds Protocol - Aboriginal Heritage										
D24	In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the objects. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by EES Group and the management outcome for the site included in the information provided to AHIMS. The Applicant must consult with the Aboriginal community representatives, the archaeologists and EES Group to develop and implement management strategies for all objects/sites. Works shall only recommence with the written approval of EES Group.		**Built**	**AMAC**							Noted
	Unexpected Finds Protocol - Historic Heritage										
D25	If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the NSW Heritage Division contacted. Depending on the possible significance of the relics, 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 NSW Heritage Division.		**Built**	**AMAC**							Noted
	Waste Storage and Processing										
D26	All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.		**Built**								Noted

	SSD 9787 - FINAL CONDITIONS | SCHEDULE 2 MATRIX	Responsibility		Relevent Consultant/s	Date Addressed	Cost Implication	Time Implication	CC # 1	CC # 2	CC # 3	Status
		Owner	Contractor								
D27	All waste generated during construction must be assess, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).		**Built**								Noted
D28	The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.		Built								Noted
	Independent Environmental Audit										
D29	Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the preparation of an Independent Audit Program or commencement of an Independent Audit.										Closed - GHD appointed & endorsed
	[i] Notification of independent auditors to be given to the Planning Secretary and agreed to - relates to environmental aspects of construction	**Nihon**	**Built**	**Azusa | dwp**							
D30	Prior to the commencement of construction, an Independent Audit Program prepared in accordance with the Independent Audit Post Approval Requirements (Department 2018) must be submitted to the Planning Secretary and the Certifier.										Closed - dwp issued
	[i] Independent audit program prepared and submitted to Planning Secretary and the Certifier	**Nihon**	**Built**	**Azusa | dwp**							
D31	Table 1 of the Independent Audit Post Approval Requirements (Department 2018) is amended so that the frequency of audits required in the construction phase is: (a) an initial construction Independent Audit must be undertaken within eight weeks of the notified commencement date of construction; (b) a subsequent Independent Audit of construction must be undertaken no later than six months from the date of the initial construction Independent Audit; and In all other respects Table 1 remains the same. The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified above, upon giving at least 4 weeks notice to the applicant of the date upon which the audit must be commenced.										Noted, Initial Audit undertaken 26/02/20 with final report issued by GHD on 26/03/20. Follow up audit scheduled for end of August '20
	[i] Audit program linked to construction dates	**Nihon**	**Built**	**Azusa | dwp**							
D32	Independent Audits of the development must be submitted to the Planning Secretary and must be carried out in accordance with: (a) the Independent Audit Program submitted to the Planning Secretary and the Certifier under condition D30 of this consent; and (b) the requirements for an Independent Audit Methodology and Independent Audit Report in the Independent Audit Post Approval Requirements (Department 2018).										Noted
	[i] Independent audits must be submitted to the Planning Secretary and the Certifier	**Nihon**	**Built**	**Azusa | dwp**							
D33	Requirements (Department 2018), the Applicant must: (a) review and respond to each Independent Audit Report prepared under condition D30 of this consent; (b) submit the response to the Planning Secretary and the Certifier; and (c) make each Independent Audit Report and response to it publicly available 60 days after submission to the Planning Secretary and notify the Planning Secretary and the Certifier in writing at least seven days before this is done.										Noted
	[i] Response required to each independent audit - Planning Secretary and the Certifier notified	**Nihon**	**Built**	**Azusa | dwp**							
D34	Notwithstanding the requirements of the Independent Audit Post Approval Requirements (Department 2018), the Planning Secretary may approve a request for ongoing annual operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an audit has demonstrated operational compliance.	Note	Note								Noted

NB Rows for post PC hidden above

Urgently required - holding up CC\OC

Closed out & complete

In progress or required for future CC stage

Note with no further actions required

Appendix H - Monthly Waste Recovery Reports

CENTRAL WASTE STATION

DRUMDERG SERVICES

NIHON UNIVERSITY

RESOURCE RECOVERY REPORT

MAY 2020

Towards a Sustainable Future

1800 180 180
centralwaste.com.au
info@centralwaste.com.au
8 Styles Street
Kurri Kurri NSW 2327

BN: 44 604 989 433 |Environmental Protection Licence Number: 13013

AS/NZS 4801 - OHS MANAGEMENT
ISO 9001 - QUALITY MANAGEMENT
ISO 14001 - ENVIRONMENTAL MANAGEMENT

1. OVERVIEW

High recovery rates for May 2020 have been achieved, C&D materials for this month which were placed into bins typically included a mixture of mainly wood/timber, scrap metals, bricks/concrete etc. processed at our Resource Recovery Facility, offering a very high level of recoverability.

