lindsay perry access

Disability Access Report

JWD Gosford

87-89 John Whiteway Drive
GOSFORD NSW

For: APG
Ref: LP_21456

Executive Summary

Documentation for the proposed s4.55 modifications of a Residential Development located at 87-89 John Whiteway Drive Gosford, has been reviewed against current accessibility legislation.

The following table summarises our findings.

Item No.	Description	Compliance Status
Access and Approach		
5.1	Allotment Boundary to Entrance	Compliant
5.2	Accessible Carparking to Entrance	Compliant
5.3	Link between Associated Buildings	Compliant
5.4	Pathways Generally	Capable of compliance
5.5	Accessible Carparking	Compliant configuration
5.8	Walkways	Capable of compliance
5.9	Stairs	Capable of compliance
5.10	Pedestrian Crossings	Capable of compliance
5.11	Accessible Entrances	Capable of compliance
5.11	Non-accessible Entrances	To be addressed during detailed design
Interior | Common Areas		
6.1	Extent of Access Generally	Compliant
6.2	Circulation Areas	Compliant
6.3	Doorways	Capable of compliance
6.4	Exempt Areas	Compliant
6.5	Floor Finishes	To be addressed during detailed design
6.6	Carpet	To be addressed during detailed design
6.7	Controls	To be addressed during detailed design
6.8	Visual Indication to Glazing	To be addressed during detailed design
6.9	Tactile Indicators	To be addressed during detailed design
6.10	Signage	To be addressed during detailed design
6.11	Access to Swimming Pool	To be addressed during detailed design
6.12	Thresholds	To be addressed during detailed design
6.13	Slip Resistance	To be addressed during detailed design
Sanitary Facilities | Common Areas		
7.1	Distribution	Compliant
7.2	Accessible Toilets	Capable of compliance
7.3	Accessible Showers	To be addressed during detailed design
7.4	Ambulant Toilet Cubicles	To be addressed during detailed design
Vertical Circulation		
8.1	Lifts	Capable of compliance
8.2	Stairs	Capable of compliance
8.4	Fire Isolated Egress Stairs	Capable of compliance

Adaptable Housing		
Pre Adaption Requirements		
9.1	Accessible Entrance	To be addressed during detailed design
9.2	Visitable Toilet	To be addressed during detailed design
9.3	Accessible Path of Travel	Compliant
Post Adaption Requirements		
9.4	Car Accommodations	Compliant Configuration
9.5	Letterbox	Capable of compliance
9.6	Doorways	Compliant Configuration
9.7	Internal Corridors	Compliant Configuration
9.8	Bathroom	Compliant Configuration
9.9	Bedroom	Compliant Configuration
9.10	Living Area	Compliant Configuration
9.11	Laundry	Compliant Configuration
9.12	Floors Generally	To be addressed during detailed design
9.13	Ancillary Items	To be addressed during detailed design
SEPP 65 Universal Housing Requirements | SEPP 64		
10.1	Dwelling Access	Compliant
10.2	Dwelling Entrance	Compliant Configuration
10.3	Internal Corridors and Doors	Compliant Configuration
10.4	Toilet	Compliant
10.5	Shower	Compliant
10.6	Reinforcement of Bathroom Walls	To be addressed during detailed design
10.7	Internal Stairways	Not applicable

We consider that the drawings presented for assessment, for the purposes of the s4.55 modification, generally comply with current statutory requirements.

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Document Control

This report has been prepared based on the documentation available and time allocated to conduct the review. All reasonable attempts have been made to identify key compliance matters. Best practice options, as noted in the report, are not mandatory but will minimise the risk of a complaint made under the DDA.

Revision Summary:

prepared by:		
Lindsay Perry	revision 1 revision 2	14 February 2022 18 February 2022

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Clarifications:

This report is limited to items within drawings listed in this report only.

Construction is to be in accordance with the recommendations made in this access report to ensure compliance.

Any dimensions quoted throughout this report and within Australian Standards are CLEAR dimensions, not structural. This needs to be considered during construction to account for wall linings and the like.

The recommendations throughout this report reflect the professional opinion and interpretation of Lindsay Perry Access Pty Ltd. This may differ from that of other consultants.

1. Project Background

The proposed development provides one-hundred and ninety-eight (198) residential apartments and townhouses within four (4) buildings. Basement carparking is provided, common to all four (4) buildings.

Each building provides outdoor communal areas and at the ground floor level and communal landscaped areas link the buildings. Communal facilities are provided that adjoin Building B at the ground floor level.

