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UNSW

UNSW Health Translation Hub

SSDA Access Review – Final

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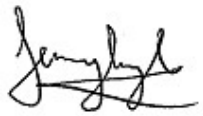

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1. Executive Summary

The Access Review Report is a key element in the design development of the UNSW Health Translation Hub (UNSW HTH) and an appropriate response to the AS1428 series, Building Code of Australia (BCA), DDA Access to Premises Standards (including DDA Access Code) and ultimately the Commonwealth Disability Discrimination Act (DDA).

Morris Goding Access Consulting has prepared the Access Report to provide advice and strategies to maximise reasonable provisions of access for people with disabilities.

The review will ensure that ingress and egress, paths of travel, circulation areas, and sanitary facilities comply with relevant statutory guidelines, and in addition, compliance with a higher level of accessibility and inclusiveness benchmarks set by the project.

2. Introduction

2.1 Introduction

This report supports a State Significant Development Application (SSDA) for the proposed UNSW Health Translation Hub (UNSW HTH) at the Randwick Hospitals Campus (RHC) 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 SSDA submission. The UNSW HTH 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.

2.2 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.

2.3 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 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.

2.4 Operating and Function of the 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.

2.5 Objectives

The Report seeks to ensure compliance with statutory requirements and enhanced benchmark requirements set by the project. The Report considers user groups, who include students, staff, and members of the public. The Report attempts to deliver equality, independence and functionality to people with a disability inclusive of:

- People with a mobility impairment (ambulant and wheelchair);
- People with a sensory impairment (hearing and vision); and
- People with a dexterity impairment

The Report seeks to provide compliance the Disability Discrimination Act 1992. In doing so, the report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

2.6 Limitations

This report is limited to the accessibility provisions of the building in general. It does not provide comment on detailed design issues, such as: internals of accessible/ambulant toilet, fit-out, lift specification, slip resistant floor finishes, door schedules, hardware and controls, glazing, luminance contrast, stair nosing, TGSIs, handrail design, signage etc. that will be included in construction documentation.

2.7 Accessibility of Design

The proposed design will utilise the Federal Disability Discrimination Act (DDA), Disability (Access to Premises – Buildings) Standards 2010, BCA/DDA Access Code, Universal Design principles, the AS 1428 Series, and other design guidelines, to develop appropriate design documentation, to provide reasonable access provisions for people with disabilities.

The design will be developed to ensure the principles of the DDA are upheld. Under the DDA, it is unlawful to discriminate against people with disabilities in the provision of appropriate access, where the approach or access to and within a premise, makes it impossible or unreasonably difficult for people with disabilities to make use of a particular service or amenity.

2.8 Statutory Requirements

The statutory and regulatory guidelines to be encompassed in the developed design to ensure effective, appropriate and safe use by all people including those with disabilities will be in accordance with:

- Federal Disability Discrimination Act (DDA);
- Disability (Access to Premises – Buildings) Standards 2010;
- Building Code of Australia (BCA) Part D3, F2, E3;
- AS 1428.1:2009 - (General Requirement for Access);
- AS 1428.4.1:2009 - (Tactile Ground Surface Indicators);
- AS 2890.6:2009 - (Parking for People with Disabilities);
- AS 1735.12:1999 - (Lift Facilities for Persons with Disabilities);

Please note that there are also additional advisory standards (not currently referenced by BCA or DDA Premises Standards) as well as other relevant guidelines that will be considered, as relevant to promote equity and dignity in line with over-arching DDA principles and aspirational objectives. These include:

- Universal Design Principles;
- Human Rights Commission (HEREOC)
- Advisory Note February 2013 on streetscape, public, outdoor areas, fixtures, fittings and furniture;
- AS1428.2:1992 Enhanced and Additional requirements;
- AS1428.4.1 Draft Way-finding Standard;
- AS3745:2010 – Planning for Emergencies in Facilities (to assist with design strategies for provision for escape for people with disability that may require assistance).

3. 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.

