morris goding accessibility consulting

ONE SYDNEY HARBOUR

BUILDINGS R4A, R4B AND R5

BARANGAROO SOUTH

ACCESS REPORT

FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION STAGE 1B (SSD 6964, 6965 & 6966)

Morris-Goding Accessibility Consulting

FINAL

3 February 2017

REPORT REVISIONS		
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1. PROJECT DESCRIPTION

1.1. Introduction

This report supports State Significant Development Applications SSD 6964, SSD 6965 and SSD 6966, submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act). Each Development Application (DA) seeks approval for the construction of a residential flat building (known as Residential Buildings R4A, R4B and R5 respectively) and associated works at Barangaroo South as described in the Overview of Proposed Development section of this report.

The Residential Building R4A DA seeks approval for the construction and use of a 72 storey residential flat building comprising 327 apartments, ground floor retail, the allocation of car parking, services, plant and storage within the Stage 1B Basement (subject of a separate concurrent DA), and the construction of ancillary landscaping and temporary public domain.

The Residential Building R4B DA seeks approval for the construction and use of a 60 storey residential flat building comprising 297 apartments, ground floor retail, the allocation of car parking, services, plant and storage within the Stage 1B Basement (subject of a separate concurrent DA), and the construction of ancillary landscaping and temporary public domain.

The Residential Building R5 DA seeks approval for the construction and use of a 29 storey residential flat building comprising 151 apartments, ground floor retail, the allocation of car parking, services, plant and storage within the Stage 1B Basement (subject of a separate concurrent DA), and the construction of ancillary landscaping and temporary public domain.

Approval for the construction of each Tower's core and associated plant and services within the basement is being sought as part of the concurrent Stage 1B Basement DA and do not form part of this DA.

1.2. Site Location

Barangaroo is located on the north western edge of the Sydney Central Business District, bounded by Sydney Harbour to the west and north, the historic precinct of Millers Point (for the northern half), The Rocks and the Sydney Harbour Bridge approach to the east; and bounded to the south by a range of new development dominated by large CBD commercial tenants.

Each of the three towers are located in Barangaroo South, on the land generally know and identified on the approved Concept Plan as Block 4A + 4B.

2. PROJECT REQUIREMENTS

2.1. General

Lendlease has engaged Morris-Goding Accessibility Consulting to provide an accessibility design review of One Sydney Harbour (buildings R4A, R4B & R5) in South Barangaroo as required by the Department of Planning's response to development submission.

The report examines specifically the common areas associated with classes 2 and 6 building elements in accordance with the BCA and Access Code of the Premises Standards.

The requirements of the investigation were to:

- Review supplied DA drawings of the proposed development;
- Provide a report that will analyse the provisions of disability design of the development; and
- Recommend solutions that will ensure the design complies with the Disability Discrimination Act (DDA), Building Code of Australia (BCA) and AS 1428 series.

2.2. Objectives

The report considers user groups, such as residents, staff and visitors. The Report seeks to deliver equality, independence and functionality for people with disabilities with respect to the subject development, inclusive of:

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

The Report seeks to provide compliance with the Disability Discrimination Act 1992. In doing so, the Report seeks to eliminate, as far as possible, discrimination against persons on the ground of disability and ensure, as far as practicable, that persons with disabilities have the same rights of access to premises as the rest of the community.

2.3. Referenced Standards

The following standards are to be used to implement the Report:

- BCA – Building Code of Australia 2016
- AS1428.1(2009) – (80% of people with disabilities accommodated)
- AS2890.6(2009) – Car Parking for People with a Disability
- AS1735.12(1999) – Passenger Lift Access for People with a Disability
- Disability (Access to Premises – Buildings) Standards 2010, Schedule 1 of which is known as 'DDA Access Code 2010'
- DDA – Federal Disability Discrimination Act 1992

3. INGRESS & EGRESS

3.1. Building R4A

Retail Entrances – Ground Level

Building R4A has at least two retail tenancies on the ground floor. The retail components of the subject building have a building classification of class 6. Each retail tenancy has a main entrance consisting of a double hung doorway.

The provision of an accessible main entrance into each of the two tenancies is achievable for compliance with the DDA Access Code 2010 and the BCA. Each of the main entry double hung doorways will be detailed to comply with AS1428.1(2009) during design development stage.

Recommendations:

(i) Ensure each retail main entry doorway has a minimum clear width of 850mm (920mm door leaf) between at least one leaf and jamb and level transition areas for compliance with AS1428.1(2009).

(ii) Ensure level door circulation areas for each retail entrance on both sides of the double hung doorway which shall be along a 1:40 surface, compliant with AS1428.1 – 2009.

Residential Entrance – Ground Level

Separate to the retail entrances mentioned above, Building R4A also has a residential entrance consisting of consecutive double hung doorways. The residential components of the subject building have a building classification of class 2. Under DDA Access Code 2010 / BCA 2016, the provision of an accessible main entrance that complies with AS1428.1 – 2009 is required into building R4A.

The consecutive doorways appear to form an airlock entry into building R4A's residential lobby. The first double hung doorway of the airlock faces the external domain and swing internally towards the second double hung doorway of the air lock which leads into the residential lobby on the ground floor. There is a sufficient 1560mm clearance between the consecutive door swings compliant with AS1428.1 – 2009.

Furthermore, each of the two double hung doorways can achieve sufficient door circulation spaces to accommodate wheel chair turning within the airlock and passing on either sides of the airlock entrance that are compliant with AS1428.1 – 2009

All door components can be detailed to be accessible and compliant with AS1428.1 – 2009 during design development stage.

Recommendations:

(i) Ensure each of the double hung doorways is detailed to have at least one leaf to achieve a minimum clear open width of 850mm (920mm door leaf) and level transition areas for compliance with AS1428.1 – 2009.

(ii) All door components shall be detailed to be compliant with AS1428.1 – 2009.

(iii) Ensure level door circulation areas for each of the double-hung doorway of the airlock, which is nominated to be the accessible entrance on both sides of the door which shall be along a 1:40 surface, compliant with AS1428.1 – 2009.

3.2. Building R4B

R4B Retail Entrances – Ground Level

Building R4B has at least two retail tenancies on the ground floor. The retail components of the subject building have a building classification of class 6. Each retail tenancy has a main entrance consisting of a double hung doorway.

The provision of an accessible main entrance into each of the two tenancies is achievable for compliance with the DDA Access Code 2010 and the BCA. Each of the main entry double hung doorways will be detailed to comply with AS1428.1(2009) during design development stage.

Recommendations:

(i) Ensure each retail main entry doorway has a minimum clear width of 850mm (920mm door leaf) between at least one leaf and jamb and level transition areas for compliance with AS1428.1(2009).

(ii) Ensure level door circulation areas for each retail entrance on both sides of the double hung doorway which shall be along a 1:40 surface, compliant with AS1428.1 – 2009.

