

# Access Review for Development Application September 2016

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Serviced Apartments & Retail / Commercial  
21-25 Woodriff Street,  
Penrith

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Issue	Date	Issued To	Reviewed	Approved
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DA 02	27/09/16	Morson Group	Robyn Thompson	Jen Barling

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## 1. Introduction

### 1.1 Purpose + Objectives

The purpose of this access review is to assess the proposed design of the building at 21-25 Woodriff Street Penrith against the requirements of the BCA 2016, the Disability (Access to Premises - Buildings) Standards (2010), the Penrith Council DCP and Disability Discrimination Act. The designs have been assessed to ensure that safe, equitable and dignified access for people with disabilities is provided.

The review aims to assist to deliver a design that provides equality, dignity, independence and functionality to people with a range of abilities inclusive of:

- People with sensory impairments
- People with mobility impairments
- People with dexterity impairments
- People with cognitive impairments

Accessible environments optimise people's independence by removing boundaries, refining choice, unlocking potential and broadening participation. Accessible environments are designed in a way that takes into account the needs of a wide range of people, improving the way people connect with their environment.

### 1.2 Scope

The following areas have been reviewed to ensure requirements for accessibility have been considered.

- accessible car parking and continuous accessible path of travel to entrances
- to and through the principal entrances
- to and throughout common areas
- continuous accessible paths of travel and circulation spaces for internal paths of travel to unit entries on accessible levels of the development
- to and within accessible serviced apartments

### 1.3 Documentation Reviewed

This report is based on review of the following documentation for 21-25 Woodriff Street, prepared by Morson Group, issued to funktion on 14<sup>th</sup> and 21<sup>st</sup> July 2016; and 23<sup>rd</sup> September 2016 :

- DA01 Development Details Issue A
- DA02 Building Performance and Adaptable Unit Issue A
- DA07 Floor Plan – Basement B1 + B2 Issue B
- DA08 Floor Plan – Ground Level Issue B
- DA17 Floor Plan – Podium Level Issue B
- DA18 Floor Plan – Typical Levels 2-5 Issue B
- DA19 Floor Plan – Level 6 Issue B
- DA12 Proposed Elevations – North & South Issue A
- DA13 Proposed Elevations – East & West Issue A

## 2. Legislation + Standards

### 2.1 Overview

The level of accessibility throughout this development is subject to the Disability (Access to Premises - Buildings) Standards 2010 and the Deemed-to-Satisfy Provisions of the BCA (2016), in particular Parts D3 and E3.6, which reference AS1428.1 (2009), AS1428.4 (2009) and AS1735.12 (1999). Therefore compliance with these standards is required to satisfy the BCA with respect to physical access provisions within the new building. Compliance with the Deemed-to-Satisfy Provisions in BCA 2016 will ensure compliance with the Access Code of the Premises Standards.

Access requirements in this review have been benchmarked against the following legislation and standards.

**The Building Code of Australia 2016 - Parts D3, E3.6 & F2.4**

**AS1428.1 (2009) Design for access and mobility Part 1** (including Amendment No. 1):  
General requirements for access-New building work

**AS1428.4.1 (2009) Design for access and mobility Part 4.1:** Means to assist the orientation of people with vision impairment

**AS1428.2 (1992) Design for access and mobility Part 2:** Enhanced and additional requirements – buildings and facilities.

**AS1735.12 (1999) Lifts, escalators and moving walks Part 12:** Facilities for persons with disabilities

**AS2890.6 (2009) Parking Facilities Part 6 Off Street Parking for people with disabilities**

**AS4299 1995 Adaptable Housing**

**The Disability Discrimination Act 1992 (DDA)**

**Disability (Access to Premises – Buildings) Standards 2010**

**Australian Human Rights Commission Guideline on the Application of the Premises Standards**

**Penrith Council DCP Part D2 – Residential Development**

### 2.2 The Disability Discrimination Act

The Disability Discrimination Act (DDA) (1992) recognises the importance of access to premises, by making it unlawful to discriminate against people with a disability in the provision of access to premises. The Building Code of Australia (BCA) in conjunction with the DDA applies to new buildings and existing buildings that undergo refurbishment.

