MGAC
morris goding accessibility consulting

MIRVAC

AUSTRALIAN TECHNOLOGY PARK
- BUILDING 1
- BUILDING 2
- COMMUNITY BUILDING
- PUBLIC DOMAIN

ACCESS REVIEW

Morris Goding Accessibility Consulting

FINAL v2

10th December 2015

REPORT REVISIONS		
Date	**Version**	**Drawing No / Revision**
13.11.215	Draft	Building 1 1000, 1001, 1002, 1003, 1004, 1010, 1011, 2301, 2302 & 2900.
		Building 2 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027 & 1029.
		Community Building B3-1020 [rev 00], B3-1021 [rev 00], B3-1022 [rev 00], B3-1023 [rev 00], B3-1024 [rev 00] & B3-1060 [rev 00].
		External Domain 151106_SK_01
03.12.2015	Final	Building 1 1100L_P5, 1100M_P4, 1100U_P4, 11001_P4, 11002_P4 & 11008_P4.
		Building 2 2100L_P3, 2100M_P3, 2100U_P3, 21001_P3, 21002_P3, 21003_P3, 21004_P3, 21005_P3, 21006_P3 & 21007_P3.
		Community Building B3-1019 [rev 00], B3-1020 [rev 00], B3-1021 [rev 00], B3-1022 [rev 00], B3-1023 [rev 00], B3-1024 [rev 00].
		Public Domain 14080_LA_001
10.12.2015	Final v2	General fjmt-AR-DWG-G1001 [rev DA0], fjmt-AR-DWG-G1002 [rev DA0] & fjmt-AR-DWG-G1003 [rev DA0].
		Building 1 fjmt-AR-DWG-1100L [rev DA0], fjmt-AR-DWG-1100M [rev DA0], fjmt-AR-DWG-1100U [rev DA0], fjmt-AR-DWG-11001 [rev DA0], fjmt-AR-DWG-11002 [rev DA0], fjmt-AR-DWG-11003 [rev DA0], fjmt-AR-DWG-11004 [rev DA0], fjmt-AR-DWG-11005 [rev DA0], fjmt-AR-DWG-11006 [rev DA0], fjmt-AR-DWG-11007 [rev DA0], fjmt-AR-DWG-11008 [rev DA0], fjmt-AR-DWG-11009 [rev DA0], fjmt-AR-DWG-11050 [rev DA0], fjmt-AR-DWG-11051 [rev DA0], fjmt-AR-DWG-11052 [rev DA0] & fjmt-AR-DWG-11053 [rev DA0].
		Building 2 fjmt-AR-DWG-2100L [rev DA0], fjmt-AR-DWG-2100M [rev DA0], fjmt-AR-DWG-2100U [rev DA0], fjmt-AR-DWG-21001 [rev DA0], fjmt-AR-DWG-21002 [rev DA0], fjmt-AR-DWG-21003 [rev DA0], fjmt-AR-DWG-21004 [rev DA0], fjmt-AR-DWG-21005 [rev DA0], fjmt-AR-DWG-21006 [rev DA0], fjmt-AR-DWG-21007 [rev DA0], fjmt-AR-DWG-21050 [rev DA0], fjmt-AR-DWG-21051 [rev DA0], fjmt-AR-DWG-21052 [rev DA0], fjmt-AR-DWG-21053 [rev DA0] & fjmt-AR-DWG-21054 [rev DA0]
		Community Building SisArch-AR-DWG-3100B [rev DA0], SisArch-AR-DWG-3100G [rev DA0], SisArch-AR-DWG-31001 [rev DA0], SisArch-AR-DWG-31002 [rev DA0], SisArch-AR-DWG-31003 [rev DA0], SisArch-AR-DWG-31004 [rev DA0], SisArch-AR-

		DWG-31005 [rev DA0], SisArch-AR-DWG-31050 [rev DA0] & SisArch-AR-DWG-31060 [rev DA0].
		Public Domain ATP_Plan 1-800

This report prepared by:

John La Scala
Access Consultant
Morris Goding Accessibility Consulting

Reviewed by:

David Goding
Director
Morris Goding Accessibility Consulting

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

The Access Review Report is a key element in design development of Building 1, Building 2, Community Building and Public Domain of the Australian Technology Park 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 Accessibility Consulting has prepared the Access Report to provide advice and strategies to maximise reasonable provisions of access for people with disabilities.

The development has been reviewed to ensure that ingress and egress, paths of travel, circulation areas, car-parking and toilets comply with relevant statutory guidelines.

In general, the development has accessible paths of travel that are continuous throughout. In line with the report recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible parking and accessible sanitary facilities, can be readily 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.

2. INTRODUCTION

2.1. General

Mirvac has engaged Morris-Goding Accessibility Consulting, to provide a design review of the proposed development located at Australian Technology Park.

The requirements of the investigation are to:

- Review supplied 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 Federal Disability Discrimination Act (DDA), DDA Access to Premises Standards (including DDA Access Code), Building Code of Australia (BCA) and AS 1428 series.

This report supports a State Significant Development Application (SSDA) submitted to the Department of Planning and *Environment pursuant to Part 4 of the Environmental Planning and Assessment Act 1979* (EP&A Act).

Mirvac Projects Pty Ltd (Mirvac) is seeking to secure approval for the urban regeneration of the Australian Technology Park (ATP), including the redevelopment of three car parking lots within ATP for the purposes of commercial, retail and community purposes, along with an extensive upgrade to the existing public domain within ATP. Building heights of 4, 7 and 9 storeys are proposed across the 3 development lots.