Residential Entrance – Ground Level

Separate to the retail entrances mentioned above, Building R4B also has a residential entrance consisting of consecutive double hung doorways. The residential components of the subject building have a building classification of class 2. Under DDA Access Code 2010 / BCA 2016, the provision of an accessible main entrance that complies with AS1428.1 – 2009 is required into building R4B.

The consecutive doorways appear to form an airlock entry into building R4B's residential lobby. The first double hung doorway of the airlock faces the external domain and swing internally towards the second double hung doorway of the air lock which leads into the residential lobby on the ground floor. There is a sufficient 1560mm clearance between the consecutive door swings compliant with AS1428.1 – 2009.

Furthermore, each of the two double hung doorways can achieve sufficient door circulation spaces to accommodate wheel chair turning within the airlock and passing on either sides of the airlock entrance that are compliant with AS1428.1 – 2009

All door components can be detailed to be accessible and compliant with AS1428.1 – 2009 during design development stage.

Recommendations:

(i) Ensure each of the double hung doorways is detailed to have at least one leaf to achieve a minimum clear open width of 850mm (920mm door leaf) and level transition areas for compliance with AS1428.1 – 2009.

(ii) All door components shall be detailed to be compliant with AS1428.1 – 2009.

(iii) Ensure level door circulation areas for each of the double-hung doorway of the airlock, which is nominated to be the accessible entrance on both sides of the door which shall be along a 1:40 surface, compliant with AS1428.1 – 2009.

3.3. Building R5

R5 Retail Entrances – Ground Level

Building R5 has at least four retail tenancies on the ground floor with two of those tenancies having an upper floor on podium level P1. The retail components of the subject building have a building classification of class 6. Each retail tenancy has at least one entrance consisting of a double hung doorway on the ground floor.

The provision of an accessible main entrance into each of the four retail tenancies is achievable for compliance with the DDA Access Code 2010 and the BCA. Each of the main entry double hung doorways will be detailed to comply with AS1428.1(2009) during design development stage.

There is also a sliding door entry into a retail goods lift lobby on the ground floor of building R5. This sliding entry doorway will be detailed to comply with AS1428.1(2009) during design development stage.

Recommendations:

(i) Ensure each retail main entry doorway has a minimum clear width of 850mm (920mm door leaf) between at least one leaf and jamb and level transition areas for compliance with AS1428.1(2009).

(ii) Ensure the sliding entry door into retail/goods lift lobby on the ground floor achieves 850mm clear open width and level transition areas for compliance with AS1428.1(2009).

(iii) Ensure level door circulation areas for each retail entrance on both sides of the double hung doorway which shall be along a 1:40 surface, compliant with AS1428.1 – 2009.

R5 Residential Entrance – Ground Level

Separate to the retail entrances mentioned above, Building R5 also has at least two residential entrances on the ground floor. The residential components of the subject building have a building classification of class 2. Under DDA Access Code 2010 / BCA 2016, the provision of an accessible main entrance that complies with AS1428.1 – 2009 is required into building R5.

The first residential entrance consisting of three doorways is located on the north western side of R5. The first and central doorway out of the three is a revolving door leading into the residential lobby on the ground floor. A revolving doorway is considered to be inaccessible for people with disabilities in accordance section 6.1 of AS1428.1 – 2009.

Nonetheless there are single hinged doors on either sides of the central revolving door which are considered as the accessible entrance into building R5 as each hinged door can achieve compliant door clear open width and sufficient door circulation spaces on both sides of the doorway, to be compliant with AS1428.1 – 2009.

At least one of the single hinged doorways mentioned above shall be nominated as the main accessible entry into building R5 and will be detailed to comply with AS1428.1 – 2009 during design development stage.

The second residential entrance consisting of a sliding doorway is located on the eastern side of R5 on the ground floor. This sliding entry doorway will be detailed to comply with AS1428.1(2009) during design development stage.

Recommendations:

(i) Ensure at least one single hinged doorway has a minimum clear open width of 850mm (920mm door leaf) and level transition areas for compliance with AS1428.1 – 2009.

(ii) Ensure the sliding entry door into residential lift lobby on the ground floor achieves 850mm clear open width and level transition areas for compliance with AS1428.1(2009).

(iii) Ensure level door circulation areas for the single hinged doorway nominated to be the accessible entrance on both sides of the door which shall be along a 1:40 surface, compliant with AS1428.1 – 2009.

3.4. Emergency Egress – Buildings R4A, R4B & R5

There are in total 14 x fire-isolated stairways distributed across buildings R4A, R4B and R4 and in the shared basement. Out of the total 14, there are 4 x fire-isolated stairways not to be used by the occupants of the retail tenancies and the residential apartments.

Out of the 4 x stairs mentioned, there are 3 x individual fire-isolated stairways leading to their respective R4A, R4B and R5 fire-control rooms on basement level B0 from the ground floor. These 3 x individual fire-isolated stairs are intended to be used by fire-services crew during an emergency. The remaining fire-isolated stairway is located within a sub-station/pump room and is intended to be used exclusively by building services/maintenance crew.

The 4 x fire-isolated stairways mentioned above are serving areas not required to be accessible and that can also be exempt under Part D3.4 of BCA.

On the other hand, the 10 x remaining fire-isolated stairways are intended for occupants of the retail tenancies and residential apartments and are serving areas required to be accessible in accordance with the Access Code of the Premises Standards.

Out of the ten stairs mentioned above, there are 2 x fire-isolated stairways (i.e. scissor type) for each of the buildings R4A, R4B and R5 (i.e. 6 x fire-isolated stairs). The scissor stairs are located in the central core of each building's floor plate near a row of lifts. Each of the 6 x fire-isolated stairways spans between the ground floor up to the highest apartment floor of buildings R4A, R4B and R5 (i.e. upper penthouse floors).

Also each of the 6 x fire-isolated stairways discharges out to the property boundary on the ground floor via egress passageway of at least 1m clear width and an egress door which can achieve 850mm clear open width. Each of the 6x fire-isolated stairways has flights which appear to have an offset tread width at landings to accommodate at least one continuous and consistent height handrail.

However, a review is required for each of the 6 x fire-isolated stairs across the three buildings where there are stepped intermediate landings on all levels from the ground floor to the highest apartment floor. Stepped intermediate landings will likely result in an inconsistent height and/or discontinuous inner hand rail which will not satisfy Part 2.17 of the BCA.

Separate to the 6 x fire-isolated stairs mentioned above there are the remaining 4 x fire-isolated stairs on the basement floors. These 4 x fire-isolated stairs are independent of the apartment fire-isolated stairs across the three buildings from the ground floor and above. Each of the 4 x basement fire-isolated stairs connects from the lowest basement floor B4

and discharge out onto the ground floor via egress passageway of at least 1m clear width and an egress door which can achieve 850mm clear open width. Also each of the basement floor fire-isolated stairs can accommodate at least one continuous and consistent height handrail throughout its flight.