### **2.3 The Disability (Access to Premises - Buildings) Standards**

The Disability (Access to Premises – Buildings) Standards 2010 applies to new buildings as well as any new part and any affected part of an existing building.

For this project, the new building will be required to comply with the Disability (Access to Premises – Buildings) Standards 2010.

The Premises Standards are a set of minimum requirements for the provision of access. While compliance with the Deemed-to-Satisfy Provisions of the Access Code fulfills legal responsibilities in relation to the Disability Discrimination Act, designing beyond the minimum is encouraged, to provide a greater degree of access than required by the Deemed-to-Satisfy Provisions.

### **2.4 Adaptable Housing**

Though not required for this class of building, provision has been made for a total of 6 adaptable apartments (3 as built accessible and 3 adaptable).

Adaptable dwellings incorporate design and construction elements that can be readily modified to cater for an occupant with access and mobility restrictions, such as a person with a disability or an older person.

Adaptable housing enables accessibility to be easily accommodated not only for people who use a wheelchair, but for people with reduced mobility as a result of age or temporary illness. Adaptable housing also provides more space for residents to be assisted by carers. AS4299 Adaptable Housing provides design requirements for adaptable dwellings.

### 3. General Building Access Requirements

The proposed development is an 8 storey building which includes:

- 2 levels of basement car parking
- commercial / retail (ground floor)
- 58 serviced apartments (podium level and levels 2-6)
- communal open area (podium level)
- communal facilities including pool, recreation area, gym, toilets and change rooms, conference rooms and meeting rooms (level 7)

The development includes Classes 3, 5, 6 and 7a under the BCA 2016 classification of buildings.

To meet Disability (Access to Premises - Buildings) Standards and the BCA part D3.1 for a new Class 3 development access is required to common areas - from a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level; to and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like. Where a ramp complying with AS 1428.1 or a passenger lift is installed— (a) to the entrance doorway of each sole-occupancy unit; and (b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.

To meet Disability (Access to Premises - Buildings) Standards and the BCA part D3.6 for a Class 3 residential building, accessible apartments are required. For 41 to 60 sole-occupancy units, 3 accessible sole-occupancy units are required. In this development of 58 apartments, 3 accessible apartments are proposed, with an additional 3 apartments built to be adaptable.

To meet the Disability (Access to Premises - Buildings) Standards and BCA part D3.1 for a new Class 5 and 6 development access is required: – to and within all areas normally used by the occupants.

To meet Disability (Access to Premises - Buildings) Standards and the BCA part D3.1 for a new Class 7a development access is required: – to and within any level containing accessible car parking spaces.

## 4. Design Review and Access Requirements

### 4.1 Car Parking

#### 4.1.1 Proposed Design

Parking is proposed to be provided as follows:

- 113 spaces are proposed, including 4 accessible car parking spaces on each basement level (8 in total), located in close proximity to the lifts.

To meet BCA D3.5 and requirements for accessible units, an accessible carparking space is proposed to be allocated to each accessible and adaptable unit. The accessible parking spaces are proposed to have a layout to meet AS2890.6 2009, including a dedicated (non-shared) space with dimensions 2.4m wide x 5.4m long, a shared area on one side of the dedicated space 2.4m wide x 5.4m long and a shared area at the end of each space 2.4m x 2.4m.

#### 4.1.2 Recommendations

In ongoing design, include the following for accessible parking spaces to comply with AS2890.6 2009 and AS1428.1 2009:

- A 1200mm high bollard located in the center and 800mm from the front edge of the shared space.
- Parking space related walking and wheelchair unloading areas comprise a slip-resistant, firm plane surface with a fall not exceeding 1:40 in any direction or 1:33 if the surface is a bituminous seal.
- The headroom above each dedicated space and adjacent shared area, measured from the level of the dedicated space to be a minimum of 2500 mm, and 2200mm on the vehicular path of travel to the designated accessible parking spaces
- A continuous accessible path of travel which includes surfaces constructed and maintained with no lip at joints between abutting surfaces exceeding 3mm or 5mm at beveled edges is provided to link the accessible parking space and the lift (AS1428.1 clause 7)