Australian Technology Park (ATP) has been continuously developed since its establishment in 1996, but has been underutilised as a technology and business precinct for quite some time. UrbanGrowth NSW Development Corporation (UGDC) has actively encouraged new development and employment opportunities at the Park for the past 15 years, and Mirvac intends to continue upon this and deliver upon the precinct's full potential, with the development of circa 107,400sqm for employment uses, which will facilitate the employment homes of an extra 10,000 staff everyday within ATP by development completion.

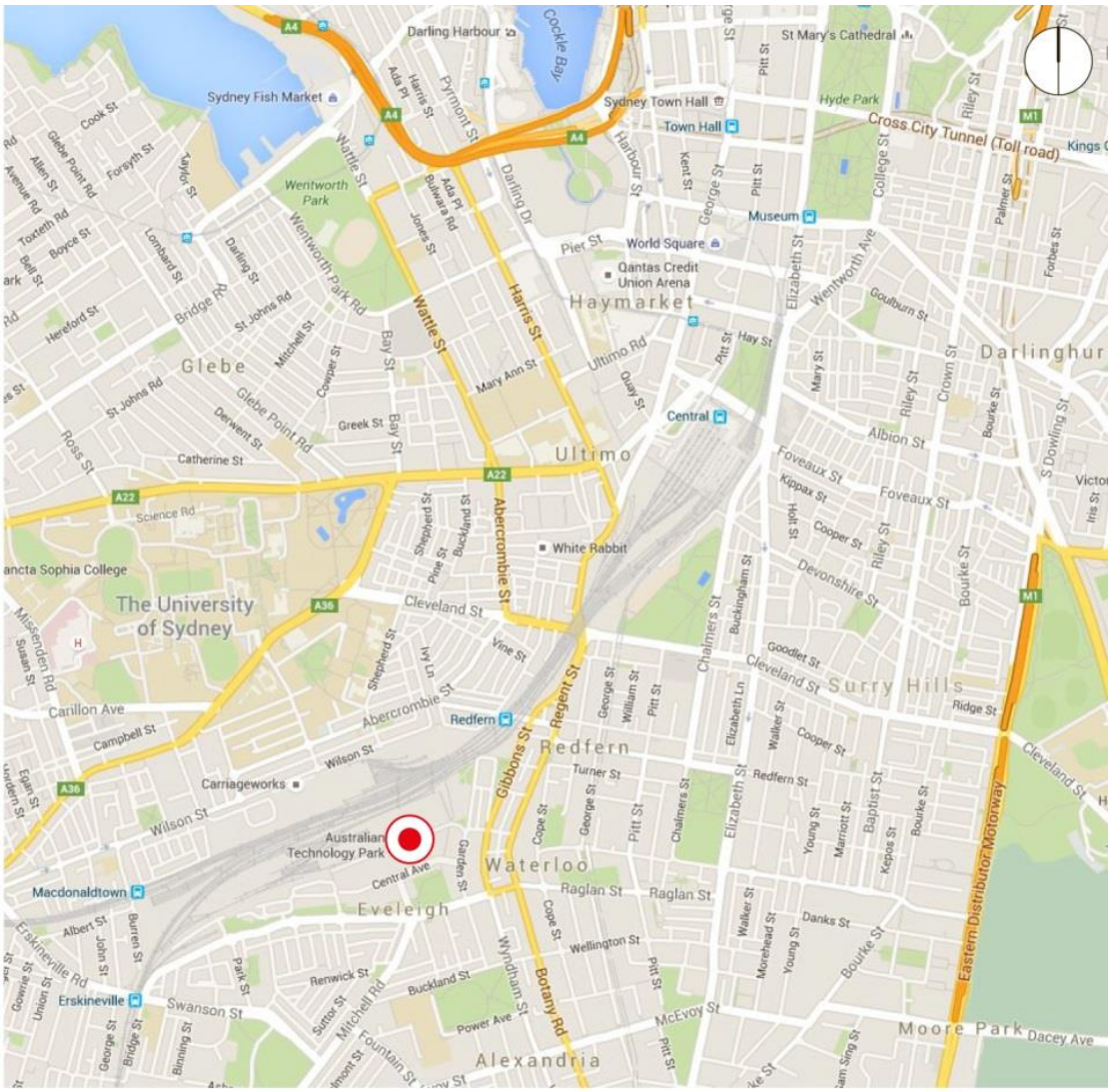
2.2. Background

Mirvac has been announced by UrbanGrowth NSW as the successful party in securing ownership and redevelopment rights for the ATP precinct, following an Expression of Interest (EOI) and an Invitation to Tender (ITT) process which commenced in 2014. Mirvac has also secured the Commonwealth Bank of Australia (CBA) as an anchor tenant for the development and intends to immediately commence the urban regeneration of this precinct through the lodgement of this SSDA. CBA's commitment to the precinct is in the form of one of the largest commercial leasing pre-commitments in Australian history, occupying circa 95,000 square metres of commercial, retail, community and childcare NLA, which will house circa 10,000 technology focused staff by 2019 and 2020. Mirvac's redevelopment

goes well beyond the development on the 3 development lots, as it includes the regeneration of the public domain within ATP, the addition of retail to activate the precinct and also the provision of community facilities such as a community centre, a gym and 2 x 90 child childcare facilities.

2.3. Site Description

The ATP site is strategically located approximately 5km south of the Sydney CBD, 8km north of Sydney airport and within 200m of Redfern Railway Station. The site, with an overall area of some 13.2 hectares, is located within the City of Sydney local government area (LGA). Refer to **Figure 1** below for a graphic representation of the site location and context.



Three key sites remain undeveloped within the ATP site and are presently used for at-grade worker and special event car parking. These sites are:

- Lot 8 in DP 1136859 – site area circa 1,937m2;
- Lot 9 in DP 1136859 – site area circa 8,299m2; and

– Lot 12 in DP 1136859 – site area circa 11,850m2.

