

DEICORP

**WESTERN SYDNEY UNIVERSITY – LOT 4
DARCY ROAD, HAWKESBURY ROAD
WESTMEAD**

ACCESS REVIEW

Morris Goding Accessibility Consulting

FINAL

22nd December 2016

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REPORT REVISIONS		
Date	Version	Drawing No / Revision
16.12.16	Draft	Revision S drawings for the following: DA-001-000, DA-001-001, DA-105-B01, DA-105-B02, DA-105-B03, DA-105-B04, DA-110-001, DA-110-002, DA-110-010, DA-110-020, DA-110-060, DA-110-070, DA-110-080, DA-110-090, DA-110-100, DA-110-120, DA-110-180, DA-110-190, DA-110-200, DA-110-210, DA-110-220, DA-120-001, DA-120-002, DA-130-001 Lot 4 Yield Analysis Summary with reference to drawings dated 11.11.16.
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1. EXECUTIVE SUMMARY

The Access Review Report is a key element in design development of Western Sydney University Lot 4 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, lifts, car-parking, adaptable units and liveable units 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 Development Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible parking and accommodation, 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

Deicorp has engaged Morris-Goding Accessibility Consulting to provide an accessibility design review of Lot 4 of the development located at 158-164 Hawkesbury Road, 2a Darcy Road Westmead.

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 Disability Discrimination Act (DDA), DDA Access to Premises Standards (including DDA Access Code), Building Code of Australia (BCA) and AS1428.1 series.

2.2. Objectives

The report considers user groups such as residents and visitors. The Report attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

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

2.3. 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.

2.4. Statutory Requirements

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

- AS 1428.1:2009 – (Design for Access and Mobility)
- AS 1735.12:1999 – (Lifts, Escalators, & Moving Walks)
- AS 2890.6:2009 – (Car parking)
- AS 4299:1995 – (Adaptable Housing)
- BCA 2016 – Building Code of Australia Part D3, E3
- DDA Access to Premises Standards 2010 (DDA Access Code)
- DDA - Disability Discrimination Act
- Parramatta Council DCP 2011

3. INGRESS & EGRESS

3.1. Foyer Entrances

There are 3 residential towers within the development. Building D has 2 entry lobbies, Building E has 2 entry lobbies and Building C has 1 entry lobby.

Building D lobby D1 is accessed from the southern site boundary on the ground floor. From the pedestrian footpath at the site boundary, there is a stair with an adjacent series of ramps leading to the entry door of lobby D1. The walkway/ramp mid-landing has an internal splay and can achieve a compliant accessible path of travel in accordance with AS1428.1 and the DDA Premises Standards. The stairs are suitable recessed to allow handrail extensions and TGSIs.

Building D lobby D2 is accessed from the southern site boundary on the ground floor. From the pedestrian footpath at the site boundary, there is a stair with an adjacent series of ramps leading to the entry door of lobby D2. The ramp mid-landing has an internal splay and can achieve a compliant accessible path of travel in accordance with AS1428.1 and the DDA Premises Standards. The stairs are suitable recessed to allow handrail extensions and TGSIs.

Building E lobby E1 is accessed directly from the south-eastern site boundary on the ground floor, with an suitably recessed adjacent stair. This entry can achieve a level entry threshold in accordance with AS1428.1 and the DDA Premises Standards.

Building E lobby E2 is accessed directly from the north-eastern site boundary on the lower ground floor. This entry can achieve a level entry threshold in accordance with AS1428.1 and the DDA Premises Standards.

Building F lobby F is accessed from the northern site boundary on the ground floor. From the pedestrian footpath at the site boundary, there is a stair with an adjacent series of ramps leading to the entry door of lobby D1. The ramp mid-landing has an internal splay and can achieve a compliant accessible path of travel in accordance with AS1428.1 and the DDA Premises Standards. The stairs are suitable recessed to allow handrail extensions and TGSIs.

Currently the drawings do not detail entry doors at any of the entry lobbies, however a compliant entry doorways are easily achievable. From the entry doors there are accessible paths of travel to their respective lift lobbies. These paths of travel have suitable clear widths that will allow wheelchair users to make 180° turns or pass other wheelchair users travelling in the opposite direction in accordance with AS1428.1 and the DDA Premises Standards.

Recommendation:

- (i) Entry ramps and stairs to comply with AS1428.1. The current provisions make this easily achievable at design development stage.

3.2. Emergency Egress

Each lift core has a pair of fire isolated stairs adjacent providing egress from all residential levels and basement levels to the lower ground or ground floor. All fire isolated stairs show offset treads allowing for installation of a handrail that maintains a constant height compliant with BCA 2015 Part D2.17 as AS1428.1 Clause 11.