A combination of one, two- and three-bedroom units have been provided within the development. The development includes the provision of adaptable housing per Central Coast Council DCP requirements.

2. Reviewed Documentation

Architectural documentation prepared by Marchese Partners has been reviewed as listed in Appendix 1.

3. Council Requirements

The site lies within the Central Coast Council local government area. Gosford City Council DCP 2013 Part 4 - Centres is applicable to the development as the site is within the Gosford Centre. Accessibility requirements of the DCP Part 4 are as follows:

4.1.4.2 Pedestrian Access and Mobility

Any new development must be designed to ensure that safe and equitable access is provided to all, including people with a mobility problems and disabilities. This is of particular concern in Gosford where a significant percentage of the population is 55 years or older and the topography can be difficult to negotiate on foot.

Objectives

- To provide safe and easy access to buildings to enable better use and enjoyment by people regardless of age and physical condition, whilst also contributing to the vitality and vibrancy of the public domain.
- To ensure buildings and places are accessible to people with a disability.
- To provide a safe and accessible public domain.

Controls

1. Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.
2. The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, or as amended) and the Disability Discrimination Act 1992 (as amended).
3. Barrier free access is to be provided to not less than 20% of dwellings in each development and associated common areas.
4. The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.

5. The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access.
6. Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours.

4.1.6.2 Housing Choice and Mix

A choice of apartment types and mix of sizes in the city centre caters for a variety of socioeconomic groups.

Objectives

- Ensure that residential development provides a mix of dwelling types and sizes to cater for a range of household types.
- Ensure that dwelling layout is sufficiently flexible for residents' changing needs over time.
- Ensure a sufficient proportion of dwellings include accessible layouts and features to accommodate changing requirements of residents.
- Ensure the provision of housing that will, in its adaptable features, meet the access and mobility needs of any occupant.

Controls

In addition to the provisions for apartment mix as per Part 3 of the Residential Flat Design Code, the following additional controls apply.

1. For residential apartment buildings and multi-unit housing on land with less than 20% slope, 15% of all dwellings (or at least one dwelling – whichever is greater) must be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes "preadaptation" design details to ensure visitability is achieved.
2. Where possible, adaptable dwellings shall be located on the ground floor, for ease of access. Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access must provide access from the basement to allow access for people with disabilities.
3. The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).
4. Car parking and garages allocated to adaptable dwellings must comply with the requirements of the relevant Australian Standard for disabled parking spaces.

The development has been designed to reflect the accessibility requirements of the Gosford City Council DCP 2013 Part 4 – Centres as demonstrated throughout this report. Adaptable housing has been provided within the development.

4. Legislation

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- Disability (Access to Premises (Buildings)) Standards 2010
- Access Code for Buildings 2010
- The National Construction Code Building Code of Australia Volume 1 2019, Amendment 1 (BCA)
  - Section D2.14 / D2.15 / D2.17 – landings, thresholds and slip resistance
  - Section D3 – Access for People with Disabilities
  - Section E3.6 – Passenger Lifts
  - Section F2.4 – Accessible Sanitary Facilities
- Australian Standard AS1428.1 (2009) Amendment 1 & 2, – Design for Access and Mobility
- Australian Standard AS1428.2(1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities
- Australian Standard AS1428.4.1 (2009) Amendment 1 – Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators
- Australian Standard AS2890.6 (2009) – Parking Facilities – Off street carparking For People with Disabilities.
- Australian Standard AS4299 – Adaptable Housing
- Australian Standard AS1735.12 – Lifts, escalators and moving walks: Lifts for persons with a disability
- State Environmental Planning Policy 65 – Residential Design Quality of Residential Apartment Development (SEPP65) – Apartment Design Guide – July 2015
- The Livable Housing Design Guidelines – Edition 4

A summary of the requirements of relevant legislation follows.

The Disability Discrimination Act 1992

The DDA requires independent, equitable, dignified access to all parts of the building for all building users regardless of disability. The DDA makes it unlawful to discriminate against a person on the grounds of disability.

The Disability (Access to Premises) Standards

The Disability (Access to Premises - buildings) Standards 2010 (the Premises Standards) commenced on 1 May 2011. Any application for a building approval for a new building or upgrade of an existing building on or after that date triggers the application of the Premises Standards.

The Premises Standards include an Access Code written in the same style as the Building Code of Australia. It has a number of Performance Requirements that are expressed in broad terms and references a number of technical Deemed-to-Satisfy Provisions.