### 4.2 Continuous Accessible Paths of Travel to Entrances

#### 4.2.1 Proposed Design

To meet BCA D3.2, accessible pedestrian links meeting the requirements of AS1428.1 are proposed to the principal building entrances:

- from Woodriff Street to the eastern ground floor entrance via an on grade walkway link from the north; and a pedestrian crossing from Judges Car Park and 1:14 ramp link from the south
- from Union Lane to the northern ground floor entrance via an on grade walkway link
- from Union Lane and Woodriff Street to the western ground floor entrance via on grade walkway links
- from basement parking to ground floor commercial /retail and residential apartments via a lift linking to all floors

#### 4.2.2 Recommendations

In ongoing design, include the following for walkways to comply with the BCA and AS1428.1 2009 clause 7.1 and 10.2:

- A minimum 1000mm unobstructed path width and 2m vertical clearance (AS1428.1 clauses 6.2 and 6.3)
- A slip resistant surface that is traversable by people who use a wheelchair and those with an

ambulant or sensory disability

- All glazing at the automatic sliding doors which is unframed and which is capable of being mistaken for a doorway or opening is to be provided with highlighting to meet the requirements of AS1428.1 (2009) clause 6.6. A solid strip 75mm high is to be provided 900-1000mm AFFL with a minimum 30% luminance contrast with the floor surface when viewed from either side

#### **4.3 External Paths of Travel and Landscaped Area**

##### **4.3.1 Proposed Design**

To meet BCA D3.2, accessible links are proposed throughout the communal open area on the podium level.

##### **4.3.2 Recommendations**

In ongoing design, include the following for external paths of travel and landscaped areas to comply with AS1428.1 2009:

- A minimum 1200mm unobstructed path width and 2m vertical clearance (clauses 6.2 and 6.3); AS1428.2 clause 6.4
- Surfaces to be constructed and maintained with no lip at joints between abutting surfaces exceeding 3mm or 5mm at bevelled edges to comply with (clause 7).
- Drainage or tree grates on the path of travel are to have spaces not more than 13mm wide and not longer than 150mm with the elongated opening placed transverse to the dominant path of travel (clause 7.5).
- Landscaping and plant selection that considers maintenance free of vegetation debris and ease of circulation including slip-resistance.
- The selection of any proposed outdoor furniture is to be linked to an accessible path of travel and include tables that are stable and seats that include a back and armrest and seat height to comply with AS1428.2 clause 27.2 and figure 32.

#### **4.4 Retail / Commercial Tenancies**

##### **4.4.1 Proposed Design**

Three spaces for retail/ commercial tenancies are indicated on the ground floor. Entry to each tenancy is via inward opening doors. All doors are indicated to include clear door openings of 850mm including the active leaf opening at double doors, and sufficient circulation space at doorways to meet AS1428.1 clause 13.3.

##### **4.4.2 Recommendations**

In ongoing design, include the following for internal links to the tenancies to comply with AS1428.1 2009:

- The force required to activate door closers, glazed or pivot action doors is to meet as close as possible the requirements of clause 13.5.2(e).
- A luminance contrast of 30% provided at doorways is required to comply with AS1428.1 (2009) clause 13.1 and will assist in identification by people with low vision.
- All glazing which is unframed and which is capable of being mistaken for a doorway or opening is to be provided with highlighting to meet the requirements of AS1428.1 (2009) clause 6.6. A solid strip 75mm high is to be provided 900-1000mm AFFL with a minimum 30% luminance contrast with the floor surface when viewed from either side.
- Surfaces at door thresholds to be constructed and maintained with no lip at joints between



abutting surfaces exceeding 3mm or 5mm at bevelled edges to comply with (clause 7).

## 4.5 Common Areas

### 4.5.1 Proposed Design

Communal facilities are provided throughout the building. On Level 7, communal facilities include a pool, bbq/recreation area, gym, change facilities, toilets and conference room. On the podium level, a communal open area is provided. Communal sanitary facilities are provided on basement B1, ground floor and Level 7.

