Construction Management Plan (CMP)

UNSW Health Translation Hub

Corner of High and Botany Streets, Randwick

Revision	Date	Section	Revision Details
Preliminary	1st April 2021		Preliminary updated for SSDA submission

Contents

1.0 Introduction

This Construction Management Plan (CMP) supports a State Significant Development Application (SSDA) for the proposed UNSW Health Translation Hub (UNSW HTH) at the Randwick Hospitals Campus (RHC), which is submitted to the Department of Planning, Industry and Environment (DPIE) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (the Act). Health Infrastructure on behalf of Health Administration Corporation (HAC) is the applicant for the UNSW HTH, which will be delivered with the University of New South Wales (UNSW).

The UNSW HTH forms an extension of the existing and proposed hospital facilities at the RHC, providing a specialist health-related research and education facility on the Campus.

Revision Note

The CMP cannot be issued as a 'final' document until the specific development application conditions of consent are received and incorporated into the management plan.

2.0 Background

A partnership agreement has been established between HAC and the UNSW to develop the UNSW HTH. This partnership will also allow UNSW to operate the building as well as manage its design and delivery.

The partnership will bring together educational and medical researchers, clinicians, educators and public health officials to drive excellence, and support the rapid translation of research, innovation and education into improved patient care. It will strengthen the symbiotic relationship between UNSW and the RHC and its research institutes and broader health partners which form part of the Randwick Health and Innovation Precinct (RHIP).

The UNSW HTH will build on the existing affiliation between UNSW and the Sydney Children's Hospital Network (SCHN); Health Infrastructure; and the South Eastern Sydney Local Health District, including Prince of Wales Hospital, The Royal Hospital for Women and Eastern Suburbs Mental Health Services.

3.0 Site Description and Location

The site is located approximately 6 kilometres (km) from the Sydney Central Business District (CBD), within the Randwick Local Government Area (LGA). It is located approximately 4km from Sydney Airport. **Figure 1** provides a regional context map of the site showing its location in relation to the Sydney CBD and surrounding centres.

This block sits in between the existing Randwick Hospitals Campus and the UNSW Kensington Campus, and directly adjacent to the CBD and South East Light Rail service which runs along High Street (**Figure 2**). The site of the proposed UNSW HTH has an area of 8,897square metres (sqm).

The site has been subject to some site preparation and early works associated with the broader development of the block. Adjacent to the site, along the High Street and Botany Road frontages, runs a 6-metre (m) wide stormwater and sewage easement.

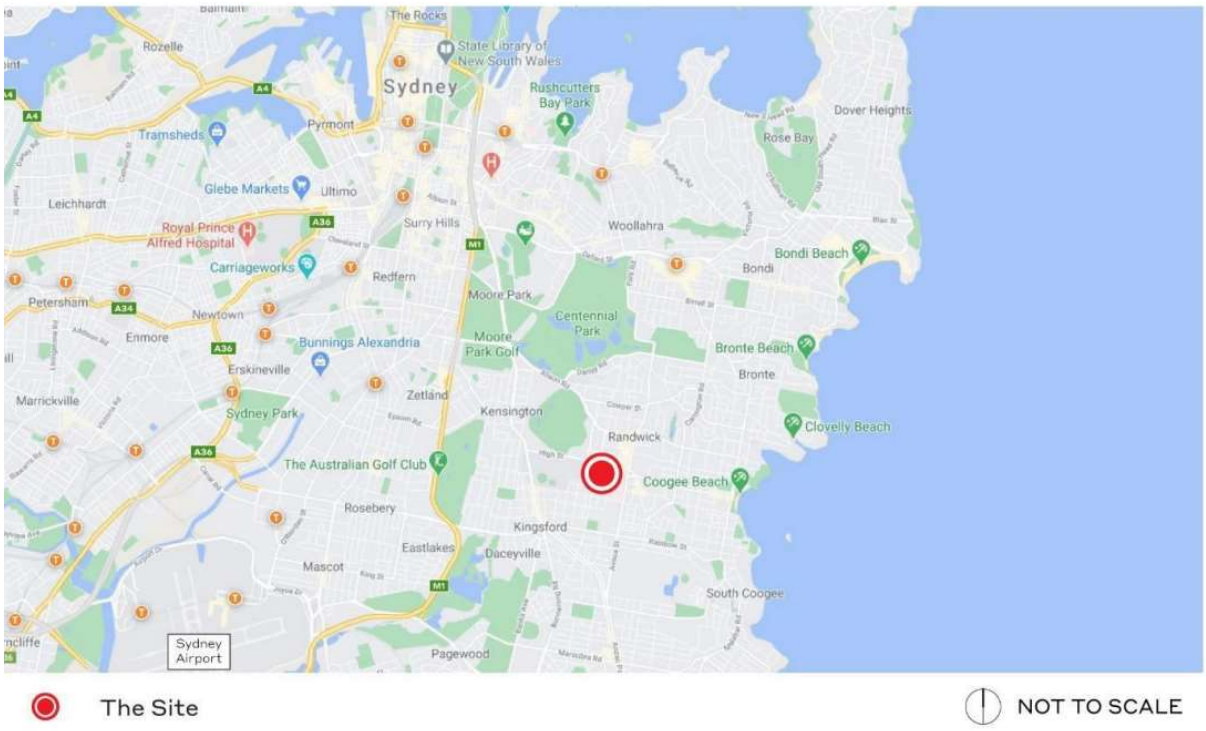


Figure 1 – Site context

Source: Google maps and Ethos Urban

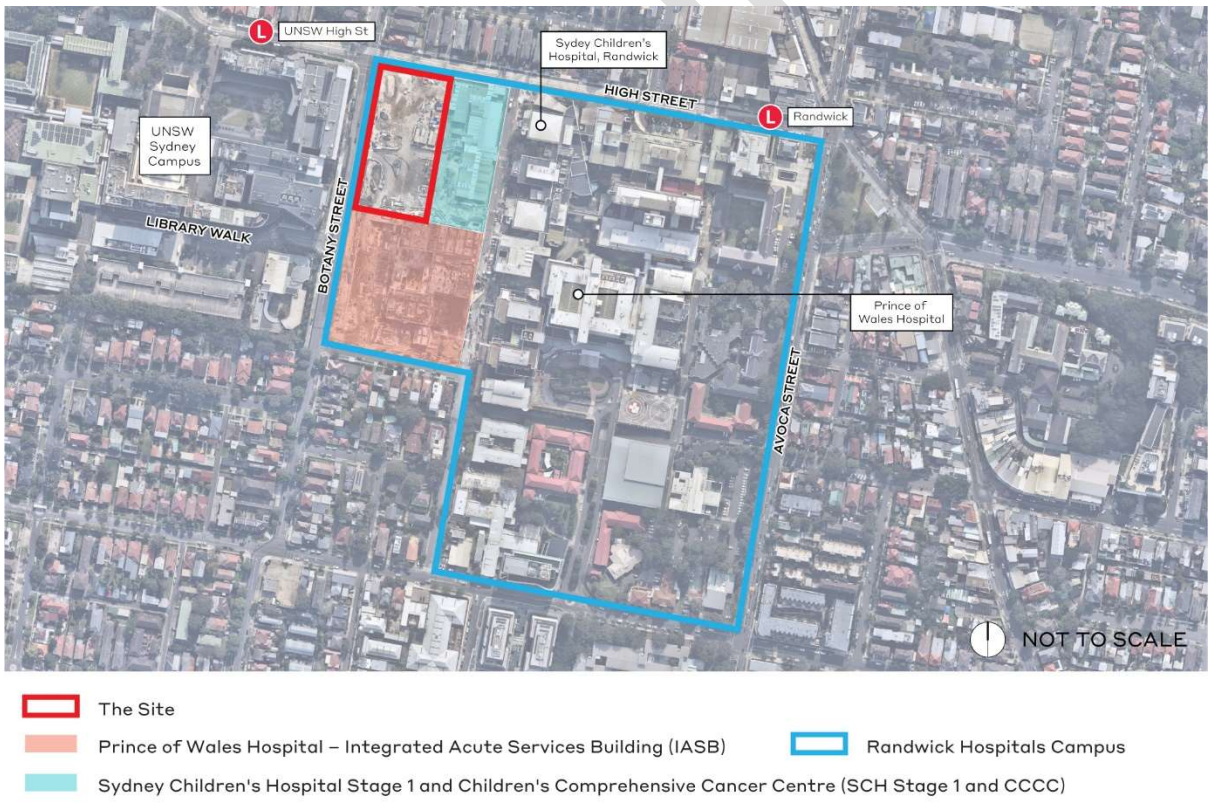


Figure 2 – Site aerial

Source: Nearmaps and Ethos Urban

4.0 Overview of the Proposed Development

The proposal involves the expansion of the existing and proposed hospital facilities at the RHC to provide ancillary health research and education uses. This will be in the form of a single building which will be physically connected (at podium level) to the neighbouring Sydney Children's Hospital Stage 1 and Children's Comprehensive Cancer Centre (SCH Stage 1 and the CCCC) redevelopment.