It is advised that there are only limited Deemed-to-Satisfy requirements for emergency egress for people with a disability in the BCA 2016 and the DDA Access Code 2010. All of the DTS requirements will be addressed during design development.

Recommendations:

(i) Modify all stepped intermediate landings to accommodate an offset tread width to ensure that at least one accessible continuous handrail within all fire-isolated stairs inside buildings R4A, R4B and R5, compliant with AS1428.1 Clause 12, as required under BCA 2016 part D2.17. Liaise with BCA consultant and/or PCA to satisfy BCA Part D2.17.

NB. As this requirement is called up by D2.17, (BCA/PCA domain) and not D3 (our accessibility domain) we have to take the final lead from the PCA.

(ii) Ensure all fire-isolated stairways allow for at least a 1m clear path of travel (i.e. between inner hand rail and wall) throughout the entire flight.

(iii) Ensure all required fire-isolated stairway components (i.e. stair nosing strips and at least one accessible hand rail) are provided in line with DDA Premises Standards.

(iv) Provide appropriate slip-resistant floor surfaces within all common areas with suitable minimum wet pendulum test ratings under HB198/AS4856.

(v) As a matter of accessibility best practice, as opposed to code compliance, consideration should be given for each fire door that leads to a fire-isolated stairway to have a minimum clear width of 850mm. (Advisory)

4. RETAIL PATHS OF TRAVEL

4.1. General

The retail components of buildings R4A, R4B and R5 have a building classification of class 6 and access is required to and within all areas normally used by the occupants in accordance with the Access Code of the Premises Standards.

The fit outs of the various retail tenancies on ground level and podium level P1 of buildings R4A, R4B and R5 will be subject to separate approvals to the present development application. The base-build design of all of the retail tenancies will be designed to enable the provision of continuous accessible paths that comply with AS1428.1(2009) of travel to and within those tenancy areas.

4.2. Buildings R4A & R4B

Base Build Stair – GL to P1

The base build layout of various retail tenancies on ground level of buildings R4A and R4B can allow access within each retail tenancy in line with the Access Code for a class 6 building classification.

Recommendation:

(i) If applicable, ensure appropriate slip-resistant floor surfaces within all common areas with suitable minimum wet pendulum test ratings under HB198/AS4856.12(1999).

4.3. Building R5

Base Build Stair – GL to P1

As parts of the base build there are at least 3 x communication stairways proposed throughout various retail tenancies of building R5.

The first communication stair is a scissor stair and has an intermediate landing for a turning path of travel and serves the ground and podium level P1 of south western retail tenancy. This stair needs to be modified to accommodate an offset tread at the intermediate landing to accommodate consistent height and continuous hand rails on both sides of the stair to be compliant with AS1428.1-2009.

The second communication stair also has an intermediate landing but has a linear flight and serves the ground and podium level P1 of north western retail tenancy. This stair needs to be increased in width accommodate 1m clear width between hand rails on both sides of the stair to be compliant with AS1428.1-2009.

The third communication stair has a splay along the flight and serves the split levels on the ground floor of north eastern retail tenancy. This stairway requires a review to modify the splayed layout which is inappropriate and unsafe for people with vision and mobility impairments. The splayed stair should be changed into a linear layout to reduce DDA risks or people with vision and mobility impairments. Also the top of splayed stairway needs to be offset by at least 300mm from adjacent opening to prevent handrail extension protruding into traverse path of travel, for compliance with AS1428.1 – 2009.

Recommendations:

(i) For south western retail tenancy, provide an offset tread width at the base of stair to accommodate consistent height and continuous handrails on both sides of communication stair whilst maintaining 1m clear width path of travel throughout the flight, compliant with AS1428.1 – 2009.

(ii) For north western retail tenancy, increase the width of the linear stair accommodate 1m clear width between hand rails on both sides of the stair to be compliant with AS1428.1-2009.

(iii) For north eastern retail tenancy, modify the splayed stair on ground level into a linear layout for a straight path of travel whilst maintaining 1m clear width between handrails on both sides to be appropriate for people with vision and mobility impairments. (DDA)

Base Build Lift – GL to P1

Also as part of the base build there appears to be a passenger lift proposed within northern retail tenancy of building R5 to serve between the ground and podium level P1. The lift provides a vertically continuous accessible path of travel between the split retail floors to satisfy the access code for a class 6 component of the development.

However, this lift needs to be re-oriented so a wheelchair user does not need to perform a turn on the lift car to ingress & egress out of the lift car.

Recommendations:

(i) Re-orient the lift so a wheelchair user does not need to perform a turn on the lift car to ingress & egress out of the lift car whilst ensuring the lift car's clear floor space achieves 1.1m width by 1.4m length whilst maintaining 1.8m clear depth in front of lift opening, compliant with A1735.12 and in line with the intent of the Premises Standards.

(ii) Ensure all lift components of the retail lift in building R5 meet DDA Access Code 2010 and BCA 2016 requirements and AS1735.12(1999).

4.4. Retail Goods Lifts – B2 to GL

There are at least 2 x retail goods lift serving from the basement level B2 up to the ground floor for buildings R4A and R5. Each goods lift will be for the use of retail staff and each lift is along a continuous accessible path of travel from the associated retail entrance on the ground floor.

The retail goods lift associated with building R4A provides continuous accessible vertical path of travel from the retail tenancies on the ground floor to various retail staff amenities on basement levels.

This lift needs a review to be re-oriented in a manner to accommodate a clear lift opening of at least 900mm, which faces directly on to the lobby on basement level B0. The retail goods lift is the only lift connecting down to level B0 where there is a room which appears to be an accessible sanitary facility. The accessible sanitary facility room is located along the lift lobby of level B0. Refer to section 4.5 below.

Recommendations:

(i) Re-orient the retail goods lift associated with building R4A so that a min. 900mm clear opening faces the lift lobby on basement level B0, compliant with A1735.12

and in line with the intent of the Access Code - Premises Standards for a class 6 building classification.

(ii) Ensure all lift components of the retail goods lift in building R4A meet DDA Access Code 2010 and BCA 2016 requirements and AS1735.12(1999).

4.5. Paths of Travel: Retail Back-of-House Corridors & Stores on Basement B0 to B2

In the current set of drawings, none of the rooms are labelled on the shared basement floors to determine the requirement for access to and within in accordance the Access Code the Premises Standards.

Nevertheless, there are various back-of-house retail corridors on basement levels B0 to B2 shared between three buildings R4A, R4B and R5. The back-of-house corridors will be for the use of retail staff and connect between the two goods lifts mentioned above to various retail storage rooms. All the rooms that are common to retail staff shall be designed in accordance to satisfy the intent of the Premises Standards during detailed design development stage.