The National Construction Code / Building Code of Australia (Volume 1)

The Building Code of Australia (BCA) is contained within the National Construction Code (NCC) and provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings (and new building work in existing buildings) throughout Australia. The BCA is a performance-based code and compliance can be met through satisfying the deemed-to-satisfy provisions or by meeting the prescribed performance requirements.

The BCA for Class 2 buildings, access for people with disabilities is required:

- 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 (all levels if serviced by a lift).
- 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.

AS1428 – Design for Access and Mobility

- Australian Standard AS1428.1 (2009) Amendment 1 & 2, – Design for Access and Mobility contains access requirements that are mandatory for the provision of access for persons with a disability and is referred by the BCA
- Australian Standard AS1428.2(1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities provides enhanced and best practice requirements that will minimize DDA risk
- Australian Standard AS1428.4.1 (2009) Amendment 1 – Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators

AS2890.6 – Off-street Carparking for People with Disabilities

AS2890.6 (2009) applies to the carparking areas generally.

AS1735– Lifts, escalators and moving walks

AS1735.12 (1992) contains requirements for passenger lifts for persons with a disability.

AS4299 Adaptable Housing

AS4299 (1993) provides housing for different community groups with different needs. It involves a move away from special accommodation for persons with a disability, avoiding social dislocation.

5. Access and Approach

The approach to the building needs to be considered when considering access for persons with a disability. The BCA has three requirements for the approach to the building for persons with a disability. An accessible path of travel is required to the building entrance from the allotment boundary at the main points of pedestrian entry, from accessible carparking areas and from any adjacent and associated accessible building.

In this instance, the approach to the building has been considered as follows:

- from the allotment boundary at the pedestrian entrances along John Whiteway to the Building C and Building D entrances.
- from the accessible carparking areas to the building entrance.
- between the buildings on the site.

Figure 2 | Overall Site Plan

5.1 Approach from Street Boundary

The BCA requires that a continuous accessible path of travel be provided from the allotment boundary at the main points of pedestrian entry to the main entrance.

Compliance Summary:

Compliant

Commentary:

An accessible path of travel provided between the allotment boundary along John Whiteway Drive to the entrance of each building. For Block B, this is via the common landscaped areas between Building A and Building B due to the topographical restraints of the site. Block C and D are accessed via the central common area associated with the communal facilities – Block B is also able to be accessed from this location.

5.2 Approach from Accessible Carparking

The BCA requires that a continuous accessible path of travel be provided from the accessible carparking areas to the main entrance.

Compliance Summary:

Compliant

Commentary:

Accessible carparking for the residents is provided within the basement carparking areas. Lift access is available within each building to all levels of the development.

Accessible visitor car parking is provided centrally within the site adjacent to the community facilities entrance.

5.3 Approach between Associated Buildings

The BCA requires that a continuous accessible path of travel be provided between associated accessible buildings.

Compliance Summary:

Compliant

Commentary:

An accessible path of travel is achievable between the entrance of each building through the central communal outdoor spaces.

5.4 Pathways Generally

The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428.

Compliance Summary:

Capable of compliance

Commentary:

Pathways throughout the communal areas of the development are of adequate width and grade for compliance.

Accessibility Requirements:

For compliance with AS1428.1, the following access requirements apply.

a. The minimum unobstructed width of all pathways is to be 1000mm (AS1428.1, Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2.

b. All pathways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 3mm is allowable, or 5mm for bevelled edges).

c. The maximum allowable crossfall of pathways is to be 1:40.

5.5 Accessible Carparking

As this is a residential development (Class 2), there are no BCA requirements for the provision of accessible carparking specific to the residential areas within the development.

Accessible carparking is provided in conjunction with the adaptable units and for visitors adjacent to the community facilities.

Compliance Summary:

Compliant configuration

Commentary:

Carparking is provided at the basement levels of the development.
A total of twenty-eight (28) accessible spaces are provided within the development, two (2) of which are visitor carparking spaces. The spaces have been provided in a configuration that offers compliance with current accessibility requirements and the total number is in keeping with BCA requirements.