Specifically, the SSDA seeks approval for:

- Relevant site preparation, excavation and enabling works.
- Construction and use of a new, 15-storey building accommodating research and health education uses, comprising:
    - One basement level; and
    - A total GFA of approximately 35,600sqm, including health-related research, education and administrative floor space.
- Pedestrian link bridges connecting the UNSW Kensington Campus to the RHC, via the Wallace Wurth Building to the UNSW HTH and through to the SCH Stage 1 and the CCCC.
- Landscaping and public domain works, including the creation of over 2,500 sqm of new publicly accessible open space within the eastern portion of the site, sitting between the UNSW HTH and the SCH Stage 1 and the CCCC redevelopment.
- Building signage.
- Stratum subdivision.
- Services and utilities augmentation as required.

4.1 Operation and Function of the UNSW HTH

The UNSW HTH will be an expansion of the RHC to accommodate new health related education, research, and administrative facilities. It will include:

- Purpose-built spaces for health educators and researchers to work alongside clinicians.
- Floor plates for health translation research focused work with physical connections to the SCH Stage1 and the CCCC and wider Randwick Hospitals Campus.
- Dedicated facilities for the CCCC directly linking the UNSW HTH with the SCH Stage 1 and the CCCC.
- An education hub, including education and training rooms allowing hospital staff to educate and train UNSW medical students.
- Facilities for education, training, research, seminars and industry events.
- Clinical schools for the Women's and Children's Health, Psychiatry and Prince of Wales Hospital.
- Ambulatory care clinics including in neurosciences, public and population health.
- Supporting facilities including retail premises.

5.0 Secretary's Environmental Assessment Requirements

Department of Planning, Industry and Environment has issued Secretary's Environmental Assessment Requirements (SEARs) for the proposed development. This report has been prepared having regard to the relevant SEARs as follows:

SEAR	Comment / Reference
Key Issue 14. Staging Assess impacts of staging where it is proposed and detail how construction works and operations would be managed to ensure public safety and amenity on and surrounding the site.	Refer to section 9.0 Project Staging & Appendix A
Key Issue 20. Waste Identify, quantify and classify the likely waste streams to be generated during construction and operation	Refer to section 12.0 Construction Waste Management & Appendix D
Key Issue 20. Waste Describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste	Refer to section 12.0 Construction Waste Management & Appendix D

6.0 Summary of Mitigation Measures

Based on the findings and recommendations of this report, the following measures are suggested to mitigate the identified impacts of the development:

Mitigation Measure
Site security – Site to be securely fenced. Soil and sediment controls to be installed to prevent pollution entering the stormwater network
Pedestrian safety – Overhead protection to be provided adjacent to the work zone and where the building is close to the boundary.
Pedestrian and vehicle movements & safety around the site – Authorised traffic controllers to manage traffic and pedestrian movements.
Vibration management during excavation and construction – Appropriate plant and equipment selection to minimise impacts of vibration. Subject to rock strength consideration to be given to rock sawing during excavation.
Dust management – dust to be controlled with soil wetting techniques and the maintenance of vegetation where possible. Appropriate tools to be selected for each task with dust containment measures i.e. wet cutting or dust extraction.
Noise management – Appropriate tool selection for each task, noise monitoring, hoardings and acoustic baffles / screens to be installed to areas of sensitivity.
Crane management – Self climbing cranes to be installed to limit the duration required for intrusion into the prescribed air space. Cranes to be restricted from lifting loads over neighbouring properties

7.0 PROJECT PROGRAM & MILESTONES

Construction works for the UNSW HTH are anticipated to commence in Q1 2024 and will target completion in late 2026.

Target milestone dates are listed below:

Project Milestones	**Planned Completion Dates**
Assumed SSDA Approval	Late 2021
Documentation and procurement	Late 2023
Site Establishment	Early 2024
Construction completion	Late 2026
Operational Milestone	Late 2026

For site coordination and cumulative assessment purposes the adjacent SCH Stage 1 and the CCCC project, subject to separate planning approval, commences construction on-site in 2022.

8.0 COMMUNICATION & CONSULTATION

UNSW will establish an appropriate communication and consultation plan which ensures all Randwick Hospitals Campus staff, Randwick Hospitals campus patients and families, UNSW staff and students, local residents, the community and local businesses remain informed with a comprehensive construction communication and stakeholder engagement plan during the development.

The communication and consultation plan will include a construction team member to form part of the community liaison team who will work with the UNSW Estate Management Communications Team.

The consultation process makes provision for community complaints about construction activities to be submitted, tracked and responded to via a register which forms part of the Project Control Group's reporting structure.

Project updates will be issued on a regular basis to proactively inform the local community.

For periods of construction that may cause nuisance a disruption notice communication procedure will be adopted. A Disruption Notice (DN) is a planning tool for instances of planned disruption (or potential disruption) to the normal operations of the surrounding hospital, University and residents. Buildcorp will submit DN's for all identified interface works or planned disruptions to the normal operations of the surrounding hospital and University or its stakeholders. When a disruption notice is issued it will typically include specific details regarding the:

- Location of the works
- Proposed date and duration of the works
- Explanation of the construction methodology involved

The DN process allows affected parties to gain an understanding of the works required, the reasons why they are unavoidable, the steps being taken to minimise its impact and the expected duration for the disruption.

Communication notices to be provided during the construction period.

Project communication	**Expected notification period**
Project updates	Monthly
Oversize and/or overmass (OSOM) vehicles and loads requiring observance of travel curfews and out of hours deliveries	48 hours
Disruptive work notices	48 hours prior to disruptive works commencing
Upcoming construction works	2 weeks prior to works commencing

9.0 SITE ESTABLISHMENT, CONTROL & PROJECT STAGING

9.1 Site Establishment

For details, refer to ***Appendix A***

9.1.1 Dilapidation Reporting

Prior to site establishment and construction commencement, Independent dilapidation reports of the surrounding structures, infrastructure and roads will be completed and issued to all relevant parties.

The report will include photographs and plans with location reference for ease of use. This report will form the basis for comparison with a dilapidation report that will be prepared after all construction works are completed.

9.1.2 Site Fencing, Hoardings & Security

The site will be appropriately secured by solid fences (wire mesh or similar), hoardings and gates during the entire duration of the construction work. Gates will be installed to control access to the site. Hoardings, gates and fences will be suitably lined to limit public viewing and ensure safe pedestrian flow. Attention will be paid to the ensure service vehicles and pedestrian travel paths are not obstructed at any time.

9.1.3 Signage

Signage specifying all safety, security measures and key contact details shall be erected on the perimeter of the construction site (i.e. attached to the building, fence or hoarding).

A 24-hour contact name and phone number shall be provided.

Delivery signage will be posted at the site entrances to ensure deliveries are coordinated and entering the correct locations.

9.1.4 Site Amenities

Site amenities and facilities will be provided for work personnel including offices, toilets, lunchrooms, first aid rooms and change rooms. The location of the site facilities during construction may vary as construction progresses.

9.1.5 Site working hours

To mitigate impacts on the Randwick Hospitals Campus, University and neighbours the proposed work hours provide the greatest opportunity for the most efficient construction program as well as mitigating traffic impacts. Further consultation with the key stakeholders of the Randwick Health & Innovation Precinct (RHIP) and UNSW Estate Management, will occur prior to project commencement to ensure minimal or nil impact is made to the Randwick Hospitals Campus and UNSW operating hours to allow the appropriate project planning and programming if required.