Figure 2 provides an aerial image of the ATP site along with identifying the three development sites.

The SSDA works boundary excludes the Locomotive Workshop. Future development associated with the adaptive re-use of the Locomotive Workshop will be the subject of separate future applications.

2.4. Overview of Proposed Development

The development application seeks approval for the following components of the development:

– Site preparation works, including demolition and clearance of the existing car parking areas/ancillary facilities and excavation;

- Construction and use of a 9 storey building within Lot 9 (Building 1), comprising of parking, retail, commercial and childcare uses;

- Construction and use of a 7 storey building within Lot 12 (Building 2) comprising of parking, retail and commercial uses;

- Construction and use of a 4 storey community building within Lot 8 (Community Building) comprising of gym, retail, community, commercial and childcare uses;

- Extensive landscaping and public domain improvements throughout the precinct for the benefit of the local community; and

- Extension and augmentation of physical infrastructure/utilities as required.

A more detailed and comprehensive description of the proposal is contained in the Environmental Impact Statement (EIS) prepared by JBA.

2.5. Planning Framework

State Environmental Planning Policy (SEPP) Major Development 2005 is the principal environmental planning instrument applying to the ATP. Schedule 3, Part 5 of the Major Development SEPP sets out the zoning, land use and development controls that apply to development on the Site.

As the development has a capital investment value of more than $10 million it is identified as State Significant Development under the *State Environmental Planning Policy (State and Regional Development) 2011*, with the Minister for Planning the consent authority for the project.

2.6. Objectives

The Access Review Report considers user groups, who include staff and visitors. The Report attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

1. People with sensory impairment
2. People with mobility impairments
3. People with dexterity impairments

The Report seeks to provide compliance with the DDA. In doing so, the Report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

2.7. 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, TGSI's, handrail design, signage, hearing augmentation etc. that will be included in construction documentation.

2.8. Statutory Requirements

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

- Disability Discrimination Act 1992
- DDA Access to Premises Standards 2010 (including DDA Access Code)
- BCA 2013 - Building Code of Australia
- AS 1428.1 – 2009 (General Requirements for Access)
- AS 1428.4.1 – 2009 (Tactile Ground Surface Indicators)
- AS 1735.12 - (Lifts, Escalators, & Moving Walks)
- AS2890.6 – 2009 (Car parking)

3. BUILDING 1

3.1. INGRESS & EGRESS

3.1.1. Main Entrance

The main entry point into the building is located from Davy Road.

In general, the main entry from Davy Road pedestrian footpath into the building is via the use of a revolving door. Although, this is seen as inappropriate for wheelchair users, alternative accessible entry into the building is found via two sets of double hinged doors located either side of the revolving door.

The two sets of double hinged entry doors have clear widths of approximately 930mm to each door leaf and appropriate circulation areas, compliant with the DDA Premises Standard and AS1428.1:2009.

The circulation space around the accessible entry will also allow the same level of manoeuvrability for wheelchair user compliant with AS1428.1:2009.

From the main accessible entry, the path of travel to the lift lobby is possible by wheelchair users, compliant with BCA and AS1428.1.

Recommendations:

(i) Ensure the accessible entry threshold is level to assist wheelchair users.

(ii) Ensure the accessible entry doors have an operational force of no greater than 20N. Alternatively, if this cannot be achieved, automatic doors could be provided.

(iii) Door components to comply with AS1428.1

3.1.2. Emergency Egress

There are seven fire stairs within the building connecting all office and car parking levels with the ground floor.

In general, the two sets of double hinged main entry doors of the building would be the most appropriate means of egress in the event of an emergency situation.

Recommendations:

(i) Provide at least one accessible continuous handrail within all fire-isolated stairs, compliant with AS1428.1 Clause 12, as required under BCA 2014 part D2.17.

(ii) Consideration of an alternative evacuation means e.g. the passenger lift to be operational in the event of an emergency to be provided (advisory/best practice only).

3.2. PATHS OF TRAVEL

3.2.1. General

In general, the main paths of travel found on all floors provide circulation spaces that will allow wheelchair users to turn 180 degrees and have the ability to easily pass one another when travelling in the opposite direction.

However, the accessible path of travel from the accessible car bays located on the floor ground floor level to the entry point of the End of Trip Facilities will need to be provided with turning circles, 1540mm in width for a minimum length of 2070mm, for compliance under AS1428.1:2009. This is due to the current corridor having a length greater than 20m and a width of only 1500mm.

A continuous accessible path of travel has been provided on all floors via the use of passenger lifts.

Access to the lifts is accessible from all corners on all floors within the building. The circulation space within all lift lobbies will ensure appropriate manoeuvrability for wheelchair users, compliant with AS1428.1:2009.

Recommendations:

(i) Ensure flooring systems used comply with BCA and HB198/AS4586.

(ii) Turning circle of no less than 1540mm wide x 2070mm length to be provided to the accessible path of travel leading from the accessible car bays to the entry point of the End of Trip Facilities on the lower ground floor level.

3.2.2. Doors

In general, there are no doors within the main office spaces due to the open office environment. However, there are several doors within the central core of the building (i.e. near the passenger lifts, sanitary facilities etc.).

In general, these doors have an 850mm open clear width (920mm door leaf), compliant with AS1428.1:2009.

Recommendations:

(i) Ensure all common use doors have a minimum 850mm open clear width (920mm door leaf), 530mm latch side clearance (door swings toward user) and 510mm latch side clearance (door swings away from user), all compliant with AS1428.1:2009.

(ii) Ensure all door components and controls comply with AS1428.1:2009.

3.2.3. Stairs

There are three communication stairs provided which provide vertical access between levels for people with ambulant disabilities.