Accessibility Requirements:

Access requirements for the accessible carparking are as follows.

a. Accessible carparking to be a minimum of 2400mm wide with a shared area to one side of the space 2400mm wide. Circulation space can be shared between adjacent accessible carparks.

b. Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2.

c. The maximum allowable crossfall of accessible carparking area to be, 1:40 (1:33 for bituminous surfaces). This crossfall applies both parallel and perpendicular to the angle of parking.

d. For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7.

e. Designated accessible carparking is to be identified using the International Symbol for Access (ISA) between 800 and 1000mm high placed as a pavement marking in the centre of the space between 500-600mm from its entry point. The perimeter of the space is to be identified by an unbroken yellow & slip resistant line 80-100mm

   Shared space to be identified using yellow slip-resistant & unbroken stipes 150 to 200mm wide with spaces 200 to 300mm between stripes. Stipes to be at an angle of 45° to the side of the space.

5.6 Walkways

AS1428.1 defines a walkway as having a gradient of 1:20, which is provided in this instance. The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428.

Compliance Summary:

Compliant configuration

Commentary:

Walkways are provided within the development to facilitate access between buildings and the communal areas.

Accessibility Requirements:

For compliance with AS1428.1, the following access requirements apply to the walkways.

a. The minimum unobstructed width of walkways is to be 1000mm (AS1428.1, Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2.

b. Walkways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 3mm is allowable, 5mm for bevelled edges -refer to Figure 6 of AS1428.1).

c. The maximum allowable crossfall of a walkway is to be 1:40.

d. Surface of the walkway to be slip-resistant.

e. The ground abutting the sides of the walkway should follow the grade of the pathway and extend horizontally for 600mm. This is not required where there is a kerb or handrail provided (refer to AS1428.1 Clause 10.2).

f. Maximum allowable gradient of the walkway is 1:20 and maximum length between landings to be 15m (for 1:20 gradient). Landings to be a minimum 1200mm in length (where there is no change in direction). For changes in direction of 180º, landings to be 1540mm in length – refer to AS1428.1(2009), Clause 10.8.

5.7 Stairs

AS1428.1 has access requirements for all public access stairs and is applicable to all stairs within the external common areas, and for the entry stair to Block B.

Compliance Summary:

Capable of compliance

Commentary:

Stairs are provided within the central external common areas of the development as shown on the landscaping documentation, and for access from John

Whiteway Drive to Building B and Building D. The overall configuration of stairs is in keeping with current accessibility requirements.

Accessibility Requirements:
Access requirements for stairs are as follows.

a. Stairs to comply with AS1428.1(2009), Clause 11.2.

b. Where the stair intersects the property boundary, the stair shall be set back a minimum of 900mm so that handrail extensions and tactile indicators do not protrude into the traverse path of travel.

c. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open riser.

d. Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009), Clause 11.2 & 12). Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis.

   Handrails are required on both sides of the stair to cater for left and right-handed disabilities. A central handrail is also an acceptable solution where adequate width is available. In this instance, the use of a double handrail is encouraged so that two users can travel in opposite directions and maintain their grip on the handrail.

e. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

f. Stair nosings shall not project beyond the face of the riser.

g. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D3.8 and AS1428.4.

   Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. For discrete tactile indicators, 45% luminance contrast is required (60% where two-tone indicators are used).

5.8 Stairway Platform Lift

A stairway platform lift is provided within the development. The BCA has limitations on the use stairway platform lifts. They must not:

- be used to serve a space in a building accommodating more than 100 persons, calculated according to D1.13; or
- be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or
- be used where it is possible to install another type of passenger lift; or
- connect more than 2 storeys; or

- where more than 1 stairway lift is installed, serve more than 2 consecutive storeys; or
- when in the folded position, encroach on the minimum width of a stairway required by D1.6

Compliance Summary:
Capable of compliance

Commentary:
A stairway platform lift is provided to facilitate an accessible path of travel to the pool area.

Accessibility Requirements:
Access requirements for stairway platform lifts are as follows.

a. Stairway platform lifts must comply with AS1735.7. When in the folded position, it must not encroach on the minimum width of a stairway required by D1.6.

b. The floor dimensions of the lift to be 810mm wide x 1200mm deep as a minimum.

5.9 Accessible Entrances

In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and not less than 50% of all pedestrian entrances including the principal pedestrian entrance. In a building with a total floor area more than 500 sqm a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.

Compliance Summary:
Compliant configuration

Commentary:
Swinging doors provide entrance to each Block from John Whiteway Drive and the communal areas at the rears of the buildings. Each entrance is accessible with the exception of the entrances to Building B and Building D from John Whiteway Drive that have stairs. An accessible path of travel to these buildings is provided at the rear of the buildings or via the Communal Facilities. This is due to the topographical constraints of the site.