The preferred working hours of the site are:

- 7.00am to 6.00pm Monday to Friday, (TBC in approval conditions).
- 8.00am to 5.00pm Saturday (TBC in approval conditions).
- No work on Sundays and Public Holidays. (TBC in approval conditions)

This information would be included within our site-specific induction.

Outside these hours, works, such as special delivery of materials / machinery / specific site works may be required to be undertaken outside the approved hours of operation for the site. This would be in line with the type of work, authority's requirements, or for safety reasons. For example, wide delivery loads that are required to meet RMS restrictions on public roads may need to be delivered outside the approved site hours, or large concrete pours that require time to pour and cure the concrete before it can be finished may extend beyond the approved hours on limited occasions.

Communication will be provided within the required notification period timings with RHC, UNSW, relevant authorities and neighbours will be issued prior to these events occurring to all impacted stakeholders.

9.1.6 Stakeholder Management

UNSW will issue regular communication updates regarding the Project to impacted stakeholders, including Randwick Hospitals Campus, local residents and government authorities. Stakeholders will have direct phone and email contact with a nominated project team member in order to address any issues and concerns if they arise. The project team will handle these in a timely manner.

9.1.7 Contractor Parking

No parking is available onsite. Contractor parking is available in the adjacent UNSW Gate 11 Botany St carpark. The site is well serviced by public transport with buses and light rail stops close to the site entry. Contractors will be encouraged to use public transport where possible. All site personnel when inducted to the project will be informed of this requirement, including details of available services.

9.1.8 Site Inductions

All site personnel will be site inducted prior to commencing work on site. The site inductions will be specific to the UNSW HTH site and Buildcorp safety protocols including site specific requirements such as:

- Site Safety
- Site Access, Site Amenities & Site Emergency Procedures
- Travel, Deliveries & Parking
- Client & Neighbour Requirements including; personnel behaviour; dust, vibration & noise controls.
- Head Contractor Policies & Procedures.
- Environmental considerations and rules.
- Other Specific Hospital and University requirements.

The head contractor and all sub-contractors must induct their employees into their safe work procedures. Induction register & copies of site SWMS will be available on site when required.

9.1.9 Hazardous Materials

For works that require hazardous and/or flammable products, secure and appropriate storage shall be provided on site. The storage area shall be appropriately located away from emergency exits, amenities, neighbouring properties & stormwater pits.

Storage and handling of materials shall be in accordance with each of the products manufactures recommendations and Material Safety Data Sheet, the Occupational Health & Safety Act 2011 and the Occupational Health and Safety Regulations 2017.

Procedures will be implemented to control chemical storage and clean up and any spills if they were to occur.

9.1.10 Safety Inspections

OH&S meetings will be held on a regular basis on site. These meeting will be conducted as per the head contractor's OHS procedures.

An OH&S information board will be erected, and a copy of the OH&S policy will be prominently displayed on the board. Safety inspection audit results will also be displayed.

Sub-contractors will be required to submit their OH&S Plan / SWMS to the Contractor for review prior to commencement as per Buildcorp's policy & procedures. The sub-contractor is to incorporate any feedback from the Contractor and Superintendent into the OH&S Plan.

9.1.11 First Aid Facilities

First aid facilities will be provided and maintained as per OH&S legislative requirements. There will always be at least one qualified first aider on site whenever any works are taking place.

9.1.12 Approved Plans to be on Site

A copy of the approved consent plans, specifications and documents incorporating conditions of approval and certification shall always be kept on site.

9.1.13 Public Domain

All footpaths and bicycle paths surrounding the site will be kept unobstructed and free of tripping hazards from hoarding, fences or construction related items.

Any works required within the public domain shall be undertaken in accordance with relevant authority approvals as required.

Where any construction related materials temporarily extend over footpaths, they will be covered and fitted with a ramp to facilitate safe pedestrian access including access for persons with disabilities.

The public shall be protected from all construction activities including vehicle loading and off-loading within the public domain with the implementation of a Construction Traffic Management Plan and qualified traffic control personnel.

9.1.14 Site Appearance

No materials shall be stored within the Public Domain areas surrounding the site.

Materials stored on site shall be adequately secured, organised and stacked to prevent unnecessary and unsightly views from surrounding public areas and to ensure the safety of the public.

All construction generated rubbish and waste shall be placed into skip bins located within the site which will be removed on a regular basis.

Trucks leaving the site shall be cleaned to ensure soil, mud and other site debris is prevented from spilling onto adjoining roads and footpaths.

All loads shall be covered to prevent the accidental spilling of materials on roadways.

9.1.15 Site Personnel Behaviour

The head contractor will ensure that all site personnel conduct themselves appropriately and consciously of the neighbouring environment. During the site induction personnel will be inducted to these protocols. The requirements will include use of acceptable language, appropriate clothing, reporting of any incidents and compliance with required consent conditions.

9.1.16 Environmental Controls – sediment & dust control

Sediment and Erosional Controls: All sediment controls will be installed prior to works commencing. Auditing / inspection and maintenance of these controls will occur regularly throughout the project duration.

These controls include the installation of silt control fabric at the low points of the site, at stormwater pit lids.

Dust Control: Adequate dust control measures will be put in place throughout the project to control wind driven dust. Control measures shall include the covering of stockpiled soil materials, implementation of dust suppression measures such as watering the site, and the covering loads when they leave / arrive on site.

9.1.17 Site Access

Construction access will vary during the construction cycle. Details of construction access points are shown in ***Appendix A.***

All site access points shall be controlled for security and safety purposes.

Environmental controls as stipulated in the Construction Environmental Management Plan will be established and maintained throughout the project lifespan as identified in ***Appendix B***.

9.1.18 Existing services infrastructure

Prior to commencement of works, a survey and scan of the site will ensure that all existing services on site are located and documented. This survey in conjunction with any as built information provided by UNSW will be used by our site team and services manager to ensure all services are terminated

and / or diverted in order to ensure services to adjoining buildings are maintained whilst undertaking the works.

Accurate documentation and as built surveying information allow us to confirm their location and mitigate the risk of exposure to live services and or interruptions to these services that would affect others.

9.2 Project Staging

9.2.1 Site Establishment

To commence construction the perimeter of the site will be secured with an A class hoarding. B class hoarding will be installed adjacent to the work zone and adjacent to the Northern and Eastern elevations of the building.

Site accommodation will be established in the open space East of the building with a dedicated worker access from High St. This will ensure a physical separation of vehicles and workers entering and leaving the site.

Sediment controls will be established to ensure soil and sediment will not enter the surrounding stormwater system.

9.2.2 Excavation

All excavation work will take place using large excavation plant and equipment with excess spoil transported off site.

Access for the earthworks will be in accordance with the site access plan and Construction Traffic Management Plan as described in ***Appendix A*** and ***Appendix C.***

Access around the site is well serviced to allow the use of 'truck and trailers' subject to council approval. This will assist in reducing the number of truck movements for the earthworks phase by half.

At the time of writing this report it is envisaged that the spoil being removed off site would generally be transported to the outer regions of Sydney.

It is expected rock excavation will be required. Subject to the rock strength. Softer rock will be removed using ripping techniques with harder rock being saw cut and removed where feasible. Noise and vibration will be the key considerations when choosing the final method for the removal of the rock.

9.2.3 Foundation / Sub-Structure Phase

Piles and structural footings will be engineered and constructed in such a way as to mitigate the risk of noise and vibration wherever possible. The works will be occurring concurrently with the detailed excavation phase.

9.2.4 Structure Phase

With completion of the Foundations, the structure phase will commence.

This phase will consist of traditional concrete column and suspended post tensioned concrete slab construction to the lower levels of the building. The upper levels will be constructed from timber. A concrete lift and stair core will service all levels.

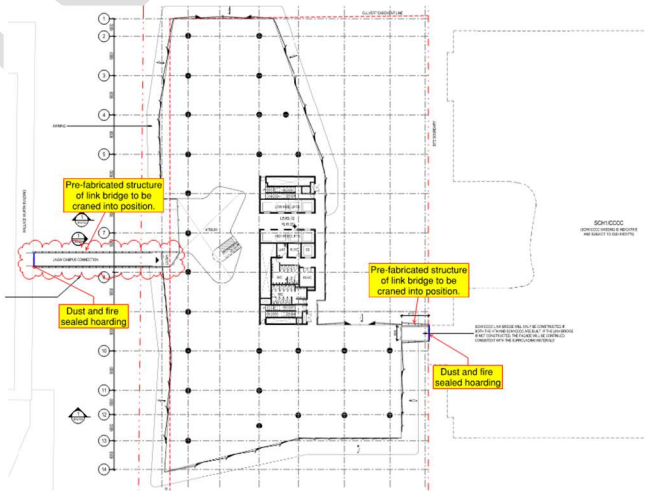
Construction of the structure shall be via the use of the sites tower cranes, workers and materials hoist and concrete pumps.