On Level 7, entry to each room is via inward opening doors. All doors are indicated to include clear door openings of 850mm including the active leaf opening at double doors, and sufficient circulation space at doorways to meet AS1428.1 clause 13.3. A platform lift is indicated to provide access to the upper pool deck.

To meet the requirements of Disability (Access to Premises - Buildings) Standards and the BCA part F2.4(a), the communal sanitary facilities are proposed to include a unisex accessible toilet, and a sanitary compartment suitable for a person with an ambulant disability in both the male and female toilets. The accessible sanitary facilities are indicated to include a layout and circulation space to meet AS1428.1 clause 15, with the exception of the following:

- the combined accessible toilet and shower in basement B1: basin is in the shower circulation space;
- the doors en route to the accessible toilet nearest to the conference room do not appear to provide adequate latch side circulation space

Garbage is proposed to be managed through the provision of garbage chutes on each level with clear circulation space of 2000mm in front of the chutes to meet AS1428.1 6.5.3.

Letterboxes are indicated on an accessible path of travel outside the eastern entrance, with circulation space in front of the boxes to facilitate the maneuvering of a wheelchair (min. 1500mm x 1500mm).

To meet BCA D3.2, accessible links are proposed throughout the communal open area on the podium level.

### 4.5.2 Recommendations

In ongoing design, include the following for common areas to comply with BCA D3.1 and AS1428.1 2009:

- Intercoms and security swipe card readers located on level landings at an accessible height to meet AS1428.1 clause 14 (not less than 900mm and not more than 1100mm AFFL and not less than 500mm from internal corners).
- Provide adaptable unit letterboxes located at an accessible height, maximum height 1100mm AFFL
- Ensure that in ongoing design unisex accessible sanitary facilities include a layout, circulation space (door, WC pan, basin) and fittings to meet the requirements of AS1428.1 clause 15.
- Ensure in ongoing design that the proposed combined accessible shower and sanitary facilities include circulation space for an accessible shower to meet AS1428.1 clause 15.
- To meet the intent of the DDA we recommend that a locker is provided in an accessible location.
- To meet BCA F2.4(g) we recommend consideration be given to providing accessible sanitary facilities with both a left-handed transfer layout and a right-handed transfer layout
- Ensure that in ongoing design cubicles for people with ambulant disabilities includes

features complying with AS1428.1 clauses 13.4 and 16 and figures 34 and 53 (signage, entry airlock and cubicle door circulation, WC pan, grabrails, toilet paper dispenser, clothes hook).

- Ensure in ongoing design, to comply with BCA D3.3 (b) and E3.6 the new low rise platform lift is one of the types identified in Table E3.6a, and includes the following features:
  - Lift floor dimensions of not less than 1100 mm wide x 1400 mm deep
  - Minimum clear door opening of 900mm complying with AS1735.12 section 2
  - Lift landing doors at the upper landing
  - Passenger protection system complying with AS 1735.12 clause 4.2
  - Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received

## **4.6 Passenger Lifts**

### **4.6.1 Proposed Design**

Two passenger lifts are proposed to link all levels of the building. The lifts are indicated to have a lift lobby on each level that provides sufficient circulation space for a wheelchair or mobility aid user. To comply with BCA E3.6 the lifts are indicated to have floor dimensions not less than 1400mm x 1600mm for lifts traveling more than 12m.

### **4.6.2 Recommendations**

To comply with BCA E3.6 the lifts must include the following features in accordance with AS1735.12:

- A handrail complying with the provisions for a mandatory handrail in AS 1735.12 clause 5.3
- Minimum clear door opening of 900mm as in AS 1735.12 section 2
- Passenger protection system complying with AS 1735.12 clause 4.2
- Lift car and landing control buttons complying with AS 1735.12 section 7 for Braille, tactile and luminance contrast
- Lighting in complying with AS 1735.12 section 10
- Automatic audible information within the lift car to identify the level each time the lift stops; and audible and visual indication at each lift landing to indicate the arrival of the lift car.
- Emergency hands free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received.

## **4.7 Stairways**

### **4.7.1 Proposed Design**

Fire isolated stairways are proposed in the building linking from basement levels to the ground level; and linking all levels of the buildings to ground floor.