One of the three stairways provides access from the lower ground floor level to the upper going floor level and the other two stairs provide vertical access for people with ambulant disabilities between the upper ground floor level and level 7.

All stairways have clear widths of at least 1m between handrails, compliant with AS1428.1:2009.

Recommendations:

(i) Provide handrails on both sides of the stairway in accordance with AS1428.1:2009.

(ii) Ensure tactile ground surface indicators (TGSIs) are installed at the top and bottom landings for the stairway. If applicable, the exposed underside of the stair may have overhead barriers that will be hazardous for a person with visual impairment. These areas with less than 2000mm height clearance shall have TGSI or other suitable treatment within fit-out (barrier protection), all in accordance with AS1428.4.1:2009.

(iii) Ensure each tread of the stairway is provided with a nosing strip, compliant with AS1428.1:2009.

3.2.4. Lifts

There is a total of 12 passenger lifts and 1 goods lift within the building.

In general, 10 lifts provide vertical access for people in wheelchairs to all levels above the ground floor. Of the remaining two lifts, one is provided for access between car parking levels and the other lift provides vertical access from the lower ground floor level to the upper ground floor level, all in accordance with the DDA Premises Standards.

Generally, the lift cars either have dimensions of 1750mm width x 2000mm length or 2360mm width x 1770mm width, both compliant with the DDA Premises Standards and AS1735.12.

As previously mentioned, the lifts provide a continuous accessible path of travel to all office floors above ground.

The lift lobbies have circulation spaces of at least 3000mm that will allow for appropriate manoeuvrability for wheelchair users, compliant with AS1428.1:2009.

Recommendations:

(i) Ensure all lift cars have internal components (control panel, handrails, visual & audio devices) that comply with AS1735.12.

(ii) Ensure all lift lobbies have appropriate audio/visual components and call buttons as specified in AS1735.12.

3.2.5. Common Facilities

In general, common facilities (i.e., café, childcare, foyer areas etc.) have circulation spaces allowing easy manoeuvrability for a wheelchair user or person with a walking frame. These areas will also allow 2 wheelchair users the ability to pass each other in an equitable and dignified manner, compliant with the BCA and DDA Premises Standards.

3.3. SANITARY FACILITIES

3.3.1. Accessible WCs

There are a total of 25 accessible WCs found throughout the building. In general, other than the lower ground floor level, the accessible toilets are

located within the cores of the building. In general there are suitable accessible paths of travel leading to all accessible toilets from all corners of the floor plates, compliant with the DDA Premises Standards.

The internal dimensions of each accessible toilet are approximately 2450mm width x 2950mm length, which will facilitate compliant circulation spaces (i.e. 1900mm x 2300mm pan circulation space), compliant with AS1428.1:2009.

However, the basin located within the right hand transfer accessible toilet currently encroaches within the circulation space of the shower. This is due to the structural column located to the corner of the room.

Also, drawings indicate there to be a total of 17 right hand transfer pans and only 8 left hand transfer pans. As per the DDA Premises Standards, an even amount of left and right handed pans is required to fulfil compliance.

The accessible bathroom doors measure 850mm minimum in width. This door width is appropriate for wheelchair users and compliant with AS1428.1:2009.

Recommendations:

(i) Ensure a clear circulation space about the shower recess to the ground floor accessible toilet of 1600mm x 2350mm, compliant with AS1428.1:2009.

(ii) The public accessible toilets throughout shall have suitable pan locations that allow a mixture of left and right transfer pans, compliant with AS1428.1:2009 and the DDA Premises Standards.

(iii) Ensure all bathroom fixtures comply with AS1428.1:2009.

3.3.2. Ambulant Cubicles

Throughout the building, there are 24 banks of male and female toilets, each of which contain an ambulant cubicle, compliant with the DDA Premises Standards.

Each ambulant cubicle door provides a clear width of at least 700mm, and cubicle clear widths of between 900mm – 120mm all compliant with AS1428.1:2009.

Circulation spaces internally and externally of the ambulant cubicle, clear of the door swing, have also been achieved, complying with AS1428.1:2009 and the DDA Premises Standards.

Recommendation:

(i) Ensure all fixtures (e.g. grabrails, toilet pan etc.) within ambulant cubicle toilet are installed compliant with AS1428.1:2009.

3.4. CAR PARKING

3.4.1. Accessible Car Bays

Car parking has been provided to the lower ground floor level, mezzanine level and upper ground floor level of the building, with a total of 217 car spaces. A total of 5 accessible parking bays have been provided to the lower ground floor level. The number of accessible parking bays satisfies the requirements of the DDA Premises Standards table D3.5.

The 5 accessible car bays have dimensions of 2400mm width x 5400mm length, with adjacent shared zones of the same dimensions, compliant with AS2890.6.

Recommendations:

(i) Ensure the accessible car bay has a vertical clearance of 2.2m whilst travelling to the accessible car bay and 2.5m within the accessible car bay, compliant with AS2890.6.

(ii) Ensure there is a safe and accessible path of travel to the lifts from the car bays. Consideration shall be given as to relocate the accessible parking bay closer to the lift lobby.

4. BUILDING 2

4.1. INGRESS & EGRESS

4.1.1. Village Square Entrance

In general, the main entry from the Village Square pedestrian thoroughfare into Building 2 is via the use of a revolving door. Although, this is seen as an inappropriate entrance for wheelchair users, alternative accessible entry into the building is found via two hinged doors located either side of the revolving door.

The two hinged entry doors have clear widths of approximately 980mm compliant with AS1428.1:2009, however, they are provided with inappropriate latch side clearances, which will need to be reviewed for full compliance under the DDA Premises Standards and AS1428.1:2009.