9.2.5 Pedestrian link bridges

The structure for the pedestrian link bridges between UNSW HTH to the SCH Stage 1 and the CCCC will be established early.

The structure of the link bridge between the SCH Stage 1 and the CCCC and UNSW HTH will be prefabricated and craned into position prior to the completion of the new SCH Stage 1 and the CCCC. An internal, dust sealed hoarding will be installed on the SCH Stage 1 and the CCCC access side to the link bridge. This will allow the link bridge to be finalised with the completion of UNSW HTH with minimal disruption to SCH Stage 1 and the CCCC. Upon completion of the UNSW HTH the internal hoarding will be removed providing access to the bridge.

The structure of the link bridge between the C27 Wallace Wurth Building and UNSW HTH will be lifted into position during later stages of UNSW HTH construction. Concrete columns will be constructed to support the new opening in the Wallace Wurth building. The new prefabricated pedestrian link bridge will be craned into position in stages over Botany St. A dust and fire sealed hoarding will be installed at the connection point into the Wallace Wurth building. Overhead protection will be installed during the construction of the bridge. The Wallace Wurth façade will be removed to allow the completion of the connection. The façade will be made good to the bridge connection allowing the internal circulation for the bridge to be completed.



Pedestrian Link Bridge

9.2.6 Façade and Building Envelope Phase

Following completion of the structure works, external facades and the building envelope works will commence.

The façade will consist generally of a prefabricated curtain wall system. The prefab components will be transported to site and where possible lifted directly from the truck in the work zone and placed on the applicable floor ready for installation.

Construction of the façade and envelope shall be via the use of the sites tower crane.

9.2.7 Internal Fitout & Finishes Phase

Following installation of the building facades and envelope elements, the internal fitout and finishes will commence.

Typically starting with the installation of required building services, followed by internal walls, ceilings, joinery and then finishes to walls, floors etc.

Construction of the internal fitout & finishes shall be via the use of the sites tower crane accompanied by a forklift. Material deliveries will utilise the work zone in Botany St where materials will be lifted directly from the delivery vehicles and loaded to the applicable floors via loading platforms. Along with smaller material deliveries through the loading dock in the basement utilising the builder's lift.

9.2.8 Connection of Services

Occurring in parallel with construction activities within the building, wherever possible connection of the developments services to the infrastructure surrounding the site will take place.

Critically these connections must be in place upon completion of the building works to allow all systems to be tested and commissioned ensuring they work as designed.

Specific locations for supply connections (water, recycled water, gas, electricity, communications, sewer, etc.) have yet to be resolved and agreed with the respective infrastructure authorities. Upon receipt of the development consent these applications will be submitted, and locations agreed.

Importantly it should be noted that all connections to the supply infrastructure will be done with little disruption to the public domain and service supply to the hospital and University.

Connections shall be undertaken via the use of small scale and specific excavation equipment where necessary.

9.2.9 Landscaping & External Works Phase

The landscaping and external works phase sees completion of the project from a visual perspective.

Upon completion of all works and removal of the site material handling equipment (tower crane, scaffold etc), the Public Domain, landscape and external works surrounding the built form commence to complete its integration with the property boundary line and streetscape.

These works will vary in design from footpaths and paved areas through to garden beds and grass areas.

Works shall be undertaken via the use of small-scale plant and construction equipment for material handling purposes now that the main site cranes etc have been removed.

10.0 CONSTRUCTION MATERIAL LOGISTICS

Materials handling involves the movement of material around the site to construct the building. The planning of this work upfront will allow the efficient construction of the building including safety, minimise double handling of materials and accelerate construction.

It is anticipated the main materials handling equipment will include:

- Forklifts to unload and relocate materials within the site compound.
- Cranes, both mobile cranes and tower cranes, to lift materials to relevant floor areas and install structure elements such as structural steel, formwork, reinforcement, precast concrete and façade panels.
- Concrete pumps for pouring concrete

Off-site prefabrication methods will be utilised to minimise the amount of work conducted on site. This also minimises the logistical requirements of coordinating all components of an element as separate deliveries, into a single delivery for complete elements.

Where possible, as the floors are constructed, they will be preloaded with bulk fitout materials such as gyprock sheets, wall framework, services componentry, joinery and the like. This will reduce smaller deliveries later in the project.

Concrete pumping will take place from both the work zone and from within the site to ensure minimum disruption.

Self-climbing tower cranes will be installed where a crane is required to enter the prescribed air space above the project to complete the building. Appropriate approvals will be obtained to enter the prescribed air space. The self-climbing cranes will be utilised to minimise the time required for entry into this space.

11.0 CONSTRUCTION TRAFFIC MANAGEMENT

NOTE: A detailed construction traffic management plan is included in Appendix C.

11.1 Estimate of construction vehicles

To minimise impact on local traffic routes the following will be encouraged with incoming and outgoing deliveries:

- Deliveries to be scheduled outside of peak traffic periods.
- Subcontractors are to log deliveries with the Veyor app which is used to schedule deliveries to alleviate traffic congestion.
- Prefabrication of elements and components where possible (will reduce the number of workers on site & number of deliveries (e.g. Structural Steel, Precast Concrete, Prefabricated Curtain Wall Facades, etc).
- Sub-contractors to log in deliveries with the project team to ensure that there is no back log of deliveries arriving at a similar time.
- Incorporate lay/waiting areas within the site for trucks to stand whilst waiting to be unloaded.
- Traffic control measures to be placed at entry points to control traffic.
- Sequences to the construction works so that trade activates that rely on several deliveries to do their work do not happen on the same day. For example, a large concrete pour and removal of spoil from site will not be programmed for the same day.

11.2 Construction vehicles site access

Due to the topography, number of buildings, design and concurrently occurring works to surrounding main roads and infrastructure during the construction cycle, construction vehicle access points will change to suit. This is further detailed under the Traffic Management section of this report.

As the site is located on a corner lot. Site access is available from both High and Botany Streets. Gates will be located to both streets and will be manned when in operation to control all vehicle movements entering and leaving the site. Botany St will be the main access gate for the site for larger vehicles.

11.3 Standing of Vehicles on Council Land.

The site establishment plan has been developed to ensure that generally standing of vehicles on public property is not required. A work zone will be established on Botany Street vehicles will be unloaded and loaded within the work zone. Should standing of vehicles be required on council land, appropriate approvals will be sought.

11.4 Standing of Equipment on Council Land.

It is anticipated that there will be no need to stand construction plant or equipment on Council Property for most of the project duration. However, as the project develops, and available space is reduced there may be a need to stand some plant within Council land. If this is the case the then the necessary approvals to do so will be procured from the Randwick City Council. Such examples include:

- Dismantling of Materials Hoisting Equipment
- Dismantling of Tower Cranes
- Removal of Site Hoardings

11.5 Proposed road closures, temporary traffic routes and loss of pedestrian paths.

As noted above, the site establishment plan has been developed to ensure that generally standing of vehicles on public property is not required. All works, and vehicles will be contained within the site fencing line / boundary line. Given this, no semi-permanent closure of roads or pedestrian paths are required for the primary development.

The following work activities may result in a short-term road closure or footpath closure. These will need to be confirmed as the design is finalised and await authority advice and advice from the relevant trade contractors:

- Construction of temporary and permanent laybacks and footpaths.
- Infrastructure services connections to the site. e.g. incoming high voltage power, sewer, telephone lines etc

Should any closures be required relevant authority paperwork will be submitted, including traffic control plans. From this any required conditions will then be put in place.

11.6 Emergency Access

Access to the construction area by emergency vehicles will always be available via the construction gates whilst the site is operational.

12.0 CONSTRUCTION WASTE MANAGEMENT

Refer to ***Appendix D*** for the detailed Waste Management Plan (WMP).