By creating a sufficient lift connection down to level B0, there can be a continuous accessible path of travel from the retail tenancy associated with R4A on the ground floor to various common retail facilities on the basement floors. This is in accordance with the intent of the Access Code – Premises Standards for a class 6 building classification.

Recommendation:

(i) Ensure all the rooms common to the public on the shared basement floors between B0 and B4, are designed to be wheel chair accessible in accordance with the Access Code of the Premises Standards.

5. RESIDENTIAL PATHS OF TRAVEL

5.1. General

The residential portion of buildings R4A, R4B and R5 in the subject development has a Class 2 building classification. Under the DDA Access Code 2010 and the BCA 2016, the provision of access within the meaning of AS1428.1(2009) is required to the main entry doorway of every residential unit in a building of this classification.

5.2. Building R4A – Ground Level to Level 69

Passenger Lifts

There are a total of 6 x passenger lifts that serve building R4A. Out of the 6 x lifts there is a row of 3 x lifts located nearest to the central fire-isolated stairway that serve upto level 68, which is the lower penthouse floor. There is another row of 3 x lifts located opposite to the first row which serve between the ground level up to level 40 of building R4A.

The above passenger lifts constitute the continuous accessible paths of travel from the main accessible residential entrance on ground level to each of the residential floor levels for compliance with DDA Access Code 2010 / BCA 2016. The outline of the lift car for each of the above passenger lifts measures1.85m wide by 2.4m long which satisfies the minimum internal car dimensions in accordance with DDA Access Code 2010 / BCA 2016.

Also the lift opening for each of the 6 x passenger lifts mentioned above measure 1050mm in width, compliant with AS1735.12(1999).

Recommendation:

(i) Ensure all lift components of each passenger lift in building R4A meet DDA Access Code 2010 and BCA 2016 requirements and AS1735.12(1999).

Apartment Corridors and Lift Lobbies

There can be continuous accessible paths of travel from the residential passenger lifts to the main entry doorway of each unit in building R4A via residential lift lobbies and corridors.

Each residential lift lobby can readily accommodate 1.8m clear depth in front of each lift opening to allow two wheelchair users from opposite directions to sufficiently pass each other in accordance with in accordance with the DDA Access Code 2010 / BCA 2016. Also the residential corridors with a nominal clear width of 1600mm can readily accommodate suitable wheelchair turning bays that comply with AS1428.1(2009) at the corridor turns and ends in building R4A for compliance with the DDA Access Code 2010 / BCA 2016.

Clause D3.3 of BCA 2016 / DDA Access Code 2010 requires the provision of wheelchair passing bays that comply with AS1428.1(2009) at the points on an accessway at which there is a poor line of sight. For compliance with clause D3.3 of BCA 2016 / DDA Access Code 2010, a suitable wheelchair passing bay has been provided on common residential floor between the ground and level 69 of building R4A where there are poor lines of sight.

Recommendation:

(i) Provide appropriate slip-resistant floor surfaces along all common residential areas with suitable minimum wet pendulum test ratings under HB198/AS4856.

Communication Stairway - P2

There is a communication stairway that connects between the split levels of common facilities on podium level P2 of building R4A. This stairway requires a review to modify the splayed layout which is inappropriate and unsafe for people with vision impairments. The splayed stair should be changed into a linear layout to reduce DDA risks or people with vision and mobility impairments.

Also the base of this common stairway needs to be offset by at least 600mm from adjacent planter bed or wall to prevent handrail extensions protruding into traverse path of travel, for compliance with AS1428.1 – 2009.

Recommendations:

(i) Modify the splayed stair on podium level P2 of building R4A into a linear layout for a straight path of travel whilst maintaining 1m clear width between handrails on both sides to be appropriate for people with vision and mobility impairments. (DDA)

(ii) Offset the base of communication stair mentioned above on podium level P2 by min. 600mm to prevent handrail extension protruding into traverse path of travel, compliant with AS1428.1 – 2009.

(iii) Ensure all stair components are detailed to be compliant with AS1428.1 – 2009 during design development stage.

5.3. Building R4B – Ground Level to Level 57

Passenger Lifts

There are a total of 6 x passenger lifts that serve building R4B. Out of the 6 x lifts there is a row of 3 x lifts located nearest to the central fire-isolated stairway that serve upto level 56, which is the lower penthouse floor. There is another row of 3 x lifts located opposite to the first row which serve between the ground level up to level 32 of building R4B.

The above passenger lifts constitute the continuous accessible paths of travel from the main accessible residential entrance on ground level to each of the residential floor levels for compliance with DDA Access Code 2010 / BCA 2016. The outline of the lift car for each of the above passenger lifts measures1.85m wide by 2.4m long which satisfies the minimum internal car dimensions in accordance with DDA Access Code 2010 / BCA 2016.

Also the lift opening for each of the 6 x passenger lifts mentioned above measure 1050mm in width, compliant with AS1735.12(1999).

Recommendation:

(i) Ensure all lift components of each passenger lift in building R4B meet DDA Access Code 2010 and BCA 2016 requirements and AS1735.12(1999).

Apartment Corridors and Lobbies

There can be continuous accessible paths of travel from the residential passenger lifts to the main entry doorway of each unit in building R4B via residential lift lobbies and corridors.

Each residential lift lobby can readily accommodate 1.8m clear depth in front of each lift opening to allow two wheelchair users from opposite directions to sufficiently pass each other in accordance with in accordance with the DDA Access Code 2010 / BCA 2016. Also the residential corridors with a nominal clear width of 1600mm can readily accommodate suitable wheelchair turning bays that comply with AS1428.1(2009) at the corridor turns and ends in building R4B for compliance with the DDA Access Code 2010 / BCA 2016.

Clause D3.3 of BCA 2016 / DDA Access Code 2010 requires the provision of wheelchair passing bays that comply with AS1428.1(2009) at the points on an accessway at which there is a poor line of sight. For compliance with clause D3.3 of BCA 2016 / DDA Access Code 2010, a suitable wheelchair passing bay has been provided on common residential floor between the ground and level 57 of building R4B where there are poor lines of sight.

Recommendation:

(i) Provide appropriate slip-resistant floor surfaces along all common residential areas with suitable minimum wet pendulum test ratings under HB198/AS4856.

Communication Stairway - P1 to P2

There is a communication stairway that connects between the common facilities on podium levels P1 and P2 of building R4B. This stairway requires a review to accommodate an offset tread width at the rounded landing to accommodate consistent height and continuous handrails on both sides whilst maintaining 1m clear path of travel between rails for compliance with AS1428.1 – 2009.

Recommendations:

(i) Modify the round intermediate landing to accommodate an offset tread width to accommodate consistent height and continuous handrails on both sides whilst maintaining 1m clear path of travel between rails for compliance with AS1428.1 – 2009.

(ii) Ensure all stair components are detailed to be compliant with AS1428.1 – 2009 during design development stage.