From the main accessible entry, the path of travel to the lift lobby is possible by wheelchair users, compliant with BCA and AS1428.1:2009.

Recommendations:

(i) Ensure the accessible entry threshold is level to assist wheelchair users.

(ii) Ensure accessible entry doors have a minimum latch side clearances of 510mm (when doors swings away from the user) and 530mm (when door swings toward the user), compliant with AS1428.1:2009.

(iii) Ensure the accessible entry doors have an operational force of no greater than 20N. Alternatively, is this cannot be achieved, automatic doors could be provided.

(iv) Door components to comply with AS1428.1:2009.

4.1.2. Locomotive Street Entrance

From the site boundary 2 sets of stairways and a ramp have been provided to gain access to the main entrance into Building 2 provided from Locomotive Street.

In general, the main entry from the Locomotive Street is via the use of a revolving door. Although, this is seen as an inappropriate entrance for wheelchair users, alternative accessible entry into the building is found via two hinged doors located either side of the revolving door.

The two hinged entry doors have clear widths of approximately 850mm and appropriate latch side clearances, compliant under the DDA Premises Standards and AS1428.1:2009.

From the main accessible entry, the path of travel to the lift lobby is possible by wheelchair users, compliant with BCA and AS1428.1:2009.

Recommendations:

(i) Ensure the accessible entry threshold is level to assist wheelchair users.

(ii) Ensure the accessible entry doors have an operational force of no greater than 20N. Alternatively, is this cannot be achieved, automatic doors could be provided.

(iii) Door components to comply with AS1428.1:2009.

4.1.3. Retail Entrances

There are retail tenancies located along the north and south sides of the building. Currently, entry into theses proposed tenancies are assumed to be directly from the pedestrian footpaths. No entry doors into these tenancies have been shown.

Recommendations:

(i) Ensure the accessible entry threshold is level to assist wheelchair users.

(ii) Ensure accessible entry doors have a minimum clear width of 850mm and appropriate latch side clearance, compliant with AS1428.1:2009.

(iii) Ensure the accessible entry doors have an operational force of no greater than 20N. Alternatively, is this cannot be achieved, automatic doors could be provided.

(iv) Door components to comply with AS1428.1:2009.

4.1.4. Emergency Egress

There are eight fire stairs within the building connecting all office and car parking levels with the ground floor.

In general, the two hinged main entry doors at Village Square and Locomotive Street would be the most appropriate means of egress in the event of an emergency situation.

Recommendations:

(i) Provide at least one accessible continuous handrail within all fire-isolated stairs, compliant with AS1428.1 Clause 12, as required under BCA 2014 part D2.17.

(ii) Consideration of an alternative evacuation means e.g. the passenger lift to be operational in the event of an emergency to be provided (advisory/best practice only).

4.2. PATHS OF TRAVEL

4.2.1. General

In general, the main paths of travel found on all floor provide circulation space that will allow wheelchair users to turn 180 degrees and have the ability to easily pass one another when travelling in the opposite direction.

A continuous accessible path of travel has been provided on all floors via the use of passenger lifts.

Access to the lifts is accessible from all corners on all floors within the building. The circulation space within all lift lobbies will ensure appropriate manoeuvrability for wheelchair users, compliant with AS1428.1:2009.

There are terraces found on the northern side of level 5. Access to these terraces are not shown on the currently design but assumed to be from their respective office space area.

Recommendations:

(i) Ensure flooring systems used comply with BCA and HB198/AS4586.

(ii) Ensure the terrace thresholds are accessible to assist wheelchair users.

4.2.2. Doors

In general, there are no doors within the main office spaces due to the open office environment. However, there are several doors within the cores of the building (i.e. near the passenger lifts, sanitary facilities, end of trip facilities etc.).

In general, these doors have an 850mm open clear width (920mm door leaf), compliant with AS1428.1:2009.

However, the four entry doors into the end of trip sanitary facilities will need to be reviewed as they do not provide a minimum 510mm external latch side clearance (door swings away from the user), compliant with AS1428.1:2009.

Recommendations:

(i) Ensure all common use doors have a minimum 850mm open clear width (920mm door leaf), 530mm latch side clearance (door swings toward user) and 510mm latch side clearance (door swings away from user), all compliant with AS1428.1:2009.

(ii) Ensure all door components and controls comply with AS1428.1:2009.

4.2.3. Stairs

There are six communication stairs provided to Building 2.

At the property boundary, two stairways are provided prior to reaching the main entry door. The four other communication stairways are internal and provide access between levels for people with ambulant disabilities.

All stairways have clear widths of at least 1m between handrails, compliant with AS1428.1:2009.

The external stair which runs parallel with the Locomotive Street site boundary is currently designed so that the bottom riser is set back from the edge of the building line by approximately 320mm. To provide compliant handrail extensions and TGSI's with AS1428.1:2009, the stairway is to be setback a minimum distance of 900mm from the edge of the building line. This is to ensure handrail extensions is TGSI's do not protrude into the traverse path of travel.

The four internal stairways which provide vertical access for people with ambulant disabilities between the upper ground floor and level 5, currently do not provide a setback tread at the base of each landing for compliant handrail extensions, in line with AS1428.1:2009.

Recommendations:

(i) Provide handrails on both sides of the stairway in accordance with AS1428.1:2009.

(ii) Ensure tactile ground surface indicators (TGSIs) are installed at the top and bottom landings for the stairway. If applicable, the exposed underside of the stair may have overhead barriers that will be hazardous for a person with visual impairment. These areas with less than 2000mm height clearance shall have TGSI or other suitable treatment within fit-out (barrier protection), all in accordance with AS1428.4.1:2009.

(iii) Ensure each tread of the stairway is provided with a nosing strip, compliant with AS1428.1:2009.