For Excavation Waste, excavated materials shall be reused on the site wherever possible. Any surplus materials needing to be exported from the site will be sorted into separate soil classifications and managed according to EPA requirements. Any hazardous materials identified will be disposed of in accordance with statutory and EPA requirements.

For Primary Building Elements, they will be prefabricated offsite in order to reduce waste and increase construction efficiency.

For Site Generated Waste, it shall be sorted into relevant bins located within the site prior to being collected by a licensed waste removal company/contractor.

13.0 CONSTRUCTION NOISE MANAGEMENT

A Noise and Vibration Management Plan will be prepared by the acoustic consultant and head contractor once the project's design has been sufficiently detailed.

This summary assessment has been carried out based on assumptions i.e. the types of equipment which would typically be used on similar projects. These typical sources of noise may be effectively controlled via:

- Appropriate hoardings around the site and strategically locating noisy items of plant away from sensitive receivers
- Strategic use of acoustic curtains for potential sensitive receivers. Once the SCH Stage 1 and the CCCC becomes operational, anticipated to be during the façade and fit out phase of UNSW HTH additional acoustic screens / baffles will be reviewed to assist as effective controls to contain noise nuisance.
- Selection of quieter construction methods wherever possible and appropriate, particularly for piling works
- Selection of low vibration construction work methods wherever possible and appropriate
- Vibration monitoring and management controls for nearby operating theatres.
- Coordination with the Hospitals and their relevant stakeholders / neighbours to minimise disruption wherever possible.
- Noise monitoring as required.

14.0 CONSTRUCTION NUISANCE MITIGATION MEASURES

The development site currently has many and varied neighbouring properties and as such mitigation measures will be adopted.

Adequate measures as nominated below are commonly implemented for sound Health and Safety reasons as well as nuisance prevention, thus in summary mitigation measures are as noted below.

Implementation of these measures shall be the responsibility of the Main Contractor.

Concerns	Mitigation Measure
1. Noise works e.g. rock hammering	◥ Construction equipment may be fitted with noise mitigation equipment where possible and reasonable. ◥ Noisy work will be identified and communicated to relevant stakeholders and neighbours, giving them sufficient notice. ◥ Noisy equipment to be located further away from the direction of closest sensitive receiver wherever possible.
2. Dust	◥ Appropriate site fencing and hoardings will be provided around the site. ◥ Ensure construction vehicles have been appropriately cleaned before exiting the site. ◥ Ensure sufficient wetting-down is completed during excavation activities. ◥ Ensure stockpiles are sufficiently protected and covered.
3. Hazardous materials being encountered	◥ Hazardous materials survey conducted prior to works commencing on site. ◥ Unexpected finds protocol will be implemented in the event of an unexpected find. ◥ Appropriately licenced contractors engaged to remove any hazardous materials found. ◥ Appropriate signage and exclusion zones maintained during applicable works if encountered.
4. Sediment run-off entering the storm water system or surrounding streets	◥ Follow prescribed sedimentation and erosion control measures as provided by the Civil Engineer. ◥ Conduct regular visual inspections of silt socks and all other sedimentation controls to ensure integrity of the systems are always maintained. ◥ Provide dedicated wash-out facilities for use by relevant Subcontractors.
5. Unauthorised entry to Site	◥ Appropriate site fencing and hoardings will be provided which separate all construction activities from the public. ◥ Signage appropriately placed to warn of hazards.
6. Vibration during excavation, piling and structural works	◥ Maximise use of bored piles rather than driven piles. ◥ Saw cut rock where feasible to minimise rock breaking equipment. ◥ Applicable works will be identified and communicated to relevant stakeholders and neighbours giving them sufficient notice.
7. Construction vehicles, plant and equipment on public roads (arriving / leaving the site)	◥ Traffic controllers to manage construction vehicle movements to/from the site as required. ◥ Safe public access routes to be pre-agreed and maintained.

	◥ Site plan and access diagrams provided to delivery drivers before reaching site, to minimise the time spent on public roadways surrounding the site.
8. Site personnel behaviour both inside and external of the site (e.g. language, rubbish left on streets, interaction with neighbours)	◥ Site inductions will include site requirements. These will include no inappropriate language, no throwing rubbish on streets, parking of vehicles legally and the requirement to wear appropriate clothing at all times etc. ◥ Weekly toolbox talks will reinforce requirements. ◥ Daily check of surrounding streets.

Appendix A – Site Establishment, Access, Material Handling Plan

Site Compound Establishment

The project will have a project office, meeting rooms, site amenities & storage facilities. All major site functions will be controlled from within this space, including all required site inductions that also are to be conducted within the site compound.

As the contractors will need to go through the standard security checks prior to coming on site, the team will conduct all inductions & checks of SWMS prior to any contractor commencing on site in accordance with the Buildcorp Contracting New South Wales (BCNSW) Safety system.

Site Access

Site access is via multiple secure gates.

Gates and access points may vary as the different construction stages are completed.

Heavy vehicle traffic is expected through the excavation, structure and façade enclosure stages.

Material Storage

The way that materials come to site will also play a part in the speed of constructing the project. All materials must come to site packaged - for example, bulk materials i.e. bricks will need to be in pallets wrapped in safety plastic to allow the quick loading & unloading.

The site will have dedicated lifting zones for materials going directly into the buildings. It will also have dedicated storage zones for materials being delivered prior to lifting into the building.

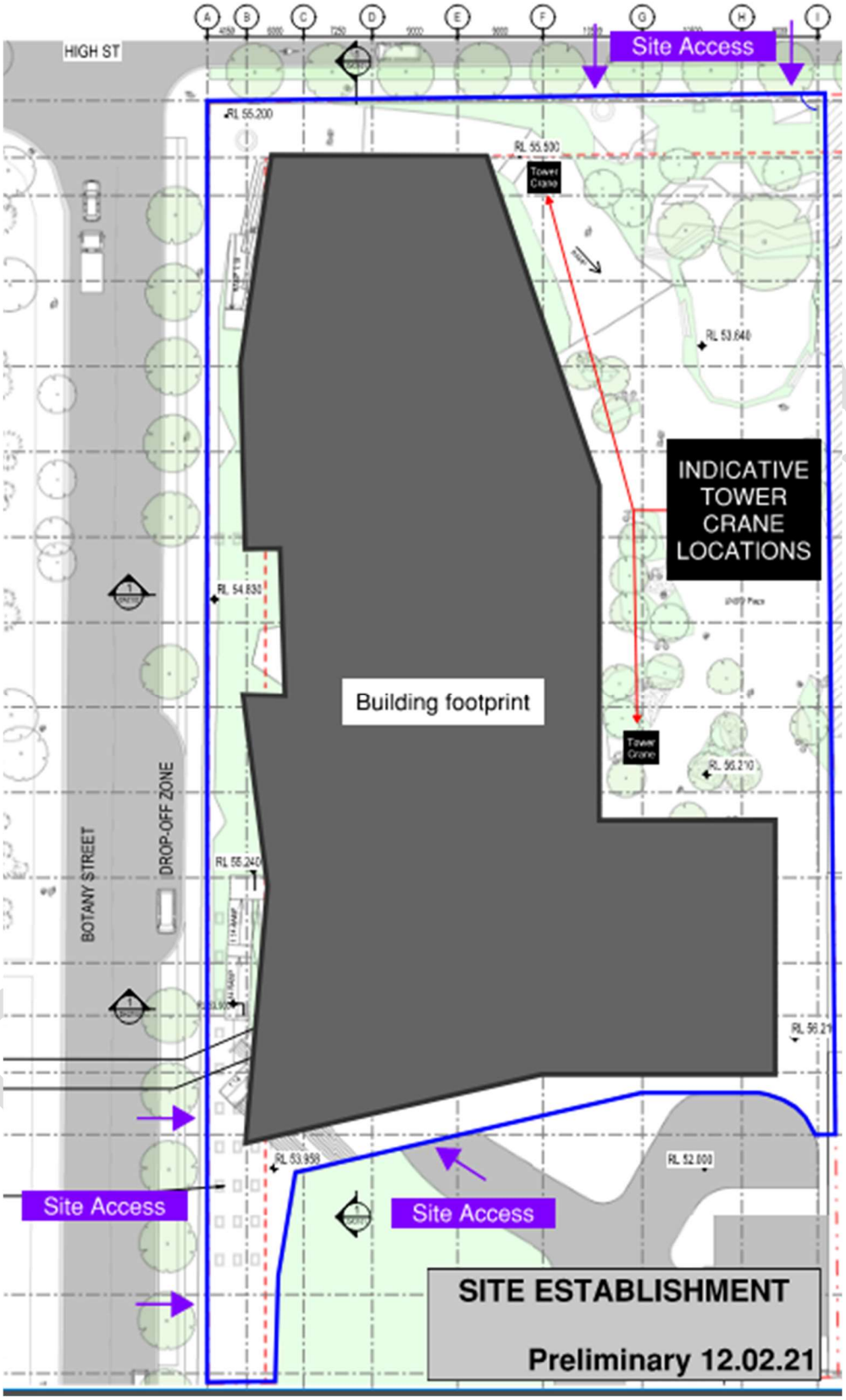
Materials Handling

Cranes;
The predominant material handling and vertical lifting for the project shall be via the Tower Cranes and mobile cranes located around the site. Cranes will vary in size and boom length as required to perform their ultimate lifting capacity functions, however coordination of the cranes shall occur via computer software-controlled systems to ensure at no time are there risks of striking each other.