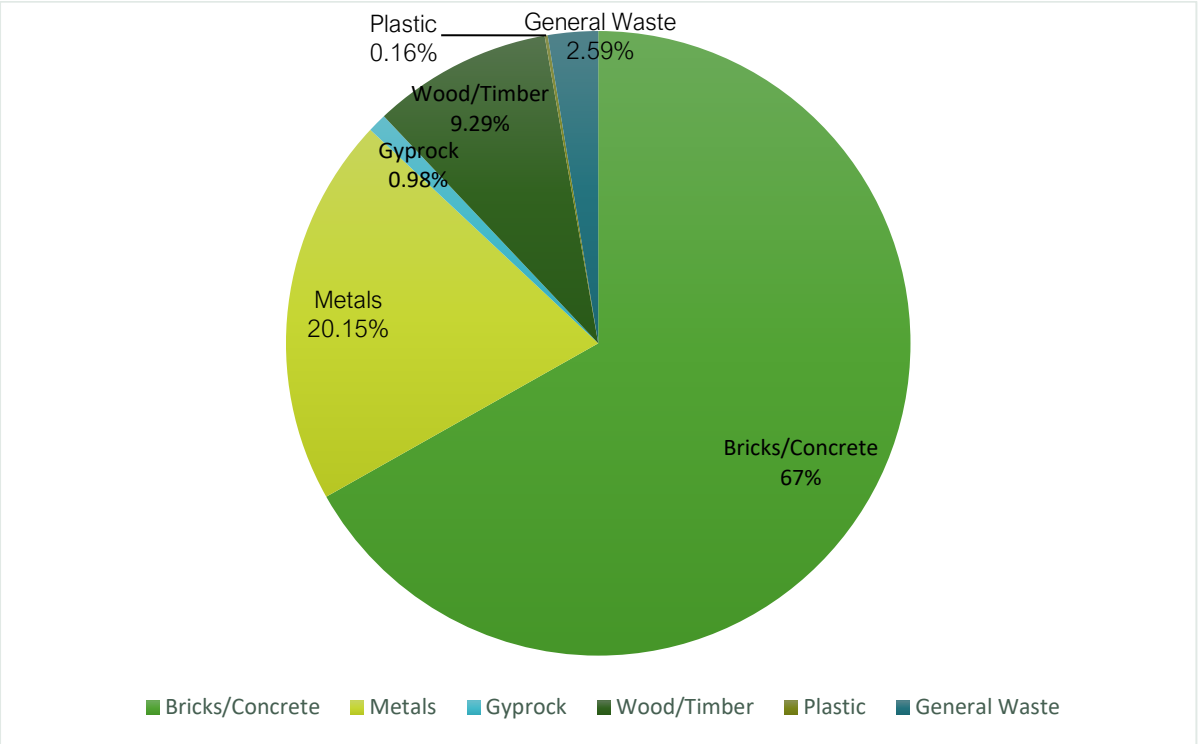
Materials were free of contamination by food or other organic matter which assists in recovery rates, however, non-recoverable/difficult material such as carpets, some plastics, etc. were found and disposed of as per local regulations.

2. CWS - RECOVERABLE MATERIALS MONTHLY BREAKDOWN

Breakdown of resources recovered, transported and processed at Central Waste Station's Resource Recovery Facility.