Accessibility Requirements:
The following access requirements apply to the entrances.

a. Entrances to comply with AS1428.1(2009), Clause 13 as part of the accessible path of travel.

b. Doors are to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel.

c. Door threshold to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces.

d. Door to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5)

e. For glass doors, provide decals to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level.

5.10 Non-accessible Entrances

The northern entrance to Building B and the entrance to Building D from John Whiteway Drive are not accessible entrances having stairs. As they are located within 50m of an accessible entrance point, this is compliant with BCA requirements.

Compliance Summary:

To be addressed during detailed design.

Commentary:

The entrances to Building B and Building D from John Whiteway Drive are not accessible having stairs. An alternative accessible path of travel is available to each building via communal areas.

Accessibility Requirements:

The following access requirements apply to the non-accessible entrance.

a. Provide direction signage displaying the location of the accessible entrance that displays the International Symbol for Access per BCA Specification D3.6.

6 Interior

The interior areas subject to accessibility requirements include the residential common areas being the entry foyer, lift lobbies, corridors and Communal Facilities located within Building B. The following requirements do not extend to individual apartments.

6.1 Extent of Access Generally – BCA

Access for people with disabilities is required to the door of individual sole occupancy units. An accessible path of travel is also required to the residential communal areas.

Compliance Summary:

Compliant

Commentary:

Lifts provide access through all levels of the development.

6.2 Circulation Areas

BCA (Clause D3.3) requires the provision of turning spaces and passing areas to corridors to enable wheelchair circulation throughout a building.

Turning spaces 1540mm wide by 2070mm long are required within 2m of the end of corridors to enable a wheelchair to turn through 90° and passing areas 1800mm wide by 2000mm long are required every 20m along a corridor unless there is a clear line of sight.

Compliance Summary:

Compliant

Commentary:

Corridors generally provide 1600mm width enabling wheelchair turning areas. A clear line of site is available along all corridors.

6.3 Doorways Generally

AS1428 has requirements for doorways within the accessible path of travel to enable independent access for people using a wheelchair.

Compliance Summary:

Compliant configuration

Commentary:

Doorways within the accessible path of travel are provided with adequate circulaitn areas for compliance.

Accessibility Requirements:

Access requirements for doorways within the accessible path of travel are as follows.

a. Doorways within the accessible path of travel to have a minimum clear opening width of 850mm (AS1428.1(2009), Clause 13.2). We recommend the use of a 920 leaf door as a minimum to achieve adequate clear width. For double doors, the operable leaf must achieve this clear opening width.

b. All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1(2009), Figure 31. Circulation areas to have a maximum crossfall of 1:40.

c. Doorways to have minimum 30% luminance contrast as described in AS1428.1(2009), Clause 13.1.

d. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5).

   Door handles and related hardware shall be able to be unlocked and opened with one hand per AS1428.1 (2009), Clause 13.5.1. The handles shall enable a person who cannot grip to operate the door without their hand slipping from the handle. We recommend the use of lever handles.

e. Doorways to have operational forces per AS1428.1 (2009), Clause 13.5.2. A maximum allowable force of 20N is required to operate the door.

6.4 Exempt Areas

BCA Clause D3.4 does not require access for people with disabilities to areas that would be inappropriate due to the particular use of the area or would pose a health and safety risk. This includes the path of travel to these areas.

6.5 Floor Finishes

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for bevelled edges) as part of the accessible path of travel. Refer to AS1428.1(2009), Clause 7.2 for further details.

Compliance Summary:

To be addressed during detailed design stages.

6.6 Carpet

AS1428.1 has access requirements for carpet. Where carpet is used as the floor surface, pile height should not exceed 4mm. Exposed edges will be fastened to the floor surface. Carpet trims shall have a vertical face not more than 3mm high.

BCA states that clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm.

Compliance Summary:

To be addressed during detailed design stage.

6.7 Controls

Controls such as light switches, GPOs, alarm keypads, card swipes, intercoms, etc are to be located within the accessible height range of 900-1100mm above the floor level and not within 500mm of an internal corner to comply with AS1428.1(2009), Clause 14. This should be implemented during construction to ensure compliance.

Compliance Summary:

To be addressed during detailed design stage.

6.8 Visual Indication to Glazing

Provide decals to all full height glazing that can be mistaken for a doorway to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid. AS1428.1, Clause 6.6.

Compliance Summary:

To be addressed during detailed design stage.