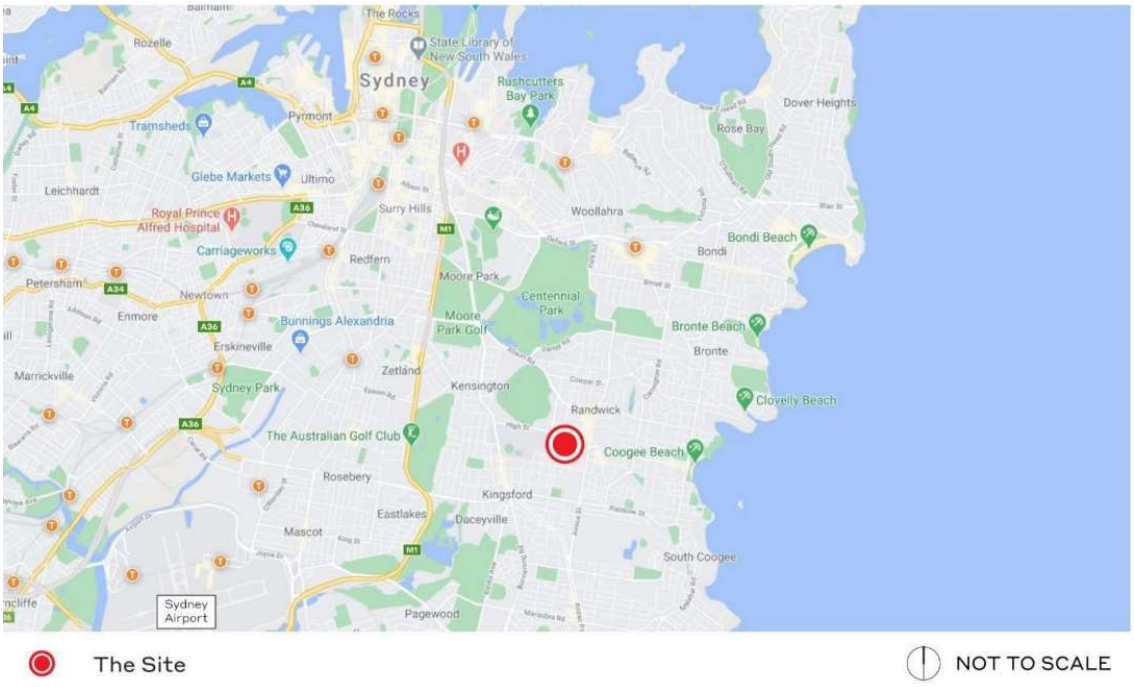

Figure 1 – Site context

Source: Google maps and Ethos Urban

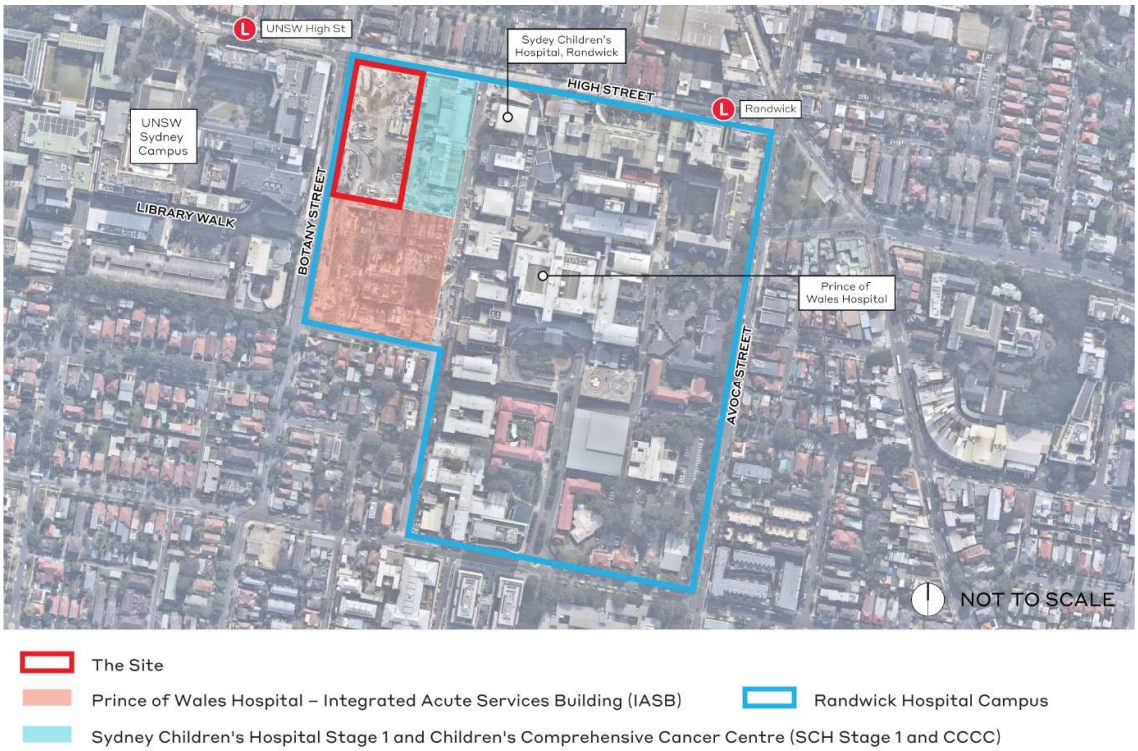

Figure 2 – Site aerial
Source: Nearmaps and Ethos Urban

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4. Secretary's Environmental Assessment Requirements

DPIE 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
Plans and Documents – The EIS must include an accessibility Report	This accessibility report has been prepared to accompany the EIS.