4. PATHS OF TRAVEL

4.1. General

In general, all common paths of travel throughout the building have minimum 1800mm clear width. This is a suitable dimension to form an accessible path of travel. These dimensions also allow for suitable 1540mm x 2070mm turning bays at the ends of corridors and 1800mm x 2000mm passing spaces at all required locations in accordance with AS1428.1 and the DDA Premises Standards.

There is an accessible path of travel between each of the buildings via the ground level podium and via the car parking levels. The lifts within each building provide access between all levels of the development.

Recommendation:

- (i) Ensure common area floor surfaces are suitably slip resistant and traversable by a wheelchair or walking frame, compliant with AS 1428.1:2009 and HB198/AS4856 (wet pendulum method).

4.2. Doors

Common use doors such as the doors to the podium and entry lobbies have suitable 850mm clear width (920mm door leaf). However some doors (e.g. entry lobby D1, entry lobby E2, entry lobby F and gym) require review to achieve appropriate door circulation compliant with AS1428.1 Fig. 31.

Recommendation:

- (i) Ensure all common use doors have suitable 850mm clear width (generally 920mm door leaf) and appropriate door circulation compliant with AS1428.1.

4.3. Passenger Lifts

There are 8 passenger lifts in the building. Building D has 3 lifts spread over 2 lift cores, Building E has 3 lifts spread over 2 lift cores and Building C has 2 lifts. The passenger lifts provide an accessible path of travel between the basement car parking levels, the lower ground level, the ground level and all residential levels above.

The lift shafts have identical internal dimensions of 2450mm long x 2450mm wide allowing for a lift of dimensions 1600mm long x 1400mm wide compliant with DDA Premises Standards Table E3.6(b).

All lift lobbies have ample room for circulation that will allow two wheelchair users to pass each other as they enter/exit the lift.

The lift lobbies on the basement car parking levels show are clear of the carriageway. These areas allow sufficient circulation area for a wheelchair user to make 180° turns and pass another wheelchair user travelling in the opposite direction compliant with AS1428.1 and the DDA Premises Standards.

Recommendation:

- (i) Lift car components (eg. grabrail, control buttons, lighting etc.) to comply with AS1735.12 and the DDA Premises Standards Part E3.6.

5. ACCOMMODATION

5.1. Residential Units

In general, there are continuous paths of travel to all residential units on all levels of the building from the main entrance via the lift in accordance with BCA, DDA Premises Standard and SEPP 65 Residential Design Code requirements.

The intent of adaptable housing is to provide a range of housing choices within the community promoting equitable access to residential accommodation. Adaptable housing is designed so that it can be adapted to meet the changing needs of residents at minimal personal and economic costs.

The development falls under Parramatta Council. According to Council DCP, a minimum of 10% of the total units are required to be designed according to Class C Certification of AS4299. In addition to this, 20% of the total units are required to be designed according to the Silver Standard of the Liveable Housing Design Guidelines as is required by SEPP 65. Where adaptable units satisfy the requirements of the Liveable Housing Design Guidelines, they can contribute to the total number of liveable units.

There is a total of 355 dwelling in the development. Of the 355 units, 36 are designed as adaptable units satisfying the provision requirements of Parramatta Council DCP. Of the 355 units, 71 are designed as being liveable satisfying the provision requirements of SEPP 65.

5.1. Adaptable Unit Design

The following unit types are designed as being adaptable.

1 Bedroom	2 Bedroom
Type 4_01C	Type 4_04C
Type 4_01E	
Type 4_05G	
Type 4_01M	

The following assessment has been made of all adaptable unit types unless specified.

The entry doors have 850mm clear width (920mm door leaf) and provide a 530mm latch side clearance when the door opens towards the user compliant with AS4299 and AS1428.1:2009.

All 1 bedroom internal doors have 850mm clear width and provision for door circulation area at post-adaptation, compliant with AS1428.1:2009.

The laundry areas have provision for 1550mm diameter circulation area in front of the appliances/tub that can be easily achieved at post-adaption.

The living rooms have provision for appropriate 2250mm diameter circulation areas after the furniture has been placed, compliant with AS4299.

The kitchens provide or have provision for minimum 1550mm clearances in front of kitchen benches at post adaption by relocating or moving island benches compliant with AS4299.

The kitchens have provision for suitable 800mm min. width workspaces adjacent to cooktops and sinks with smaller workspaces (300mm min) adjacent to refrigerators, compliant with AS4299

There is at least a bedroom in each unit that has sufficient internal dimensions to allow for 1000mm clearance on one side of the bed, 1000mm at the base of the bed and a 1540mm x 2070mm circulation area on the other side of the bed. In the 1 bedroom apartments, this can be easily achieved at post-adaptation stage through the removal of cabinetry.