6.9 Tactile Indicators

For a building that is required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching a stairway (other than a fire isolated stair); an escalator; a moving walkway; a ramp (other than a fire isolated ramp, step ramp, kerb ramp or swimming pool ramp); and in the absence of a suitable barrier, an overhead obstruction less than 2m above the floor level or an accessway ,meeting a vehicular way if there is no kerb or kerb ramp (BCA D3.8).

Tactile indicators are generally required to be 600-800mm deep across the width of the hazard and set back 300mm from the edge of the hazard (refer AS1428.4.1, Figure A1). Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background color (45% for discrete tactile indicators and 60% for discrete two-tone tactile indicators).

Compliance Summary:

To be addressed during detailed design stage.

6.10 Signage

Signage to identify sanitary facilities, hearing augmentation and required exits are to be provided in accordance with BCA Clause D3.6. This includes provision of the International Symbol for Access or International Symbol for Deafness as appropriate. Signage to comply with AS1428.1 (2009), Clause 8.

Compliance Summary:

To be addressed during detailed design stage.

Accessibility Requirements:

Access requirements for signage are as follows. Note that this does not include general wayfinding signage.

a. Braille and tactile signage formats as outlined within BCA Specification D3.6 that incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 must be provided to identify the following:
   - a sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b building or a sole-occupancy unit in a Class 3 or Class 9c building
   - a space with a hearing augmentation system
   - each door required by E4.5 to be provided with an exit sign and state level
   - an accessible unisex sanitary facility and identify if the facility is suitable for left or right handed use
   - an ambulant accessible sanitary facility 1 and be located on the door of the facility
   - where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access to direct a person to the location of the nearest accessible pedestrian entrance
   - where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary

b. Braille and tactile components of the sign to be located not less than 1200mm and not higher than 1600mm affl.

c. Signage to be located at the latch side of the doorway with the leading edge of the sign 50-300mm from the architrave. Where this is not possible, the sign can be located on the door.

   Sample signs are as follows. These are examples only – ensure selected signage complies with BCA Specification D3.6 including provision of Braille locator for multiple lines of text and characters.

6.11 Access to Swimming Pool

The BCA requires access for persons with a disability to swimming pools with a total perimeter greater than 40m that are associated with as Class 1b, 2, 3, 5, 6, 7, 8, or 9 building that this required to be accessible (Table D3.1).

Compliance Summary:

To be addressed during detailed design.

Commentary:

The pool within the central communal external areas has a perimeter greater than 40m. Therefore, an accessible entrance is required to the pool.

Accessibility Requirements:

For pools required to be accessible by this clause, not less than one accessible entry / exit must be provided by means of a fixed or moveable ramp and an aquatic wheelchair; or a zero depth entry at a maximum gradient of 1:14; or a platform swimming pool lift; or a swing style swimming pool lift.

6.12 Thresholds

The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless in a building required to be accessible by Part D3, the doorway opens to a road or open space; and is provided with a threshold ramp or step ramp in accordance with AS 1428.1.

Compliance Summary:

To be addressed during detailed design stages.

6.13 Slip Resistance

The BCA defines the following slip resistance requirements for stairs and ramps:

Application	Surface Conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or Landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

Compliance Summary:

To be addressed during detailed design stage.

7 Sanitary Facilities

The BCA / Access Code for Buildings (Clause F2.4) require the provision of sanitary facilities catering for persons with a disability.

7.1 Distribution of Accessible Sanitary Facilities

Accessible sanitary facilities are required as follows.

- Within a Class 2 building, where sanitary facilities are provided for use in common by the residents, a unisex access sanitary compartment is required.
- At each bank of toilets where there is one or more toilets in additional to a unisex accessible sanitary compartment at the bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 must be provided for use by males and females
- A unisex accessible shower is required where showers are required by F2.3.
- A unisex accessible adult change facility must be provided in some public buildings.

Compliance Summary:

Capable of compliance

Commentary:

Sanitary facilities for use in common by the residents are provided within Building B

Ambulant toilets for male and female use will be required at each level of the communal facilities in addition to the unisex accessible facility to meet current BCA requirements.

7.2 Unisex Accessible Toilets

Three (3) unisex accessible toilets are provided within the development within Block B (ground floor and Level 1).

Compliance Summary:

To be addressed during detailed design

Commentary:

Overall room dimensions and the arrangement of fixtures within the accessible sanitary facilities is conducive to compliance with current accessibility legislation. Both a left and right-handed facility is provided.