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5. 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
Further detailing to accessibility requirements can readily be incorporated at Crown Certificate stage

6. General Access Planning Considerations

The Disability Discrimination Act 1992 (DDA) is a legislative law that protects the rights of all people. The Act makes disability discrimination unlawful and promotes equal rights, equal opportunity and equal access for people with disabilities. The Australian Human Right Commission is the governing body who control and enforce DDA compliance.

Nevertheless, building elements that provide insufficient accessible provisions for people with disabilities remain subject to the DDA. The improvement of non-compliant building elements and areas to meet current access requirements will mitigate the risk of a DDA complaint be made against the building owner.

Since the 1st May 2011, the Commonwealth's Disability (Access to Premises – Buildings) Standards 2010 (DDA Premises Standards) apply to all new building works and to affected parts of existing buildings.

The DDA Premises Standards' requirements (DDA Access Code) are mirrored in the access provisions of the BCA. New building work and affected parts must comply with the DDA Premises Standards and AS1428.1-2009 in the same manner as they would comply with the BCA by meeting deemed-to-satisfy provisions or by adopting an alternative solution that achieves the relevant performance requirements.

By utilizing AS 1428 suite of Standards, the overall aim is to provide continuous accessible paths of travel to connect the proposed development to and through public domain areas and between associated accessible buildings in accordance with the DDA Access Code.

MGAC supports the use and consideration of universal design (UD) principles into the design to maximize access for all people. We will assist the design team to incorporate UD principles where possible within the project, while still meeting mandatory compliance requirements.

Universal design principles consider the needs of a broad range of people including older people, families with children and pushing prams, people from other cultures and language groups, visitors in transit and people with disability. By considering the diversity of users, the design will embed access into and within it, so that benefits can be maximized, without adding on specialized 'accessible' features that can be costly, visually unappealing and may perpetuate exclusion and potential stigma.

The seven key Universal design principles to consider in the on-going design include:

- Principle 1: Equitable Use
- Principle 2: Flexibility in Use
- Principle 3: Simple and Intuitive Use
- Principle 4: Perceptible Information
- Principle 5: Tolerance for Error
- Principle 6: Low Physical Effort
- Principle 7: Size and Space for Approach and use

7. Ingress & Egress

7.1 External Linkages

The BCA and DDA Premises Standards contain requirements for site approaches for the use of persons with disabilities. These requirements can be summarised as follows:

- An accessible path of travel from main pedestrian entry points at the site allotment boundary to all building entrances compliant with AS1428.1:2009.
- An accessible path of travel between buildings (or parts of buildings) that are connected by a pedestrian linkage, within the site allotment boundary, compliant with AS1428.1:2009 is also required.
- An accessible path of travel to building entrances (required to be accessible) from associated accessible car-parking bays, compliant with AS1428.1:2009 is required.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

There are two main access points to the site from Botany Street. The south eastern entry consists of a stair with adjacent ramp providing access to the main entry door from the Botany Street pedestrian footpath. The stair has provision for handrails that will not interfere with the surrounding circulation paths of travel compliant with AS1428.1. The adjacent ramp has provision for landings and handrails that comply with AS1428.1. TGSIs are achievable at the top and bottom landings of both the stair and ramp compliant with AS1428.4.1.

The north eastern entry consists of a stair with adjacent ramp providing access to the main entry door from the Botany Street pedestrian footpath. The stair has provision for handrails that will not interfere with the surrounding circulation paths of travel compliant with AS1428.1. The adjacent ramp requires review to allow for compliant handrails on both sides compliant with AS1428.1. Currently the disappearing stair adjacent the ramp will interfere with the provision of compliant handrails on both sides. TGSIs are achievable at the top and bottom landings of both the stair and ramp compliant with AS1428.4.1.

The UNSW campus connection on Level 02 can achieve compliance with AS1428.1 as an accessible path of travel from the associated UNSW site.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Amendments can readily be incorporated at Crown Certificate stage to ensure compliance with relevant codes.