MONTHLY BREAKDOWN	
Total Amount Received (Tonnes)	54.88
Total Recovered (Tonnes)	53.46
Total Recovery Percentage	97.41%

RESOURCE TYPE	TONNES RECOVERED	PERCENTAGE
WOOD/TIMBER	5.10	9.29%
METALS	11.06	20.15%
PLASTICS	0.09	0.16%
GYPROCK	0.54	0.98%
BRICK/CONCRETE	36.67	66.82%
GENERAL WASTE (NON RECYCLABLE)	1.42	2.59%



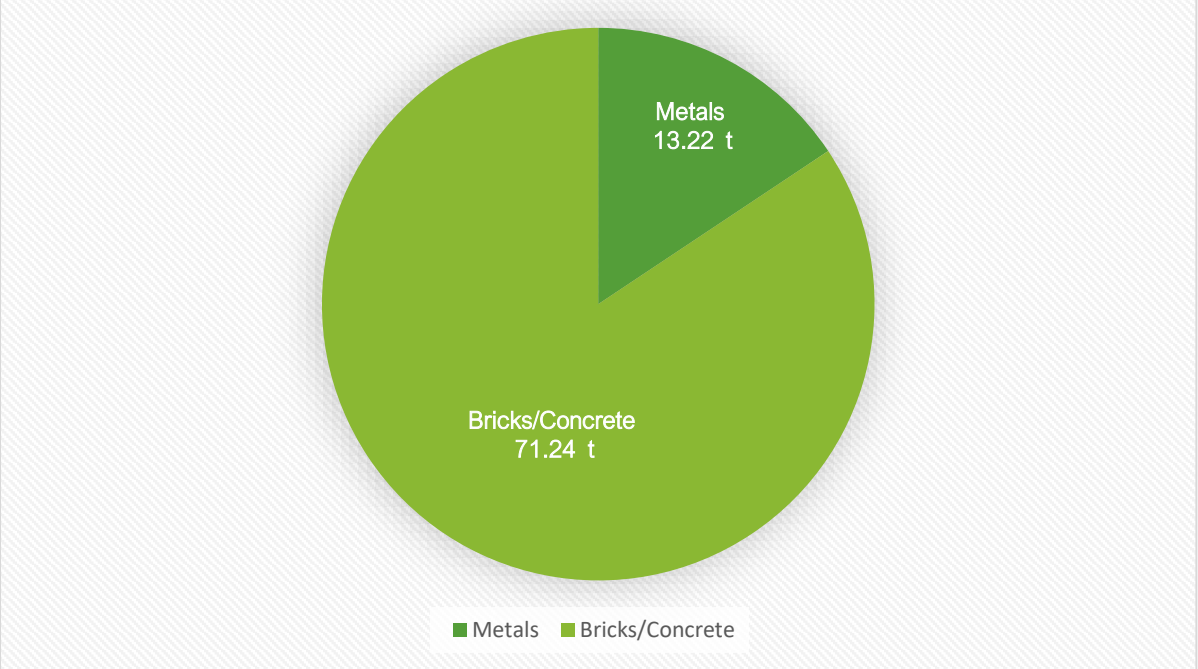
3. OTHER FACILITIES - RECOVERABLE MATERIALS MONTHLY BREAKDOWN

Breakdown of resources recovered, transported, and processed at local material specific recycling facilities to achieve full recyclability. These include:

- Metals – Sell & Parker
- Metals – Weston Aluminium
- Bricks/Concrete – Boral Recycling

MONTHLY BREAKDOWN	
Total Amount Received (Tonnes)	84.46
Total Recovered (Tonnes)	84.46
Total Recovery Percentage	100%

RESOURCE TYPE	TONNES RECOVERED
METALS	13.22
BRICK/CONCRETS	71.24



4. RECOVERY SUMMARY

MONTHLY BREAKDOWN	CWS	OTHER FACILITIES (material specific)	TOTAL
Total Amount Received (Tonnes)	54.88	84.46	139.34
Total Recovered (Tonnes)	53.46	84.46	137.92
C&D Non-Recoverable Percentage	2.59%	0%	2.59%
Total Recovery Percentage	97.41%	100%	98.98%

5. TOTAL EXPORTED MATERIALS MONTHLY BREAKDOWN (INCLUDING NON-RECYCLABLES)

A summary of all materials exported from site by Drumderg throughout the month of May, including special/difficult waste such as asbestos, has been including in the following table and graphic.

RESOURCE TYPE	TONNES
C&D RECOVERED MATERIALS	137.92
C&D NON RECOVERABLE	1.42
ASBESTOS WASTE	5.36
ASBESTOS SOILS	1024.50