5.4. Building R5 – Ground Level to Level 26

Passenger Lifts

There are a total of 4 x passenger lifts that serve building R5. Out of the 4 x lifts there are 2 x lifts that serve upto level 26, which is the penthouse floor. There is another 2 x lifts which serve between the ground level up to level 13 of building R5.

The above passenger lifts constitute the continuous accessible paths of travel from the main accessible residential entrance on ground level to each of the residential floor levels for compliance with DDA Access Code 2010 / BCA 2016. The outline of the lift car for each of the above passenger lifts measures1.85m wide by 2.4m long which satisfies the minimum internal car dimensions in accordance with DDA Access Code 2010 / BCA 2016.

Also the lift opening for each of the 4 x passenger lifts mentioned above measure 1050mm in width, compliant with AS1735.12(1999).

Recommendation:

(i) Ensure all lift components of each passenger lift in building R5 meet DDA Access Code 2010 and BCA 2016 requirements and AS1735.12(1999).

Residential Corridors and Lobbies

There can be continuous accessible paths of travel from the residential passenger lifts to the main entry doorway of each unit in building R5. This is in accordance with the DDA Access Code 2010 / BCA 2016.

There are suitable wheelchair turning bays that comply with AS1428.1(2009) at the ends of the common residential corridors in in building R5 for compliance with the DDA Access Code 2010 / BCA 2016.

Clause D3.3 of BCA 2016 / DDA Access Code 2010 requires the provision of wheelchair passing bays that comply with AS1428.1(2009) at the points on an accessway at which there is a poor line of sight. For compliance with clause D3.3 of BCA 2016 / DDA Access Code 2010, a suitable wheelchair passing bay has been provided on all common residential floor between the ground and level 26 of building R5.

Recommendation:

(i) Provide appropriate slip-resistant floor surfaces along all common residential areas with suitable minimum wet pendulum test ratings under HB198/AS4856.

6. RESIDENTIAL COMMON FACILITIES

6.1. General

Under the DDA Access Code 2010 and BCA 2016, the provision of access within the meaning of AS1428.1(2009) is required to and within each unique residential common facility in Class 2 components of buildings R4A, R4B and R5.

6.2. Building R4A

In building R4A, there are common facilities such as the pool and associated sanitary facilities on podium level 2. There is also a common garbage chute room on each level for residents on apartment levels 01 to 19, levels 21 to 51 and from levels 61 to 67.

R4A Podium Swimming Pool + Common Facility – P2

As mentioned above there is a swimming pool area with associated sanitary facilities on podium level 2 of building R4A. There are accessible paths of travel to the pool area from the lift lobby on the same floor. The podium swimming pool has a perimeter which requires at least one accessible means of pool entry/exit in line with the Access Code of the Premises Standards 2010.

Near the podium swimming pool mentioned above there is also a common-use leisure facility on the same floor with access directly from the pool area. This leisure facility is within a circular room and is located along an accessible path of travel from the pool. This is in line with the intent of access to and within a class 2 common facility under the Premises Standards. Internally, the circular room can readily accommodate a 1550mm clear diameter turning circle for wheelchair manoeuvrability also in line with the intent of the Premises Standards.

Recommendations:

(i) Provide at least one accessible means of pool entry/exit in line with the Access Code of the Premises Standards 2010.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R4A Podium WCs No. 1 & 2 – P2

There is a bank of toilets WC1 and WC2 associated with the podium swimming pool, steam room and sauna on level P2. As both toilets are not gender specified the two toilets shall be presumed to be unisex toilets. This triggers the requirement for an ambulant toilet facility to serve each gender and at current stage there is no nomination for a unisex ambulant toilet facility. At least one of the toilets WC1 and WC2 can be modified as a unisex ambulant toilet facility that is compliant with AS1428.1 – 2009 in accordance with Part F2 of the BCA and the Premises Standards.

Recommendations:

(i) Nominate WCs 1 & 2 on level P2 as unisex toilets and make at least one of the toilets to be a unisex ambulant toilet.

Ensure the unisex ambulant cubicle can accommodate 900mm clear square internally between leading edge of 610-660 projection pan and door swing.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

Podium Accessible Change Room – P2

Near the bank of toilets mentioned above, there is also a larger sanitary facility which appears to be for use as an accessible change room. The accessible room appears to include a combined accessible toilet and shower facility associated with the podium swimming pool and other common leisure facilities on level P2. This provision satisfies the requirement for an accessible sanitary facility near the bank of male and female toilets in accordance with Part F2 of the BCA and the Premises Standards.

The entry door into the accessible change room achieves 850mm clear open width and compliant external door circulation space along the corridor.

However a review is required for the irregular internal wall set out and layout of the accessible change room to accommodate all the required circulation spaces around the toilet pan, shower and basin to be compliant with AS1428.1 – 2009.

Recommendations:

(i) Modify the irregular wall set out inside accessible change room on level P2 to accommodate all the required circulation spaces around the toilet pan (1.9m wide by 2.3m long), the basin (allowed to encroach into toilet circulation by max. 100mm) and the hob less shower (1.6m wide by 2.35m with no encroachment of pan and bain), compliant with AS1428.1 – 2009.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R4A External Landscape Area – P2

There is an external landscape area near the link bridge of building R4A on podium level P2.

From the landscape plan provided, the external area has offset floors, which include a lower paved area and elevated landscaped area on a turf. There are accessible paths of travel to and along the lower external paved area from the residential lift lobby on the same floor via a sing hung doorway allowing sufficient door circulation spaces on both sides that are AS1428.1 compliant. The upper landscaped area on turf will be detailed to be wheel chair traversable during detailed design development stage.

Also as part of the base build, there appears to be a platform lift and a stairway connecting between the upper and lower external areas of R4A on P2. The lift provides a vertically continuous accessible path of travel between the split external floors to satisfy the access code for a common area associated with class 2 components of the development.

However, this lift needs to be re-oriented so a wheelchair user does not need to perform a turn on the lift car to ingress & egress out of the lift car. This can be achieved during design development stage.

Recommendations:

(i) Re-orient the lift so a wheelchair user does not need to perform a turn on the lift car to ingress & egress out of the lift car whilst ensuring the lift car's clear floor space achieves 1.1m width by 1.4m length whilst maintaining 1.8m clear depth in front of lift opening, compliant with A1735.12 and in line with the intent of the Premises Standards.

(i) Ensure the upper landscaped open space on podium level P2 has wheelchair traversable surface/pavement along all required circulation spaces as well as

turning and passing bays and around seats and tables. Avoid stepping-stone pavements and/or soft soil surfaces as they are not wheelchair traversable.