7.2 Entrances

The BCA and DDA Premises Standards contain requirements for building entry for the use of persons with disabilities. These requirements can be summarised as follows:

- Access through at least 50% of entrances, including the principal pedestrian entrance/s to all buildings or parts of buildings (ie. when they have a separate function and/or use eg. external retail tenancy). Note it is preferred that all entrances are accessible.

- A non-accessible entry located no more than 50m distance from an accessible entry (for buildings greater than 500m2).
- All accessible doors with 850mm min. clear width opening and suitable door circulation area, compliant with AS1428.1:2009.
- An accessible path of travel eg. ramp or lift provided adjacent (or in reasonable proximity) to any stair access. Note: providing choice of access route directly adjacent so that people can start and finish in the same location/travel similar route promotes inclusion and UD principles.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

All entrances to the building have level thresholds and automatic sliding doors that can achieve the required 850mm clear width compliant with AS1428.1 and the DDA Premises Standards.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Amendments can readily be incorporated at Crown Certificate stage to ensure compliance with relevant codes.

7.3 Emergency Egress

BCA 2016 Part D2.17 has requirements for all fire-isolated egress stairs from areas required to be accessible (not communication stairs) to include at least one continuous handrail designed to be compliant with AS1428.1 Clause 12. Provision of an off-set tread at the base of stair flights or an extended mid-landing that will allow a 300mm extension clear of egress route is considered appropriate for achieving a consistent height handrail (without vertical or raked sections). Such an off-set tread configuration has not been shown at the egress stairs and needs to be incorporated to ensure consistent height handrails are achievable.

Where fire-isolated egress stairs will also be used for communication stair purposes between levels, they should be designed to meet AS1428.1:2009. Confirmation is required on the likely use of certain stairs for this purpose.

There is currently no mandatory requirement within BCA or DDA Premises Standards for provision of independent accessible egress for people with a disability in accordance AS1428.1 and this remains an important DDA issue. Consideration of an accessible egress strategy with emergency evacuation plan will be needed as a minimum starting point.

Consideration of management systems and fire wardens for emergency egress for people with disabilities.

8. Paths of Travel

8.1 Circulation Areas

The BCA and DDA Premises Standards contain requirements for circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Wheelchair passing bays (1800mm width x 2000 length) when a direct line of sight is not available and are to be provided at 20m max. intervals along access-ways.
- Turning spaces (at least 1540mm W x 2070mm L) within 2m of every corridor end and at 20m.max intervals along all access-ways. This is needed for wheelchairs to make a 180 degree turn, compliant with AS1428.1:2009.
- All common-use doors (ie. not excluded under Part D3.4) with 850mm min. clear width opening (each active door leaf) and suitable door circulation area, compliant with AS1428.1:2009.
- All common-use corridors and accessible paths of travel with at least 1000mm min. width when travelling in linear direction Note: Increased clear width paths of travel required for doorway circulation, turning areas etc.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

In general, all accessible paths of travel have sufficient clear width that will allow wheelchair users to turn 180° or pass wheelchair users travelling in the opposite direction. Turning bays and passing bays are provided where necessary under the DDA Premises Standards and the BCA.

A majority of common use doors have sufficient 850mm clear width and appropriate door circulation to comply with AS1428.1. Accessible toilets on the upper floors require review to ensure sufficient latch side clearance to comply with AS1428.1 Fig. 31.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Amendments can readily be incorporated at Crown Certificate stage to ensure compliance with relevant codes.

8.2 Passenger Lifts

The BCA and DDA Premises Standards contain requirements for passenger lifts and circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Passenger lifts with min. internal size at floor of 1400mm width x 1600mm depth, compliant with BCA/DDA Access Code Part E3.6 and AS1735.12.
- All lift lobbies and main corridors on each level with 1800mm min. clear width to allow two wheelchairs ability to space pass each other.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

The lift cores show sufficient internal dimensions to accommodate a lift that complies with DDA Premises Standards/BCA Part E3.6. All lift lobbies show sufficient circulation space to allow two wheelchair users to pass each other.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Amendments can readily be incorporated at Crown Certificate stage to ensure compliance with relevant codes.

8.3 Stairs & Ramps

The BCA and DDA Premises Standards contain requirements for stairs and ramps for the use of persons with disabilities. These requirements can be summarised as follows:

- Ramps maximum 1:14 gradient with landings at no more than 9 metre intervals
- Ramps with handrails on both sides with minimum 1 metre clearance in accordance with AS1428.1
- Landings 1200mm length with 1500mm length at 90 degree turns
- Stairs handrails on both sides in accordance with AS1428.1
- Stairs and ramps with offset to ensure no encroachment of handrail extensions into from transverse path of travel at top and bottom of stair/ramp

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

The external ramps on the ground floor can achieve compliance with AS1428.1 with further detailing of handrails, landings and TGSIs as assessed in section 7.1 of this report.