(iv) Ensure the stairway which runs parallel with the Locomotive Street site boundary is recessed 900mm minimum from the edge of the building to allow required handrail extensions and TGSI's to not protrude into transverse path of travel, compliant with AS1428.1:2009.

(v) Ensure the four internal stairways are provided with an offset tread at the base of all stair flights to enable the continuous handrail provision at a constant height, compliant with AS1428.1:2009.

4.2.4. Ramp

An external ramp has been provided at the Locomotive Street boundary for people in a wheelchair to gain access to the building entrance, in line with the DDA Premises Standards.

The ramp provides a width of approximately 1800mm which will enable handrails to be installed to both sides of the ramp, compliant with AS1428.1:2009.

The ramp has sufficient level landings at the bottom and top to allow wheelchair users to enter/exit the ramp easily and in accordance with the DDA Premises Standards and AS1428.1:2009.

Recommendations:

(i) Provide handrails on both sides of the ramp in accordance with AS1428.1:2009.

(ii) Ensure tactile ground surface indicators (TGSIs) are installed at the top and bottom landings of the ramp, compliant with AS1428.1:2009.

4.2.5. Lifts

There is a total of 15 passenger lifts within the building and 2 goods lifts.

Lifts 13 – 15 provide vertical access for people in wheelchair from the lower ground floor to the upper ground floor. Lifts 1 -12 provide vertical access for people in wheelchair from the upper ground floor to level 5 of the building, all compliant with the DDA Premises Standards.

Generally, the lift cars have dimensions of 1800mm width x 2000mm length, compliant with the DDA Premises Standards and AS1735.12.

As previously mentioned, the lifts provide a continuous accessible path of travel to all office floors above ground.

The lift lobbies have circulation spaces of at least 4000mm that will allow for appropriate manoeuvrability for wheelchair users, compliant with AS1428.1:2009.

Recommendations:

(i) Ensure all lift cars have internal components (control panel, handrails, visual & audio devices) that comply with AS1735.12.

(ii) Ensure all lift lobbies have appropriate audio/visual components and call buttons as specified in AS1735.12.

4.2.6. Common Facilities

In general, common facilities (i.e., café, retail tenancies, foyer areas etc.) have circulation spaces allowing easy manoeuvrability for a wheelchair user or person with a walking frame. These areas will also allow 2 wheelchair users the ability to pass each other in an equitable and dignified manner, compliant with the BCA and DDA Premises Standards.

4.3. SANITARY FACILITIES

4.3.1. Accessible WCs

There are a total of 14 accessible WCs found throughout the building. In general, other than the lower ground floor level (end of trip facilities), the accessible toilets are located within the cores of the building. In general there are suitable accessible paths of travel leading to all accessible toilets from all corners of the floor plates, compliant with the DDA Premises Standards.

Drawing indicate that throughout the building there are a total of 1 ‘left hand’ transfer to pan and 13 ‘right hand’ transfer’ to pan, which does not satisfies the DDA Premises Standards.

The minimum internal dimensions of each accessible toilet are approximately 2250mm width x 2900mm length, which will facilitate compliant circulation spaces (i.e. 1900mm x 2300mm pan circulation space), compliant with AS1428.1:2009.

The accessible bathroom doors measure 850mm minimum in width. This door width is appropriate for wheelchair users and compliant with AS1428.1:2009.

Recommendations:

(i) An even spread of ‘left hand’ and ‘right hand’ transfer to pans is required throughout the building, compliant with the DDA Premises Standards.

(ii) Ensure all bathroom fixtures comply with AS1428.1:2009.

4.3.2. Ambulant Cubicles

Throughout the building, there are 13 banks of male and female toilets.

Each bank of male and female toilets are provided with an ambulant cubicle, in line with the DDA Premises Standards and AS1428.1:2009.

Each ambulant cubicle door provides a clear width of at least 700mm, and cubicle clear widths of between 900mm – 120mm all compliant with AS1428.1:2009.

Circulation spaces internally and externally of the ambulant cubicle, clear of the door swing, have also been achieved, complying with AS1428.1:2009 and the DDA Premises Standards.

Recommendation:

(i) Ensure all fixtures (e.g. grabrails, toilet pan etc.) within ambulant cubicle toilet are installed compliant with AS1428.1:2009.

4.4. CAR PARKING

4.4.1. Accessible Car Bays

Car parking has been provided to the lower ground floor level and mezzanine level of the building, with a total of 489 car spaces.

Within the 489 car spaces, a total of 12 accessible car bays have been provided, which satisfies the requirements of the DDA Premises Standards.

The 12 accessible car bays have dimensions of 2400mm width x 5400mm length, with adjacent shared zones of the same dimensions, compliant with AS2890.6.

Recommendation:

(i) Ensure the accessible car bay has a vertical clearance of 2.2m whilst travelling to the accessible car bay and 2.5m within the accessible car bay, compliant with AS2890.6.

5. COMMUNITY BUILDING

5.1. INGRESS & EGRESS

5.1.1. Main Entrance

The main entry point into the community building is located from Davy Road.

An automatic sliding entry door has been shown to be provided with a clear width of approximately 1175mm, compliant with AS1428.1:2009 and the DDA Premises Standards.

From the main entry, the path of travel to the lift lobby is possible by wheelchair users, compliant with BCA and AS1428.1.

Recommendations:

(i) Ensure the accessible entry threshold is level to assist wheelchair users.

(ii) Entry door and its components to comply with AS1428.1

5.1.2. Emergency Egress

There are three fire stairs within the building connecting all levels with the ground floor level.

In general, the main entry of the building would be the most appropriate means of egress in the event of an emergency situation.