All Wheel Drive Forklifts;
Where materials are requiring unloading and loading onto trucks, as well as moving horizontally across the site, these functions shall predominantly occur with the use of forklifts.

Material Hoists;
Various materials also shall be moved to the required levels of the building via the use of material hoists. Typically, these materials are not suited to lifting via the sites tower cranes.

Hoist access will also be available directly via the basement to the Jumpform hoist and the personnel and materials hoist.


HIGH ST
Site Access
RL 55.200
RL 55.530
Tower Crane
RL 53.640
INDICATIVE TOWER CRANE LOCATIONS
RL 54.830
Building footprint
Tower Crane
RL 56.210
BOTANY STREET
DROP-OFF ZONE
RL 55.240
RL 56.21
RL 53.958
RL 52.000
Site Access
Site Access
SITE ESTABLISHMENT
Preliminary 12.02.21

Appendix B – Sediment Control Plan

Introduction

Purpose

This Stormwater and Sediment Control Plans describe how Buildcorp proposes to manage stormwater, prevent erosion, control sediment and prevent pollution.

Scope

This plan describes the stormwater and sediment control aspects of the project, which will need to be managed to achieve the desired outcomes, within the constraints imposed by legislative, regulatory and contractual requirements, so that the desired outcomes are achieved.

Objectives

To prevent contamination of, or damage to, stormwater drains and waterways and ensure sediment from the building site is retained on-site during construction work.

Project Site

The project site is identified in the forward section of this report.

Project Description

The project proposes the construction of the UNSW HTH as detailed in the forward sections of this report.

Site Specific Details

The construction site is located on the corner of Botany and High St Randwick, NSW as detailed in the forward sections of this report.

Operational Controls

- Stormwater shall be prevented from entering adjoining properties or into the sewerage system.
- Stormwater shall be captured and filtered in sediment control points before entering the legal point of discharge from the site.
- Rumble grids shall be cleaned daily with consideration given to water saving measures including recycling. Water run-off from cleaning the grid must be filtered prior to entering the legal point of discharge from the site.
- Stockpiles shall be located away from drainage lines and street drains and gutters. Where possible, stockpiles shall be located on the highest part of the site clear of main activity areas.
- Designated truck/vehicle/ equipment wash down areas shall be located near the site entrance and be designed to capture and treat water prior to discharge into the stormwater system. A water recycling system shall be installed if wash down areas exceed 3,000 litres per day.
- Wherever possible, natural vegetation shall be retained to absorb water flows and to minimise dust. Revegetation shall occur as soon as possible after the completion of works
- Natural rainwater run-off shall be controlled to prevent sediment draining into the stormwater system. Upslope water shall be diverted to prevent it from travelling through the site. Downpipes shall be connected as soon as a roof is installed on the site. Natural falls of the site shall be identified and sediment filters such as straw bales filters, gravel surface barriers, sandbags, pit baskets or geo-textile mesh screens shall be installed at runoff points.
- Sediment shall be trapped and controlled prior to leaving the site boundary.
- Straw bales/geo-textile mesh screens shall be inspected and replaced on a regular basis, so they remain effective.

- Sediment traps or filters shall be placed around any drain affected by construction works to prevent sediment entering the stormwater system. Sediment controls shall be checked regularly to ensure they are in place and operating properly. Additional inspections shall be undertaken immediately following or during heavy rain (10mm of more rainfall event) to confirm the operational adequacy of the facilities.
- Water shall not be discharged to the stormwater system if oil is visible on the surface, or if there is reason to suspect that the pit is contaminated with fuel, sewage or other contaminants. In this case the water shall be taken away to an oil separation facility (such as Lidcombe Liquid Waste Facility).
- Waste material, including liquid wastes such as paint, concrete slurries and chemicals, will not be discharged into a stormwater drain. Facilities shall be provided to enable paint brushes, rollers and spray equipment to be cleaned without any discharge of by-product into the stormwater system. Where possible, a depression or earth dam below brick, concrete or tile cutting shall be constructed. If this is not possible, site water shall be passed through a filtered pit.
- Buildcorp will monitor discharge from the sediment trap during design rain events (up to 5ear ARI) to ensure only visibly clean water is discharged from site. Additional measures such as the addition of flocculants to the sediment trap may be employed if necessary.
- Wastewaters which are still “dirty” or contaminated will not be discharged to stormwater systems, but instead collected and properly disposed.

Water Saving Measures

Permanent water saving measures shall be used on site. These include:

- All hoses must be in good condition and fitted with a trigger nozzle.
- A high-pressure water cleaning unit is to be used for all washdown activities.
- Where infrastructure is available the use of recycled water for washdown activities is to be used.

Appendix C – Construction Traffic Management Plan

During the construction of the proposed Project, Buildcorp shall engage the services of specialist Traffic Control Operators to ensure traffic and pedestrian flow is managed to the highest standards and with the utmost focus on safety. Buildcorp will allocate traffic controllers where required to direct all construction deliveries and to communicate changes to traffic conditions to the users of the precinct. All traffic control personnel will be certified as required.

Care will be taken to minimise any damage to the surrounding roads as a result of construction activity.

Public Safety and Security

Safety of the public is the highest priority. In order to reduce the safety risks to public, all potential risks need to be identified and eliminated or controlled. In summary, practices that will be initiated for this project to assist with public safety will include:

- Hoardings to the perimeter of the site to be used to eliminate the chance of public gaining access and to reduce the visual impact of the construction works.
- Gates to the sites will always be monitored by appropriate staff.
- Each entry point will be carefully signposted and monitored to reduce accidental public access. Refer to attached site establishment plan.
- Daily monitoring of all public access ways and repair if required as a result of construction activities will be conducted.
- Surrounding access paths will be cleaned daily in order to reduce the occurrence of slip risk.
- A clearly defined traffic management plan will be implemented to ensure all motor vehicle movements to and from the site as a result of construction activities, do not impede on the operations of the parking of the general public.
- With the public's safety as our primary concern we will ensure licensed traffic controllers and the traffic management plan is approved by Buildcorp Contracting NSW management and is implemented.

Traffic Control Personnel

- Traffic control personnel and equipment will be established as required for the safe and effective control of traffic and pedestrians at all Gates leading into and from the site that interface with public space.
- Traffic control personnel will set-up roadside signage and equipment at the various locations specified and in accordance with guidelines stipulated by MUTCD.

Statement of Quality Assurance Compliance

Traffic Management:

- Will be conducted in a professional manner to minimise delays to reduce inconvenience to the public by authorised traffic controllers.
- Will maintain the traffic control equipment as required for the safe and effective control of traffic for the duration of the roadwork.

References

- Australian Standard AS 1742.3 - 1996
- MUTCD – Manual of Uniform Traffic Control Devices – Part 3
- Traffic Management Plan

Ingress and Egress of Vehicles to the Site

Traffic routes are to be utilised as the road network allows. The Gates provided on Botany and High Streets will ensure all vehicles can always fully enter the site and not remain standing on public land. Area will be provided inside the site and inside the work zone for vehicles requiring assistance unloading via any of the site material handling equipment.

Deliveries directly to the basement will be managed utilising the Acute Services Building access road or a secondary vehicle access road.