(i) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R4A Common-use Garbage Chute Rooms – L1 to L19, L21 to L51 & L61 to L67

As mentioned above, there is a common garbage chute room on each level for residents on apartment levels 01 to 19, levels 21 to 51 and from levels 61 to 67. Each common-use garbage chute room is located along a continuous accessible path of travel from each unit entry door and from the main building entrance of building R4A. The entry door into each garbage chute room can achieve 850mm clear open width and compliant door circulation spaces on both sides of the door, compliant with AS1428.1 – 2009. Internally the garbage chute room can accommodate 1550mm clear diameter turning circle in front of the garbage chute. This is in line with the intent of access to and within a class 2 common facility under the Premises Standards.

Recommendation:

(i) All door components of garbage chute room entry door to be AS1428.1 compliant.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

6.3. Building R4B

In building R4B, there are various common facilities and associated sanitary facilities on levels P1 and P2. There is also a common garbage chute room on each level for residents on apartment levels 1 to 19, levels 21 to 48 and between levels 50 to 55 of building R4B.

R4B Common Facilities – P1

As mentioned above there is a common facilities area on podium level P1 of building R4B, with an associated bank of unspecified toilets.

The main entrance into the common facilities area consists of a double hung doorway. The double hung door can achieve 850mm at least clear open width between at least one door leaf and jamb and sufficient door circulation on both sides to be compliant with AS1428.1 – 2009. The common facilities main entrance can be along a continuous accessible path of travel from the lift lobby on the same floor. This is in accordance with the intent of access to a class 2 common facility under the Premises Standards.

Internally the common facilities area can readily accommodate continuous accessible paths of travel throughout the various common leisure facilities. These areas can accommodate 1550mm clear diameter turning circles and 1.8m wide by 2m long wheelchair passing bays for wheelchair manoeuvrability in accordance with the intent of access to and within a class 2 common facility under the Premises Standards.

Recommendation:

(i) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

Unspecified Bank of Toilets – P1

As mentioned above there is bank of toilets located within and associated with the common facilities area of R4B on level P1. As both toilets are not gender specified the two toilets shall be presumed to be unisex toilets. This triggers the requirements for an

ambulant toilet facility to serve each gender and at least one unisex accessible toilet near the bank.

At current stage there is no nomination for ambulant toilet facilities nor an unisex accessible toilet. Such a provision above will satisfy the requirement for an accessible sanitary facility near the bank of male and female toilets in accordance with Part F2 of the BCA and the Premises Standards.

Once provided, the exact set outs and locations of all the required sanitary fixtures and fittings will be reviewed during design development stage.

Recommendations:

(i) In each bank of toilets on level P1 of R4B, provide an ambulant cubicle for each gender that can accommodate 900mm clear square internally between leading edge of 610-660 projection pan and door swing.

Alternatively, provide an unisex ambulant toilet facility with all the required circulation spaces internally and externally in accordance with AS1428.1 – 2009.

(ii) Provide a separate unisex accessible toilet near the bank of toilets mentioned above on P1 of R4B which generally achieves an overall dimension of 2000mm width by 2750mm length. This is in the case that the bank of toilets is nominated as male and female.

Alternatively, if one of the bank of toilets is nominated as an unisex ambulant toilet then the remaining bank can be modified to accommodate the accessible toilet room dimensions mentioned above.

This accessible toilet shall be near the bank of toilets within the R4B common facilities area on level P1 and along a continuous accessible path of travel.

(i) Ensure the entry door into the future accessible toilet achieves a clear open width of min. 850mm and all door components detailed during design development stage to be compliant with AS1428.1 – 2009.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

<u>R4B Common Facilities – P2</u>

As mentioned above there is a common facilities on podium level P2 of building R4B. At current stage the exact nature and different spaces of the common facilities are yet to be specified and detailed.

Nevertheless the common facilities area on P2 is located along a continuous accessible path of travel from the lift lobby on the same floor via two double hung doorways which can be detailed to achieve sufficient door circulation spaces on both sides of each door during design development stage to be compliant with AS1428.1 – 2009.

Internally the common facilities area can readily accommodate continuous accessible paths of travel throughout with 1550mm clear diameter turning circles and 1.8m wide by 2m long wheelchair passing bays for wheelchair manoeuvrability in accordance with the intent of access to and within a class 2 common facility under the Premises Standards.

The sanitary facilities associated with the first common facilities will be covered in the section below.

Recommendations:

(i) Ensure each double hung doorway connecting to the common facilities area from R4B lift lobby on P2 has all door components detailed to be compliant with AS1428.1 – 2009.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R4B External Pool + Landscape Area – P2

As mentioned above there is an external swimming pool area with a landscaped area on podium level 2 of building R4B. There are accessible paths of travel to the external pool and landscaped areas from the lift lobby on the same floor. The podium swimming pool has a perimeter which does not require an accessible means of pool entry/exit in line with the Access Code of the Premises Standards 2010. There can be continuous accessible path of travel around the pool from the pool to the landscaped area in line with the Premises Standards.

The provision of a continuous accessible path of travel within the landscaped area which appears to be roof garden at the corner of the podium is achievable.

The provision of access to and within common features such as seats and tables within the common-use podium landscape area will be achieved during design development.

Recommendations:

(i) Ensure the landscaped open space on podium level P2 has wheelchair traversable surface/pavement along all required circulation spaces as well as turning and passing bays around seats and tables. Avoid stepping-stone pavements and/or soft soil surfaces as they are not wheelchair traversable.

(ii) Consider providing at least one accessible pool entry/exit in line with the Premises Standards. (Advisory)

(iii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R4B Sanitary Facilities – P2

There appears to be a bank of toilets and a standalone shower facility associated with both the external swimming pool and internal common facilities area on level P2 of building R4B. This triggers the requirements for an ambulant toilet facility to serve each gender and a combined accessible toilet and shower facility in accordance with Part F2.4 of the BCA and the Premises Standards.

However, at current stage there is no nomination for neither of the above required sanitary facilities. The provision of an unisex ambulant toilet and combined accessible toilet and shower facilities that are AS1428.1 compliant can be achieved in accordance with Part F2 of the BCA and the Premises Standards.

Exact set outs and locations of all the required sanitary fixtures and fittings will be reviewed during design development stage.

Recommendations:

(i) At the bank of toilets with a standalone shower facility on level P2 of building R4B nominate the following:

- 1 x combined accessible toilet and shower facility with overall room dimension of generally 2350mm wide by 2750mm long. This can be the

toilet closest to the pool with the doorway relocated to face directly out to the pool

- 1 x unisex ambulant toilet with all the required internal and external circulation spaces

(ii) Ensure the unisex ambulant cubicle can accommodate 900mm clear square internally between leading edge of 610-660 projection pan and door swing that meets AS1428.1(2009).

(iii) Ensure that the path of travel to each ambulant cubicle complies with the ambulant cubicle requirements of AS1428.1(2009).

(iv) If the above cannot be achieved, provide two combined accessible toilet and shower facilities with each facility achieving an overall room dimension of min. 2350mm width by 2750mm length compliant with AS1428.1-2009.