Bathrooms have overall internal dimensions that have provision for fixtures compliant with AS1428.1:2009. This allows for appropriate circulation space around the toilet pan, washbasin and shower recess.

The toilet pans are positioned such that a 'visitable' WC is provided from the outset, located 450mm – 460mm from the side walls with 1250mm length x 900mm width circulation areas in front of the pan compliant with AS4299.

Recommendations:

- (i) Ensure the rear wall of adaptable unit bathrooms where the pre-adaptation shower is currently located is built out, non-structural and not a riser. This is to ensure ease of removal at post-adaptation stage.
- (ii) Provide capped off services at pre-adaptation in preparation for movement of washbasin and shower fixtures at post-adaptation. Wall strengthening to be provided for future provision of required shower seat and grabrails. Shower waste outlet to be provided at post-adaptation location from the outset to allow for retention of falls during adaptation.
- (iii) Provide slip-resistant floor surface with min. wet pendulum test rating of 'X' (under HB197/AS4856) in adaptable unit bathroom, kitchen and laundry at pre-adaptation stage as required in AS4299 clause 4.5.4. Test results will be required at OC Stage.

5.2. Liveable Housing Unit Design

All of the adaptable units satisfy the requirements of the Liveable Housing Design Guidelines in their pre-adapted state. In addition, a further 10% of units have been designed as liveable units. The apartments that satisfy the Liveable Housing Design Guidelines are tabulated below.

1 Bedroom	2 Bedroom
Type 4_01C	Type 4_04C
Type 4_01E	Type 4_03A
Type 4_05G	Type 4_03D
Type 4_01M	
Type 4_02A	
Type 4_05A	

The following assessments have been made of all the liveable unit types.

The entry door has 850mm clear width.

The doors to rooms within the unit achieve 820mm clear opening width.

All corridors have minimum 1000mm clear width.

The toilet pans have a clear circulation space of 900 x 1200mm forward of the pan.

Toilet pans are located adjacent a wall allowing for future installation of grabrails.

Showers are hob-less and are located in the corner of the room allowing for future installation of grabrails.

Recommendation:

- (i) If lightweight walls are proposed for bathroom, provide suitable reinforcing around bath, shower and WC.

6. CAR PARKING

6.1. Adaptable Unit Car Parking

There is currently 5 levels car parking. There are 36 adaptable unit car bays spread over the 5 levels of car parking. This satisfies the requirements of AS4299 for 1 adaptable car bay for each adaptable unit.

The adaptable unit car bays are designed as 2400mm wide x 5400mm long with a 2400mm wide x 5400mm long shared zone adjacent compliant with AS2890.6. In general, the adaptable unit car bays are located in close proximity to the lifts and are distributed adequately in relation to each lift core.

Recommendations:

- (i) Ensure adaptable unit car bay shared zones remains as common strata and are kept clear at all times and are associated with the adaptable unit car bays at all times.
- (ii) The approach to the accessible car bay should not have vertical clearance of less than 2.2m and height clearance of 2.5m at adaptable unit car bays compliant with AS2890.6.

6.2. Liveable Housing Unit Car Parking

Currently the drawings do not show provision for Liveable Housing Unit car parking bays. Under the Liveable Housing Guidelines, 3.2m wide car parking bays are only required when the car parking bay is part of the dwelling access and hence are not required in this scenario.

7. COMMON FACILITIES

7.1. Mailbox Area

In general, the mailboxes that are details are located in appropriate areas with ample circulation space in front.

7.2. Garbage Rooms

The garbage chutes on each of the residential levels are all accessed from hinged doors directly from the corridor. As users do not need to enter a room to operate the garbage chute, AS1428 compliant door circulation is not required to these doors.

Recommendation:

- (i) Ensure garbage chute operation is no deeper than 300mm from the face of the garbage chute door to assist wheelchair users.

7.3. Podium and Building F Rooftop Outdoor Space

There is a communal outdoor landscaped space on the ground floor podium and another on the roof of Building F. Currently these areas have not been fully detailed on the drawings.

Recommendation:

- (i) Ensure there is an accessible path of travel to and within the communal outdoor landscape space. An AS1428.1 accessible path of travel should be provided to at least one of any facility/seating area/landscaped area on the podium.

MISCELLANEOUS

7.4. Lighting

Recommendation:

- (i) In general the maintenance illumination levels should be 150 lux for paths of travel, corridors and stairs. Ensure all lighting levels comply with AS1680

7.5. Signage

Recommendation:

- (i) Signage to comply with BCA part D3.6.