Recommendations:

(i) Provide at least one accessible continuous handrail within all fire-isolated stairs, compliant with AS1428.1 Clause 12, as required under BCA 2014 part D2.17. As handrail needs to be at a consistent height throughout stair flights and over landings, in our opinion, this could be achieved by including an off-set tread at base of each stair flight or by increasing landings by 300mm min. length (more than required egress path) to allow space for handrail to extend and continue at constant height. Clarification from BCA consultant/PCA on this matter is recommended to satisfy BCA Part D2.17.

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

(ii) Consideration of an alternative evacuation means e.g. the passenger lift to be operational in the event of an emergency to be provided (advisory/best practice only).

5.2. PATHS OF TRAVEL

5.2.1. General

In general, the main paths of travel found on all floors provide circulation space that will allow wheelchair users to turn 180 degrees and have the ability to easily pass one another when travelling in the opposite direction.

A continuous accessible path of travel has been provided on all floors via the use of passenger lifts.

Access to the lifts is accessible from all corners on all floors within the building. The circulation space within all lift lobbies will ensure appropriate manoeuvrability for wheelchair users, compliant with AS1428.1:2009.

On the ground floor level the Plaza area has an RL difference of 0.1m less than the internal entry lobby. Ensure an accessible path of travel (e.g. step ramp) is provided for a person in a wheelchair to gain access to and from the two areas, compliant with the DDA Premises Standards.

There are terraces found on the eastern, western and southern side of level 3. Access to these terraces are not shown on the currently design but assumed to be from the childcare centre. Currently drawings indicate there to be an RL difference of 0.1m less than the internal childcare centre finished floor level. As mentioned above, ensure an accessible path of travel is provided at the door thresholds to enable a person in a wheelchair access to and from the terrace.

Recommendations:

(i) Ensure flooring systems used comply with BCA and HB198/AS4586.

(ii) Ensure an accessible path of travel is provided between the ground floor level plaza and entry lobby, compliant with AS1428.1:2009.

(iii) Ensure the terrace thresholds are accessible to assist wheelchair users on level 3, compliant with AS1428.1:2009.

5.2.2. Doors

At the currently design stage, internal doors have not been shown as each level is an open floor plan.

However, the two doors on the ground floor level leading to the external areas near the FHR Risers will need increased latch side clearance for full compliance under AS1428.1:2009.

Recommendations:

(i) Ensure all common use doors have a minimum 850mm open clear width (920mm door leaf), 530mm latch side clearance (door swings toward user) and 510mm latch side clearance (door swings away from user), all compliant with AS1428.1:2009.

(ii) Ensure all door components and controls comply with AS1428.1:2009.

5.2.3. Lifts

There is a total of 2 passenger lifts within the building.

The 2 lifts provide vertical access for people in wheelchairs to all levels above the ground floor in accordance with the DDA Preemies Standards.

Generally, the lift cars have dimensions of 1600mm width x 1970mm length, compliant with the DDA Premises Standards and AS1735.12.

As previously mentioned, the lifts provide a continuous accessible path of travel to all office floors above ground.

The lift lobbies have circulation spaces of greater than 6000mm that will allow for appropriate manoeuvrability for wheelchair users, compliant with AS1428.1:2009.

Recommendations:

(i) Ensure all lift cars have internal components (control panel, handrails, visual & audio devices) that comply with AS1735.12.

(ii) Ensure all lift lobbies have appropriate audio/visual components and call buttons as specified in AS1735.12.

5.2.4. Common Facilities

In general, common facilities (i.e., café, retail tenancies, gym etc.) have circulation spaces allowing easy manoeuvrability for a wheelchair user or person with a walking frame. These areas will also allow 2 wheelchair users the ability to pass each other in an equitable and dignified manner, compliant with the BCA and DDA Premises Standards.

5.3. SANITARY FACILITIES

5.3.1. Accessible WCs

There are a total of 3 accessible WCs found throughout the building.

The accessible toilets on levels 1 and 2 have suitable accessible paths of travel leading to them from all corners of the floor plates, compliant with the DDA Premises Standards.

However, the clear width of the corridor outside the ground floor accessible toilet has a clear width of 1000mm, which will need to be reviewed for compliance under AS1428.1:2009.

The accessible toilets have internal dimensions of approximately 1970mm width x 2750mm length, which will facilitate compliant circulation spaces (i.e. 1900mm x 2300mm pan circulation space), compliant with AS1428.1:2009.

However, all three accessible toilets are currently ‘right hand’ transfer to pans, which will need to be reviewed for compliant under the DDA Premises Standards.

The accessible bathroom doors measure approximately 850mm minimum in width. This door width is appropriate for wheelchair users and compliant with AS1428.1:2009.

As there are End of Trip facilities provided on level 2 of the building with showers, the accessible toilet on level 2 will be required to be provided with an accessible shower, as per the requirements of the DDA Premises Standards.

Recommendations:

(i) The public accessible toilets throughout shall have suitable pan locations that allow a mixture of left and right transfer pans, compliant with AS1428.1:2009 and the DDA Premises Standards.

(ii) A minimum clear depth in front of 1670mm in front of the ground floor accessible toilet is required, compliant with AS1428.1:2009.

(iii) Accessible toilet on level 2 to accommodate for an accessible shower, compliant with DDA Premises Standards and AS1428.1:2009.

(iv) Ensure all bathroom fixtures comply with AS1428.1:2009.

5.3.2. Ambulant Cubicles

Throughout the building, there are 2 banks of male and female toilets as well as male and female End of Trip Facility on level 2 of the building.

Each bank of male and female toilets are not provided with an ambulant cubicle, not in line with the DDA Premises Standards and AS1428.1:2009.

Recommendations:

(i) An ambulant cubicle to be provided to each male and female toilets, including the End of Trip Facility, compliant with the DDA Premises Standards and AS1428.1:2009.