(v) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R4B Common-use Garbage Chute Rooms – L1 to L19, L21 to L48 & L50 to L55

As mentioned above, there is a common garbage chute room on each level for residents on apartment levels 1 to 19, levels 21 to 48 and between levels 50 to 55 of building R4B.

Each common-use garbage chute room is located along a continuous accessible path of travel from each unit entry door and from the main building entrance of building R4B. The entry door into each garbage chute room can achieve 850mm clear open width and compliant door circulation spaces on both sides of the door, compliant with AS1428.1 – 2009. Internally the garbage chute room can accommodate 1550mm clear diameter turning circle in front of the garbage chute. This is in line with the intent of access to and within a class 2 common facility under the Premises Standards.

Recommendations:

(i) All door components of garbage chute room entry door to be AS1428.1 compliant.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

6.4. Building R5

In building R5, there are common facilities, associated sanitary facilities and external podium landscaped area on podium level P2. There is also a common garbage chute room on each level for residents on apartment levels P2 to level 25 of building R5.

R5 Common Facilities– P2

As mentioned above there are common facilities on podium level P2 of building R5. At current stage the exact nature and different spaces of the common facilities are yet to be specified and detailed.

However, it can be deduced that there are two separate common facilities areas on P2. The first common facilities area with a bank of sanitary facilities is not along a continuous accessible path of travel from the lift lobby on the same floor due to a single hinged entry doorway with insufficient door circulation space.

On the other hand, the second common facilities area is along a continuous accessible path of travel from the lift lobby on the same floor via double hung entry doorway with

sufficient door circulation spaces on both sides of the door, compliant with AS1428.1 – 2009.

Internally both common facilities areas can readily accommodate continuous accessible paths of travel throughout with 1550mm clear diameter turning circles and 1.8m wide by 2m long wheelchair passing bays for wheelchair manoeuvrability in accordance with the intent of access to and within a class 2 common facility under the Premises Standards.

The sanitary facilities associated with the first common facilities will be covered in the section below.

Recommendations:

(i) Modify the single hung entry doorway leading into common facilities area with a bank of toilets on level P2 of R5 to accommodate min. 340mm latch-side clearance when door swings away from the user, along 1220mm clear depth for a hinge side approach to be compliant with AS1428.1-2009.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

Unspecified Bank of Toilets – P2

As mentioned above there is bank of toilets located within and associated with the fist common facilities area of R5 on level P2. As both toilets are not gender specified the two toilets shall be presumed to be unisex toilets. This triggers the requirement for an ambulant toilet facility to serve each gender and at current stage there is no nomination for a unisex ambulant toilet facility. At least one of the toilets can be modified as a unisex ambulant toilet facility that is compliant with AS1428.1 – 2009 in accordance with Part F2 of the BCA and the Premises Standards.

Recommendations:

(i) Nominate both bank of toilets on level P2 of R5 as unisex toilets and make at least one of the toilets to be a unisex ambulant toilet.

Ensure the unisex ambulant cubicle can accommodate 900mm clear square internally between leading edge of 610-660 projection pan and door swing.

(ii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

(iii) Ensure that the path of travel to each ambulant cubicle complies with the ambulant cubicle requirements of AS1428.1(2009).

Accessible Sanitary Facility– P2

There is no accessible sanitary facility near the bank of toilets associated with the R5 common facilities area mentioned above on level P2. The provision of an accessible toilet near the bank of male female toilets is required under Part F2.4 of the BCA and the Premises Standards.

However, as there are vacant areas within the common facilities and around the bank of toilets the provision of a room of minimum overall dimension of 2000mm width by 2650mm length can be provided for use as an accessible toilet.

Such a provision above will satisfy the requirement for an accessible sanitary facility near the bank of male and female toilets in accordance with Part F2 of the BCA and the Premises Standards.

Once provided, the exact set outs and locations of all the required sanitary fixtures and fittings will be reviewed during design development stage.

Recommendations:

(i) Provide an accessible toilet with an overall dimension of at least 2000mm wide by 2750mm long (incl. tolerances) to accommodate all the required circulation spaces around the toilet pan (1.9m wide by 2.3m long), the basin (allowed to encroach into toilet circulation by max. 100mm) compliant with AS1428.1 – 2009.

This accessible toilet shall be near the bank of toilets within the R5 common facilities area on level P2 and along a continuous accessible path of travel.

(ii) Ensure the entry door into the future accessible toilet achieves a clear open width of min. 850mm and all door components detailed during design development stage to be compliant with AS1428.1 – 2009.

(iii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R5 External Landscape Area – P2

As mentioned above there is an external landscaped area on podium level 2 of building R5. From the landscape plan provided, there are accessible paths of travel to and along the external landscaped area from the lift lobby on the same floor via a sing hung doorway allowing sufficient door circulation spaces on both sides that are AS1428.1 compliant.

There are accessible paths provided along the paved surfaces of the external landscaped area on podium level P2 of building R5 as the paved surfaces can accommodate sufficient wheel chair turning and passing spaces in accordance with the Premises Standards.

Recommendation:

(i) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

R5 Common-use Garbage Chute Rooms – P2 to L25

As mentioned above, there is a common garbage chute room on each level for residents on apartment levels P2 to level 25 of building R5.

Each common-use garbage chute room is located along a continuous accessible path of travel from each unit entry door and from the main building entrance of building R45. The entry door into each garbage chute room can achieve 850mm clear open width, compliant with AS1428.1 – 2009. However, there is no compliant internal door circulation space of the garbage chute room door and internally the room cannot accommodate the required 1550mm clear diameter turning circle in front of the garbage chute. A review is required to modify the garbage chute room into a garbage chute directly activated from the corridor which will still be in line with the intent of access to and within a class 2 common facility under the Premises Standards.

Recommendations:

(i) Increase each R5 garbage chute room on levels P2 to L25 to accommodate min. internal latch-side clearance of 530mm along 1450mm clear depth and also to accommodate a 1550mm clear diameter turning circle directly in front of the chute to be compliant with AS1428.1 – 2009 and in line with the Premises Standards.

Alternatively, modify the garbage chute room into a garbage chute directly activated from the corridor and along a continuous accessible path of travel.

(ii) All door components of garbage chute room entry door to be AS1428.1 compliant.

(iii) Provide appropriate slip-resistant floor surfaces along all residential common use facilities with suitable minimum wet pendulum test ratings under HB198/AS4856.

6.5. Residential Storage Cage Areas – B1 to B4 (Buildings R4A, R4B & R5)

There are multiple storage cage areas for the use of residents of all three buildings R4A, R4B and R5 on the shared basement floor levels B1 to B4. Storage cages cannot be considered a common facility, given that each storage cage is allocated for the use of one specific unit rather than for all residents in common. The storage cages therefore do not fall within the requirement under the DDA Access Code 2010 / BCA 2016 for the provision of access to common areas or facilities.