Accessibility Requirements:

Access requirements for the accessible toilet facilities are as follows.

a. Accessible toilet facilities to be unisex facilities for compliance with the BCA.

b. Unisex accessible facilities to comply with AS1428.1(2009), Clause 15 including set-out of fittings and fixtures, circulation areas and doorways.

   Crucial dimensions for the toilet are 450mm from centreline of pan to side wall, 800mm from front of pan to rear wall and a seat height of 470mm. A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see figure 43).

   For the basin, a minimum dimension of 425mm is required from the centreline of the basin to the side wall and height of basin to be between 800 and 830mm.

   Grabrails to be provided at the side and rear of the toilet in compliance with AS1428.1 at a height of 800mm.

c. Taps to have lever handles, sensor plates or similar controls. For lever taps, a minimum 50mm clearance to be provided to adjacent surfaces.

d. Toilet seat shall be of the full round type, be securely fixed in position when in use and have fixings that create lateral stability. They should be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (eg pan, wall or floor) and remain in the upright position when fully raised.

e. Provide a backrest to accessible toilets to comply with AS1428.1, Clause 15.2.4.

f. Accessible toilet to be identified using the International Symbol for Access. Pictograms / lettering to have a minimum 30% luminance contrast to the background colour. Signage is to comply with AS1428.1, Clause 8 and include information in tactile and Braille formats (as required by the BCA).

g. Doorways to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel. Adequate circulation area at the latch side of the doorway is required to allow independent access to the facility – for details refer to AS1428.1, Figure 31.

h. Door hardware to be located within the accessible height range of 900-1100mm above the finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

i. Controls such as light switches within the accessible toilet facilities to be in the accessible height range of 900-1100mm above the finished floor level to comply with AS1428.1(2009), Clause 14. Controls should be located not less than 500mm to a corner.

7.3 Unisex Accessible Shower Facility (if provided)

Where showers are provided for use in common, an accessible shower is required.

Compliance Summary:

To be addressed during detailed design

Accessibility Requirements:

Access requirements for accessible showers are as follows.

a. Showers are to comply with AS 1428.1, Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range.

b. Floor waste to be positioned 550mm and 580mm from enclosing shower walls as illustrated in AS1428.1 (2009), Figure 47a.

c. The minimum dimension of an accessible shower to be 1160 x 1000mm. A folding seat, at a height of 470mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.

d. Circulation space in front of the shower is to be provided as illustrated in AS1428.1, Figure 47.

7.4 Cubicles for People with an Ambulant Disability

Ambulant cubicles are required to satisfy BCA requirements within the male and female toilets located in Block B.

Compliance Summary:

To be addressed during detailed design.

Accessibility Requirements:

Access requirements for ambulant toilets are as follows.

a. Options for the configuration of the ambulant cubicles are illustrated in AS1428.1, Figure 53.

b. Provide an ambulant cubicle within each bank of male and female toilets in compliance with AS1428.1, Clause 16.

c. Minimum width of ambulant cubicles to be 900-920mm.

d. Provide grabrails to ambulant cubicles to comply with AS1428.1, Clause 17 and Figure 53A.

e. Doors to have a minimum opening width of 700mm and comply with AS1428.1, Figure 53B.

f. Provide signage to the ambulant cubicles to comply with AS1428.1, Clause 16.4.

8 Vertical Circulation

Lifts provide the main means of access between levels of each building. Multiple lifts are provided within the development distributed evenly throughout the buildings. Stairs within the building are generally fire isolated egress stairs. Public access stairs are provided within the communal areas of Block B.

8.1 Lifts

Lifts are provided for access between levels. The size of the lifts appears to satisfy the requirements of AS1735.12.

Compliance Summary:

Capable of compliance

Accessibility Requirements:

The following access requirements apply to the lifts. These requirements are for disabled access only and do not include requirements for stretchers.

a. Lift is to comply with AS1735.12 and be fully automatic as required by the BCA, Clause E3.6.

b. Minimum internal dimensions of the lift car to be 1400mm wide x 1600mm deep BCA, Clause E3.6 – for a lift that travels over 12m.

c. Clear opening of the lift door to be minimum 900mm.

d. Provide a handrail complying with the provisions for a mandatory handrail in AS1735.12.

e. All lift control buttons are to be in the accessible height range of 900-1100mm affl and have a minimum 30% luminance contrast to the background colour. This includes buttons within the lift car and at each public lift lobby. All buttons are to be provided with information in Braille and tactile formats.

f. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment.

g. Series of door opening devices that will detect a 75mm diameter rod across the door opening between 50 mm and 1550mm above the floor level.

h. Emergency hands-free communication, including a button that alerts a call centre of a problem, a light to signal that the call has been received by the call centre and a light indicating assistance is being dispatched.