The ramp to the bike room appears to be able to achieve compliance all the requirements of AS1428.1 including handrails on both sides, landings at max. 9m intervals and TGSIs at the top and bottom.

The external leading to UNSW Plaza from the High Street site boundary requires further detail to ensure appropriate gradients, landings and edge details.

The external stairs on the ground floor can achieve compliance with AS1428.1 with further detailing of handrails, landings and TGSIs as assessed in section 7.1 of this report.

The atrium stair running from ground floor to level 3 has provision for handrails on both sides compliant with AS1428.1 and TGSIs at top and bottom landings compliant with AS1428.4.1.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Amendments can readily be incorporated at Crown Certificate stage to ensure compliance with relevant codes.

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9. Facilities & Amenities

9.1 Sanitary Facilities

The BCA and DDA Premises Standards contain requirements for sanitary facilities suitable for the use of persons with disabilities. These requirements can be summarised as follows:

- For Class 5, 9b: At least 1 unisex accessible toilet, adjacent to every bank of toilets (where provided) on each storey, compliant with AS1428.1 under BCA/DDA Access Code part F2.4. If more than 1 toilet bank provided on each level, accessible toilet is required at 50% min. of toilet banks at each level.
- For Class 9b: If common-use change facilities provided (ie. both toilets and showers) a separate combined accessible WC/shower adjacent to male and female change rooms is required, compliant with AS1428.1 under BCA/DDA Access Code Part F2.4.
- An even number of left hand (LH) and right hand (RH) transfer WC pans (accessible toilets) within the building. Alternating LH/RH layouts on each subsequent level is the most appropriate and inclusive approach.
- Accessible WC with 2300mm x 1900mm around the pan with the basin to sit outside this area in accordance with AS1428.1.
- An ambulant cubicle within every standard toilet bank adjacent to an accessible toilet under DDA Access Code Part F2.4 compliant with AS1428.1:2009.

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

End of trip facilities have been provided on Basement level -01. Male, female, gender neutral and accessible facilities are being proposed. All facilities show the capability to comply with AS1428.1 including the circulation paths of travel leading to these facilities such as the entry door of the accessible toilet and the airlock of the male and female end of trip facilities. The current room sizes of these end of trip facilities show sufficient space to allow for all required circulation areas around the toilet/shower fixtures.

It is strongly recommended that all amenities provided within the male/female end of trip facilities are provided within the accessible end of trip facilities to ensure equity to all users of the building. This includes lockers, hair dryers, irons etc.

There are accessible toilets provided within the core of all levels from ground to level 14. These accessible toilets show sufficient internal dimensions to allow for appropriate circulation around the toilet pan and washbasin.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Amendments can readily be incorporated at Crown Certificate stage to ensure compliance with relevant codes.

9.2 Car Parking

The BCA and DDA Premises Standards contain requirements for parking which are applicable to this project. These requirements can be summarised as follows:

- Class 5 commercial, 9b development: 1 accessible car bay for every 100 car bays or part thereof, compliant with AS2890.6.
- Accessible car bays 2.4 metre with 2.4 metre shared area.
- All accessible car bays located near relevant lifts and/or associated building entry points to minimise distance to relevant lift and ensure accessible path of travel between these areas.
- 2.5m min. height clearance, compliant with AS2890.6 fig 2.7 over accessible car bays with 2.2 m min. vertical clearance leading to the accessible and adaptable unit car bays (Note: consideration for 2.3 or 2.4m min. height preferred for higher vans/adapted vehicles is recommended as good practice).

Assessment

MGAC has reviewed the drawings and documentation in relation to the aforementioned requirements.

The DDA Premises Standards and BCA clause D3.5(d) denotes that accessible carparking spaces need not be designated where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability. As there is a total of not more than 5 carparking spaces, this clause applies.

On the basis of the current level of detail all access requirements appear capable of achieving compliance. Amendments can readily be incorporated at Crown Certificate stage to ensure compliance with relevant codes.

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10. Conclusion

MGAC has assessed the proposed scheme for UNSW Health Translation Hub. The proposed drawings indicate that accessibility requirements, pertaining to external site linkages, building access, common area access, sanitary facilities and parking can be readily achieved. It is advised that MGAC will work with the project team as the scheme progresses to ensure appropriate outcomes are achieved in building design and external domain design.