Management of Loading and Unloading of Materials

Loading and unloading of materials shall occur in nominated work zone in Botany Street and in the "Delivery and Set- Down Zones within the site.

Given all materials set downs and deliveries are to be fully contained within the work zone or the site and coordinated by the Project Supervisors, it is not anticipated that delays to surrounding public vehicular traffic or pedestrian movements should occur.

Where any activities are anticipated to affect normal vehicular and/or pedestrian movement, appropriate traffic management shall be provided. Appropriate notification shall be provided for any large or significant deliveries which may result in disruptions.

Numbers, Timing and Frequency of Vehicles Accessing the Site

The number of vehicles entering the site is to be restricted to deliveries wherever possible.

The anticipated number of vehicular access into the site is detailed in the Transport Impact Assessment.

Management Responsibility for Traffic Control

It is the responsibility of the senior traffic controller or nominated person on site to ensure that all traffic control equipment and its allocation is in accordance with the contract specifications and guidelines.

If required, Traffic delays will be kept to an "absolute maximum" of fifteen (15) minutes (as per MUTCD guidelines) for any single vehicle. Routine work delays to traffic flow shall be targeted to no more than sixty (60) seconds.

Any traffic delays shall be monitored on a regular daily basis and reported to the Site Supervisor. Areas of work under traffic control shall be programmed to achieve these times and other safety requirements. Any specified lengths of work under traffic shall be nominal distances only.

Queue congestion at closures will be monitored to ensure that any intersection and/or roundabout are not blocked at any time during the program unless unavoidable. Traffic Controllers and signage will direct traffic through the closure to ensure this is enforced and maintained.

Responsibility and Authority

Appropriately qualified personnel will undertake direct traffic control. The minimum qualification shall be a current Traffic Controllers' ticket and General Safety (Blue Card) Induction Card. Traffic Controller's will be responsible for ensuring traffic is not unduly delayed and that safety of the general public and workers on site is maintained.

Each traffic controller is required to take corrective action and notify the Site Supervisor if a problem occurs. The relevant parties will communicate via two-way radio, mobile telephone or direct oral communication.

The Traffic Controller's on site, in consultation with Buildcorp Contracting NSW representative, will be responsible for the control of traffic.

The Traffic Management Plan is to be signed off by the representative prior to commencement of the project.

Personnel on-site will rectify any Non-Conformances immediately and the Operations Manager will respond to all necessary reports.

Selection of Site Traffic Control Modes.

The following factors have been considered in selecting the appropriate site control modes:

- Minimising hazard risk to the public and workers on site:
- Minimising interaction between public traffic and work-site pedestrian / construction vehicles.
- Minimising traffic delays as specified in the Traffic Control at Worksites - 1998.
- Minimising the occurrence of any traffic stoppages.

Specific Traffic Control Modes.

At the location/s outlined in the job specification, the traffic will be controlled by: -

- Traffic Controllers will maintain road/lane closures on the sections that are indicated as per Traffic Control Plan and/or contract details.
- A Buildcorp Contracting NSW representative prior to the commencement of any road/lane closures will complete any applicable application for Road Occupancy/Closure [if applicable] and all other relevant permits for closures.
- Buildcorp Contracting NSW – Traffic Control Plans / Traffic Management Plan.

Public Notification

Notification will be by way of signage approved and installed by Buildcorp Contracting NSW. Where appropriate written communication with surrounding residents may be utilised to notify of any major planned changes to traffic.

Time Restrictions

Shall be implemented as per Development Consent conditions.

Equipment List

Traffic Controller control personnel as required.

All signage and equipment as required and as specified in the detailed Traffic Control Plans developed and approved for various scenarios.

Pedestrians flow

- Main pedestrian access shall be segregated from the vehicle entry points to the site.
- Pedestrians will be required to follow the same directions/detour as vehicles.
- No unauthorised personnel shall be allowed within the construction zone.
- All personnel (including authorised visitors) on site shall be required to wear as a minimum safety boots, hard hats and high visibility safety vests.

Appendix D – Waste Management Plan

Level 4, 10 Mallett Street
Camperdown NSW 2150
Phone: 02 9565 0000

Construction Waste Management Plan

UNSW Health Translation Hub

Corner of High Street and Botany Street,
Randwick

Approved by:

Manager	**Date**
Mike Currie	14 February 2020

Record of revisions of HSE Waste Management Plan

Edition Revision	**Date**	**Page**	**By**	**Revision Details**
A	09 December 2020	First issue		Preliminary Issue

Introduction

This Waste Management Plan outlines Buildcorp's strategy to minimise the generation of waste, maximise reuse and recycling and ensure waste is disposed of at a licensed EPA waste disposal facility.

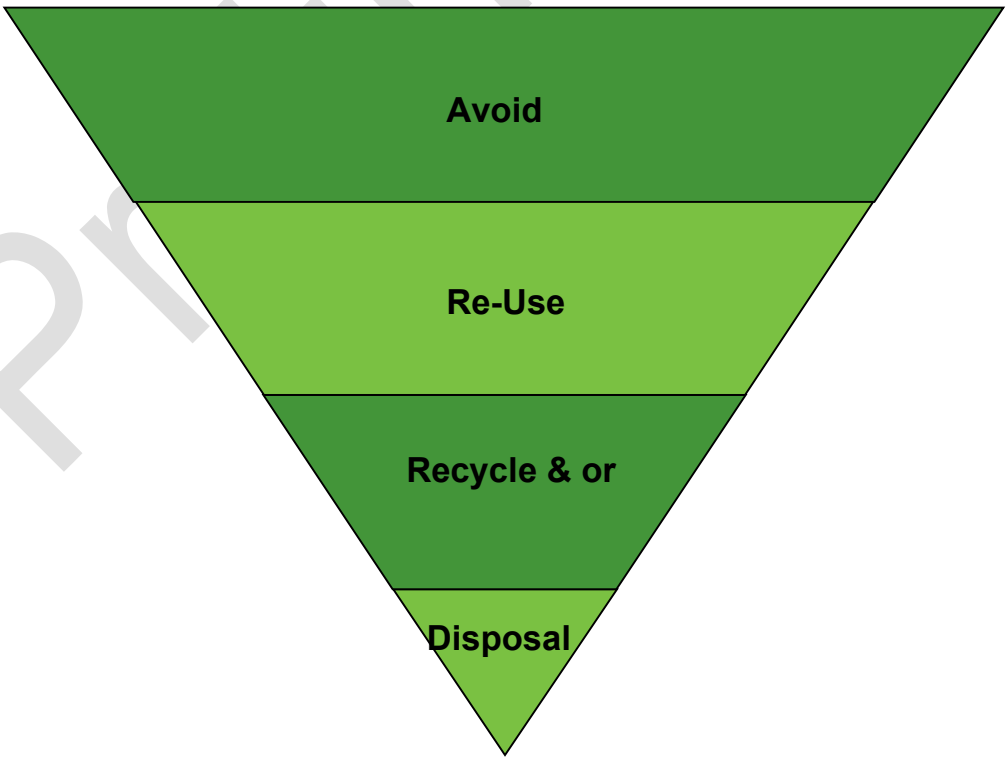
The purpose of this plan is to:

- Establish the specific procedures to ensure waste generated by project activities are minimised and waste is appropriately recycled.
- Provide a consistent and uniform approach that assures the required standards relating to waste are attained and maintained for the project works to achieve minimum recycling / reuse target of 80% of waste by weight minimising the amount of waste going to landfill.
- Establish waste management strategies for the construction stages from demolition, building construction through to commissioning.
- Establish provision for on-site monitoring of wastes generated with details of each material, disposal destinations (tracking) and receipts.
- Define the appropriate waste disposal measures to be undertaken for materials that pose an environmental risk such as soils, concrete, contaminated water, paints etc

Waste Management Hierarchy

Buildcorp have prioritised waste management by adopting a waste management hierarchy as follows:

1. **Avoiding Waste (**identify demolition and construction waste to minimise packaging and over ordering of materials)
2. **Re-Use Materials** (pallets and storage containers)
3. **Recycle and Reprocess Materials**
4. **Disposal of Waste**



Waste Minimisation Controls

The following controls will be implemented on site to ensure waste is minimised on the project:

- Main subcontractors are asked to submit waste minimisation details in their SWMS including the following:
    i. Avoiding over-ordering materials
    ii. Minimising the use of un-recyclable packaging materials
    iii. Reviewing with suppliers, the potential for reusable packaging, such as cloth bags, blankets, pallets or containers for materials and equipment
    iv. Buying environmentally approved and recycled-content products where possible
- Waste management training is provided as part of Site Induction, ensuring that subcontractors and site visitors are aware of the materials on-site (in particular any hazardous wastes) and waste disposal requirements.
- Buildcorp will utilise the services of a Waste Sub-Contractor whose facilities and waste procedures have been audited by our sustainability management team for stringency and accuracy. They should need also meet the following requirements:
    i. Be appropriately licensed under the POEO Act (1997) and associated regulations to transport, store, recycle, reprocess and/or dispose of wastes removed from the site.
    ii. Provide waste containers and transport vehicles suitable for storage and carriage of waste types to be generated at the site.
    iii. Can provide EPA licenses of the appropriate landfills that are licensed to accept the waste which is generated on site
    iv. Provide accurate written documentation including tracking documentation and disposal receipts to Buildcorp in a prompt manner following the disposal of waste from the site to comply with regulatory and Buildcorp contract requirements.
    v. Remove and transport all waste for disposal to a facility lawfully able to accept the waste.
    vi. Securely load and cover all vehicles/bins and containing waste prior to exit from the site to minimise the risk of waste spillage, dust generation etc during transport.
    vii. Facilitate recycling of appropriate materials.
- Prior to commencing work on site project personnel (including subcontractors) are to be informed through the site induction process of the importance of waste, recycling, spills or incident impacts on the site and adjacent areas. Site supervisors are to discuss waste management issues at toolbox and other meetings as required.
- All work areas are to be maintained in a clean and tidy manner. A weekly (or more frequent if required) sweep of the entire site will be completed by the contractor to remove loose waste and/or litter present within the site to appropriate waste/recycling storage facilities in the loading dock.
- Daily inspections are to be conducted to ensure that the worksite is left in a rubbish-free state and that no rubbish has been trapped against site fencing
- Regular management audits are to be carried out to ensure that the Waste Management Plan is being adhered to.

Waste Management

The table below represents the expected waste types that will be generated during the works and describes how each will be managed on-site, collected and the waste management outcome ranked from the most to least preferred.

Waste Type	Waste Management Outcome				
	Most Preferred				Least Preferred
	Avoid/Reduce	Reuse	Recycle	Recover	Treat &/or Dispose
Plasterboard			■	■	
Paper & Cardboard	■	■	■		
Steel, Scrap Metal etc…			■		
Timber		■	■	■	
Plastics and Foam	■				■
Insulation Material	■				■
Excavated Fill		■			■
Glass		■	■	■	
Concrete and Bed Mix	■				■
Residual			■		■
Hazardous					■
Food and General Waste			■		■

Notes;

1. Waste is collected in "general construction waste" bins and is sorted at a resource recovery facility using mechanical and manual sorting techniques that remove wastes such as plasterboard, timber, metal, cardboard and plastic for recycling.
2. Residual waste refers to construction waste other than those listed as a waste type.
3. Waste Management Definitions:
   - *Re-use,* means the activity of using waste materials in their current form (i.e. not altering their chemical or physical state)
   - *Recycling,* means the activity of processing waste materials to form new products
   - *Recovery*, means the activity of processing waste materials for the purpose of recovering energy (e.g. incineration)
   - *Disposal,* means the activity of depositing waste materials in landfill

Demolition

The site has been cleared under an early works package. Minor demolition works are required to the C27 Wallace Wurth Building façade for the connection of the pedestrian link bridge.

Excavation Fill Material

Any fill materials identified requiring excavation within the site footprint should be reused, where suitable, on the site as part of the site engineering or landscaping work. Excess or contaminated excavation fill is to be removed off site and classified in accordance with relevant guidelines. To ensure the fill is being taken to the correct landfill the subcontractor transporting the waste should provide details of the landfill site, the EPA licence details and confirmation that landfill is authorised to receive that waste. Trucking docket records are to be kept on site to check that fill is going to the nominated landfills.

Construction Waste

The construction waste generated on site is to be placed as follows;

- in mixed waste skip bins, meaning that all waste is deposited in the one skip bin and segregation into the appropriate waste streams occurs offsite.

- Where site room allows and subject to waste type and quantity. It will be sorted into the appropriate waste bins, removed and where applicable recycled off site by the waste generating contractor.

Food and general waste

Food scrap/ general waste bins are provided in the vicinity of site offices and amenities. It is sorted into general waste, cans/bottles and paper/cardboard. Buildcorp site sheds have paper bins and printer cartridge bins (for staff to return to head office for recycling).

Hazardous Materials

Contaminated waste will be disposed of to an EPA licensed facility which is able to take the waste. Contaminated waste will be stored within designated storage areas on site. Records of disposal of the waste should be maintained with site records.

Hazardous Substances

Any subcontractors handling, using or disposing of harmful or toxic chemicals or substances are to ensure they follow appropriate manufacture requirements and legislation requirements in disposal. No chemicals or substances are to be disposed of down any drains, sewer etc on- site.

If a spillage of a hazardous substance occurs staff are appropriately trained in spill kit procedures to clean up spills immediately. Spill kits are located adjacent to the areas where hazardous substances are stored on site. Once the substance has been cleaned up it will then be disposed of to the appropriate EPA licensed facility. Records of disposal and the clean up methods of the spill are to be maintained with site records.

Wastewater/Wash Out Areas

Wash out facilities for finishing trades including concrete and paint waste are to be minimised and water recycling for these activities are encouraged. If a wash out facility is utilised it will not be plumbed to any building services or drain to stormwater.

The wash out area will have sediment controls and should be clearly signposted. The location of the wash down area is shown on the sites layout plan and everyone is made aware of this location during the site induction. Refer to the Sediment control section.

The wash out area and sediment controls should be emptied of all solid residues regularly in order for it to catch wastewater. Solids which are caught by this process should be disposed of in a bin going to a licensed waste facility.

Site Management Roles and Responsibilities

To manage waste generation on site the following roles and responsibilities have been set for all contractors to follow and ensure the waste recycling targets can be met. The table below represents a summary of the waste management roles and responsibilities for the construction of the UNSW HTH development.

Responsibility	Project Task
Site Operation	
Base building management	• Ensuring that waste is segregated and collected in accordance with this Plan • Ensuring that Duty of Care documentation is obtained and maintained in the site file (e.g. copy of waste transporters licence, waste collection receipts, waste transport certificates) • Updates to the Plan and Building Management approvals • Supervising the collection of waste by the waste contractor (where practical) • Maintaining site records of waste types and approximate quantities collected from site
Waste Sorting	
All Contractors	• It is the responsibility of all contractors to be inducted into this plan and put waste into the correct bins on site for appropriate disposal off site • Contractors are to use the designated bins on site and not dispose of any materials expect within designated bins on site • Minimise the generation of wastes through appropriate behaviour on site through site measurement and ongoing management of works
Waste Collection & Management	
Waste Contractor & Buildcorp Project Manager	• Supply of bins, according to agreed approach & ongoing site requirements • Collection & disposal of waste, as agreed & according to ongoing site requirements • Weighing and sorting of all wastes generated on site for disposal off site • Ensuring that the waste collected is managed in accordance with the relevant legislation and the identified wastes are re-used, recycled or recovered
Reporting	
Buildcorp Project Administrator	• Tracking of wastes generated • Reporting of all waste data • End of Project reporting of waste data to confirm % recycled / reused and wastes to landfill • Preparation of final waste report for the site

Monitoring, Conformance and Reporting

The Buildcorp (BC) approved Waste Contractor will provide monthly recycling and waste minimisation reports. These reports are audited to ensure that we are reaching our set targets. Records of the total waste generation and disposal to landfill or recycling are retained on site by Buildcorp contractor site staff.

Any subcontractor found to be inappropriately acting will be issued with a non-conformance and rectification notice immediately by BC. The procedure for environmental non-conformances is as follows:

i. Site issue is identified
ii. BC investigates and issues a response to all subcontractors
iii. BC issues non-conformance/rectification notice to party responsible
iv. Subcontractor to clean up immediately to relevant legislative requirements
v. BC notifies external parties as required and final notice to subcontractor

Audits are to be conducted on waste generated to ensure it is being disposed of as per the procedures set out in this Waste Management Plan.