### **4.7.2 Recommendations**

In ongoing design, include the following for stairways to comply with BCA D3.1 and AS1428.1 2009:

- All stairways, (including fire isolated stairs) have nosing profiles which include 50-75mm wide solid slip resistant highlighting strips on the tread at the nosing that includes a minimum luminance contrast of 30% with the tread to comply with AS1428.1 figures 27(A) and (B)

## **4.8 Internal Accessible Paths of Travel – Residential Apartment Levels**

### **4.8.1 Proposed Design**

Internal corridors on each level linking the lifts to units are proposed to meet the BCA part D3.1 and AS1428.1 by including:

- Space for passing and turning (at least 1800 x 2070 mm) in the corridors
- Circulation space to meet AS1428.1 clause 13 at the unit doorways
- Doors to units to provide a clear door opening of minimum 850mm (AS1428.1 clause 13)

## **4.9 Emergency Egress**

### **4.9.1 Proposed Design**

It is understood that on the apartment levels the apartments are deemed as fire refuges.

### **4.9.2 Recommendations**

In ongoing design, include the following for emergency egress to comply with the DDA:

- To meet AS3745 (2009) Planning for Emergencies in Facilities we recommend in ongoing design that consideration be given to the inclusion of suitable emergency evacuation devices for people to be carried down the stairwell, and accessible / adaptable units identified on the fire services panel.
- To meet the intent of the DDA refuges are recommended to be provided in one of the basement stair entry landings for a wheelchair user or a person with ambulant mobility equipment and an accompanying person, with a recommended unobstructed space of 1300mm x 800mm outside of the egress route (BCA RD 97/01 Table D1.6).

## 5. Accessible Unit Review and Requirements

### 5.1 Accessible Apartments

The development is proposed to include a total of 58 serviced apartments. Apartments are all proposed to be 2 bedroom units.

Accessible apartments are proposed to be provided in apartments 101, 105 and 201.

In addition, apartments 301, 401 and 501 are indicated to be adaptable apartments. The adaptable bedroom apartment layouts are indicated to include a layout to meet the essential design criterion as listed in AS4299 and include circulation spaces to comply with the functional requirements of AS1428.1 for the entry doorway, internal doors, living room, kitchen, laundry, bedroom and bathroom.

#### 5.1.1 Proposed Design

To meet the Disability (Access to Premises - Buildings) Standards and the BCA requirements, the two bedroom apartment layout in units 101, 105 and 201 are indicated to include an accessible layout and circulation spaces to comply with the requirements of AS1428.1 for the entry doorway, internal doors, living room, kitchen, laundry, bedroom and bathroom.

#### 5.1.2 Recommendations

In ongoing design, include the following for the accessible apartments to comply with BCA D3.1 and AS1428.1 2009:

- Further detail of the kitchen and bathroom fixtures and joinery is required to ensure the inclusion of accessible features.
- The door to the master bedroom in the accessible apartments to be positioned to meet the circulation space requirements of AS1428.1 clause 13.3

## 6. Conclusion

We have evaluated the DA design documentation for the proposed new building at 21-25 Woodriff Street Penrith for compliance with the access and mobility requirements of the BCA 2016 and the Disability (Access to Premises - Buildings) Standards (2010). The designs have been assessed to ensure the inclusion of safe, equitable and dignified access for people with disabilities to meet the intent of the DDA.

Having reviewed the listed drawings, it is our opinion that at this stage of the design, the access provisions for people with physical and sensory disabilities complies with the performance requirements of BCA (2016) sections D3, E3.6 and F2.4; AS1428.1, AS1428.2, AS1428.4.1, AS2890.6, AS4299, AS1735.12 and the Penrith Council DCP. With the inclusion of the recommendations in this report, the development has the potential to continue to meet these requirements in ongoing design.

In our opinion the proposed design, in conjunction with inclusion of the recommendations, has the potential to meet the objectives of the Disability Discrimination Act through its intention to provide non-discriminatory access and the equitable and dignified use of all appropriate areas of this residential development.



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