On the other hand, it would not be unreasonable to expect that a resident with a disability would, notwithstanding, wish to have a storage facility that is accessible. Consideration should be given for the provision of an accessible path of travel that complies with AS1428.1(2009) to at least one cluster of storage cages for each residential building for use by people with disabilities.

7. CAR PARKING

7.1. Retail Accessible Car Parking: Quantity and Design

There are a total of 3 x retail car bays for all three buildings R4A, R4B and R5 on the shared basement level B1.

Each retail car bay achieves a dimension of 2550mm width and 5400mm length which is sufficient for at least one accessible car bay and an adjacent shared zone in accordance with AS2890.6(2009). The two retail bays that are side by side on basement level B1 can be nominated to be used as the accessible car bay and the adjacent shared zone. There is a delineated path of travel to these bays from the nearest lift lobby which is associated with building R4A.

As there is less than 3 x retail car bays for the entire development across three buildings, there is no requirement to visually designate accessible car parking spaces (i.e. international symbol of access, bollard and hatched shared zone). This is in accordance with Part D3.5 clause (d) of the Access Code in the Premises Standards.

It is noted that there is no visitor car parking in the subject development.

Recommendations:

(i) Ensure a minimum vertical clearance of 2500mm over the two side by side retail car parking bays intended for people with disabilities compliant with AS2890.6.

(ii) Ensure a minimum vertical clearance of 2200mm over the entire vehicular path of travel from the vehicular main entrance to the retail car parking bays intended for people with disabilities compliant with AS2890.6.

7.2. Shared Car Parking Basement B1

Doors

There is a common doorway connecting to the two retail bays to be used as an accessible bay and the adjacent shared zone as mentioned above to the nearest lift lobby associated with building R4A on B1. This common door is located along a major structural wall of 700mm width which accommodate sufficient door circulation spaces on both sides of the doorway. The following recommendations shall be applied to ensure compliant with AS1428.1 – 2009:

Recommendations:

(i) Provide latch-side clearances of 510mm when door swings away from the user and 530mm when door swings towards the user, which are both along 1450mm clear depths in accordance with AS1428.1 – 2009.

NB: In cases where the door is located along a 600mm wide structural wall, shift the door and associated partitions along the middle of the structural wall whilst preventing a latch-side recess of no more than 300mm. This only applies when there is a compliant latch-side clearance is provided beyond the wall recess.

(ii) If the above cannot be provided with doors that are located along a major structural wall of more than 600mm width, the alternative would be to power operate the door.

(iii) Ensure all door components are compliant with AS1428.1 – 2009.

8. SIGNAGE AND COMMUNICATIONS

8.1. Hearing Augmentation

Recommendation:

(i) In accordance with DDA Access Code 2010 and the BCA, where there is an in-built system of audio amplification within either the class 9B residential common facilities (e.g. Resident's Lounge) on podium levels P1 to P2, provide a system of hearing augmentation in that room. An audio induction loop is strongly recommended for this type of facility.

8.2. Signage

Recommendation:

(i) Signage within the subject development is to comply with the requirements of clause D3.6 of the DDA Access Code 2010 and the BCA.

9. CONCLUSION

MGAC has assessed buildings R4A, R4B and R5 of the One Sydney Harbour development in Barangaroo South as a part of the State Significant Development Applications (SSD 6964, 6965 and 6966) submitted to the Department of Planning and Environment pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 ('EP&A Act').

In general, the development can provide continuous accessible paths of travel for people with disabilities. In line with the report's recommendations, the proposed development has demonstrated an appropriate degree of accessibility.

The Development Application drawings indicate that compliance with statutory requirements and common area access facilities can be achieved.

The recommendations in this report are to be developed in the ongoing design development and should be confirmed prior to construction certificate stage. As the project proceeds, further review of documentation is strongly recommended to ensure that appropriate access is provided to and throughout the development. The main recommendations that have arisen from the access review include:

Shared Buildings

(i) Modify all stepped intermediate landings to accommodate an offset tread width to ensure that at least one accessible continuous handrail within all fire-isolated stairs inside buildings R4A, R4B and R5, compliant with AS1428.1 Clause 12, as required under BCA 2016 part D2.17. Liaise with BCA consultant and/or PCA to satisfy BCA Part D2.17.

NB. As this requirement is called up by D2.17, (BCA/PCA domain) and not D3 (our accessibility domain) we have to take the final lead from the PCA.

Building R4A

(ii) Modify the irregular wall set out inside accessible change room on level P2 to accommodate all the required circulation spaces around the toilet pan (1.9m wide by 2.3m long), the basin (allowed to encroach into toilet circulation by max. 100mm) and the hob less shower (1.6m wide by 2.35m with no encroachment of pan and bain), compliant with AS1428.1 – 2009.

Building R4B

(iii) In each bank of toilets on level P1 of R4B, provide an ambulant cubicle for each gender that can accommodate 900mm clear square internally between leading edge of 610-660 projection pan and door swing.

Alternatively, provide an unisex ambulant toilet facility with all the required circulation spaces internally and externally in accordance with AS1428.1 – 2009.

(iv) Provide a separate unisex accessible toilet near the bank of toilets mentioned above on P1 of R4B which generally achieves an overall dimension of 2000mm width by 2750mm length. This is in the case that the bank of toilets is nominated as male and female.

Alternatively, if one of the bank of toilets is nominated as an unisex ambulant toilet then the remaining bank can be modified to accommodate the accessible toilet room dimensions mentioned above.

Building R5

(v) Re-orient the retail goods lift associated with building R4A so that a min. 900mm clear opening faces the lift lobby on basement level B0, compliant with A1735.12 and in line with the intent of the Access Code - Premises Standards for a class 6 building classification.

NB: The 1800mm clear depth in front of each lift opening on the levels that it serves shall be maintained.

(vi) Provide an accessible toilet with an overall dimension of at least 2000mm wide by 2750mm long (incl. tolerances) to accommodate all the required circulation spaces around the toilet pan (1.9m wide by 2.3m long), the basin (allowed to encroach into toilet circulation by max. 100mm) compliant with AS1428.1 – 2009.

This accessible toilet shall be near the bank of toilets within the R5 common facilities area on level P2 and along a continuous accessible path of travel.

(vii) Modify the single hung entry doorway leading into common facilities area with a bank of toilets on level P2 of R5 to accommodate min. 340mm latch-side clearance when door swings away from the user, along 1220mm clear depth for a hinge side approach to be compliant with AS1428.1-2009.

(viii) Increase each R5 garbage chute room on levels P2 to L25 to accommodate min. internal latch-side clearance of 530mm along 1450mm clear depth and also to accommodate a 1550mm clear diameter turning circle directly in front of the chute to be compliant with AS1428.1 – 2009 and in line with the Premises Standards.

Alternatively, modify the garbage chute room into a garbage chute directly activated from the corridor and along a continuous accessible path of travel.