(ii) Ambulant cubicles to have a clear width of between 900mm – 920mm, compliant with AS1428.1:2009.

(iii) Ensure all fixtures (e.g. grabrails, toilet pan etc.) within ambulant cubicle toilet are installed compliant with AS1428.1:2009.

6. PUBLIC DOMAIN

6.1. Vice Chancellors Oval

There is an existing accessible path of travel through Vice Chancellors Oval. The path of travel through the oval enables people in a wheelchair to gain access to and from the corner of Henderson Road and Davy Road to Central Avenue.

The above mentioned path as a width of 2.5m for its entire length which will allow a wheelchair user to turn 180 degrees and pass another wheelchair users travelling in the opposite direction with ease, compliant with AS1428.1:2009.

As per shown existing RL's, there are approximate gradients of between 1:75 – 1:100 across the accessible path of travel through the oval, complaint with AS1428.1:2009.

Recommendation:

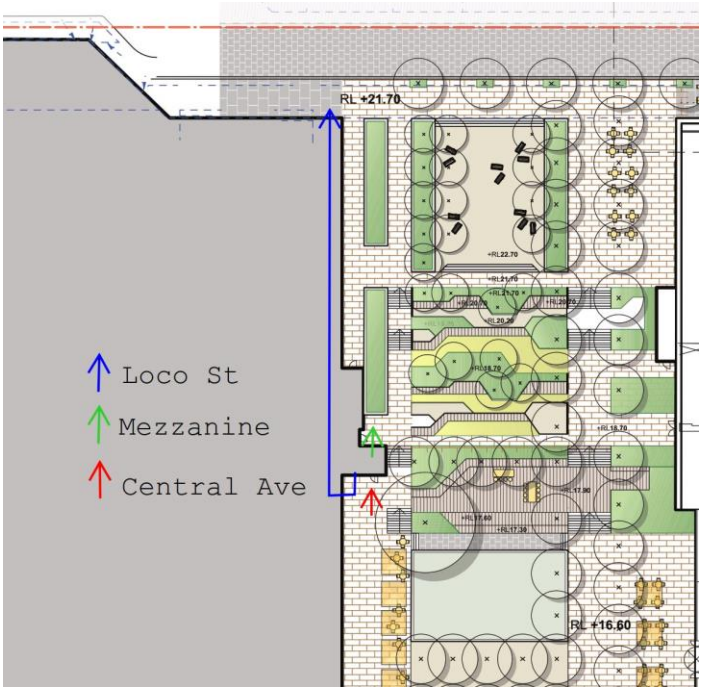
(i) The provision of appropriate safety mechanisms to minimise the risk to people with a disability in relation to cyclists is preferred. Safety mechanisms include, but are not limited to, signage, chicanes, painted strips on pavement surface, and warning TGSIs.

6.2. Village Square

Village Square provides a thoroughfare for the public to gain access from Central Avenue leading toward Locomotive Street.

There is stair linkage through Village Square.

With regards wheelchair access, from the information provided, an accessible path of travel can be achieved via the use of the adjacent Channel 7 building 'Jockey Lift' as shown below.



This accessible path of travel will need to be investigated further during the design development stage of the project to ensure that common use of this path of travel is maintained.

There are 2 sets of stairs provided for people with ambulant disabilities to gain access through this thoroughfare. These stairways have an approximate minimum width 5m which will enable handrails to be installed to both sides of the stairway, in accordance with AS1428.1:2009.

6.3. Pedestrian Footpaths (Davy Rd, Central Ave)

Davy Road and Central Avenue has pedestrian footpaths on either side of the street which will lead the public into the main entrances of Building 1, Building 2 and the Community Building.

From the drawings the pedestrian footpaths on each side of the roads have clear widths of 3m.

Current drawings do not provide information on the location of kerb ramps. Kerb ramps, in accordance with the DDA Premises Standards and AS1428.1:2009 are to be provided at each crossing point.

Recommendations:

(i) Ensure kerb ramps are provided and shall be aligned in the direction of travel, compliant with AS1428.1:2009.

(ii) Ensure kerb ramps are slip resistance in accordance with AS1428.1:2009.

6.4. Rest Seating and Street Furniture

Recommendations:

(i) Consideration to be given to providing, as a matter of accessibility best practice, rest seating at intervals of 60 metres along each of the accessible paths of travel within Vice Chancellors Oval.

(ii) Any rest seating should have back and arm rests, compliant with AS1428.2.

(iii) Ensure any street furniture (e.g., rest seating, drinking fountains, or sculptures) shall not protrude into an accessible path of travel, compliant with City of Sydney Access DCP section 4.2.10.

6.5. Signage

Recommendations:

(i) Provide directional signage indicating the location of key features such as main entrances to Buildings 1, Building 2, Community Building and the Transport Ramp Link.

(ii) Interpretative signage to include Braille as well as consider audio provision.

(iii) All signage is to meet the requirements of DDA Access Code clause D3.6.

6.6. Transport Link Ramp

A new pedestrian ramp is proposed to be constructed which will enable a person in a wheelchair to access to/from Innovation Plaza to Cornwallis Street.

The new ramp provides an accessible path of travel from the Australian Technology Park to Redfern Station.

The ramp has clear widths of approximately 2m which will enable handrails to be installed on both sides, compliant with AS1428.1:2009.

The current design of the ramp indicates lengths of 6m or less with level landing areas, which will satisfy the requirements DDA Public Transport Standards.

Recommendations:

(i) Provide handrails on both sides of the ramp in accordance with AS1428.1:2009.

(ii) Ensure ramp has maximum gradients of 1:14, compliant with AS1428.1:2009.