8.2 Stairs

Stairs are provided within the Communal Facilities of Block B. AS1428.1 has access requirements for all stairs other than fire isolated egress stairs and is applicable in this instance.

Compliance Summary:

Capable of compliance

Accessibility Requirements:

Access requirements for public access stairs are as follows.

a. Stair construction to comply with AS1428.1, Clause 11.1.

b. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open risers.

c. Where the stair intersects with an internal corridor, the stair shall be set back in accordance with AS2418.1 Figure 26C/D to allow adequate space for handrail extensions and tactile indicators.

d. Provide handrails, with extensions, to both sides of the stair (AS1428.1, Clause 11.2). Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails should be continuous around the landings where possible.

   Handrails are required on both sides of the stair to cater for left and right-handed disabilities. A central handrail is also an acceptable solution where adequate width is available.

e. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

f. Stair nosings shall not project beyond the face of the riser.

g. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D3.8 and AS1428.4.1.

   Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. For discrete tactile indicators, 45% luminance contrast is required (60% where two-tone indicators are used).

   Tactile indicators at the top and bottom of the stair to be 600-800mm deep across the width of the stair set back 300mm from the edge of the stair.

8.3 Fire Isolated Egress Stairs

Stairs are provided throughout the development to enable egress in the event of a fire.

Designated fire egress stairs are not considered public access stairs and therefore are not subject to the requirements of AS1428.1 with the exception of contrasting nosing strips and handrail requirements. These are required per AS1428.1.

Compliance Summary:

Capable of compliance

Accessibility Requirements:

Access requirements for fire isolated egress stairs are as follows.

a. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

b. Stair nosings shall not project beyond the face of the riser.

c. Handrails in a required exit serving an area required to be accessible, are to be designed and constructed to comply with AS 1428.1, Clause 12 (BCA D2.17).

   Note: handrails within fire-isolated stars are required to one side only and do not require the provision of handrail extensions. They must have a diameter between 30-50mm; be between 865-1000mm high above the noising; be a consistent height along the length of the stair – no vertical sections; have a clearance to the wall not less than 50mm; have no obstruction along the length of its passage; and have an end that turns through 180, turns to the ground, or returns fully to an end post.

   We recommend the use of the staggered stair to maintain a constant height along the length of the handrail per AS1428.,1 (2009), Clause 12.

9 Adaptable Housing

An adaptable housing unit is defined by AS4299 as follows:

> *A housing unit which is designed and constructed to meet the performance requirements stated in the standard. It is designed in such a way that it can be modified easily in the future to become accessible to both occupants and visitors with disabilities of progressive frailties.*

There are requirements for both the pre-adaption state and post-adaption states. In the pre-adapted state, an adaptable unit is required to be "visitable" and these requirements are applicable at the time of construction. Other elements are to be provided on adaption of the unit.

Note that the documentation needs to demonstrate that compliance in the post-adapted state is achievable.

At time of construction, the following are required:

- An accessible entrance per AS1428.1 (2009).
- A visitable toilet at the entry level per AS4299
- An accessible path of travel from the entrance to the visitable toilet within the meaning of AS1428.1 (2009)
- An accessible path of travel from the entrance to the living area within the meaning of AS1428.1 (2009)

At time of adaption, the following are required:

- Compliance with AS4299 Appendix A – essential criteria. This includes kitchen layouts, laundry layouts, carparking, etc

There is total of one-hundred and eighty eight units within the proposed development. As Central Coast Council DCP states that 15% of units are to be adaptable, there is a requirement for twenty-eight (28) adaptable units within the development. Thirty (30) are provided as follows.

- Building A | 4 off
- Building B | 6 off
- Building C | 9 off
- Building D | 11 off

For the following unit types are provided as adaptable units within Building C and Building D (subject to this s4.55 modification application): Building C – 1BS.1; Building C – 2BS.1; Building D – 2BS.1; and Building D – 2BS.2. Pre and post adaptable layouts have been provided in the documentation.

Nominated adaptable units within Building C and Building D are as follows:

C3-03; C4-03; C5-03; C6-03; C3-02; C4-03; C5-02; C6-02; D3-01; D3-06; D4-01; D4-06; D5-01; D5-06; D6-01; D6-06; D1-10; D2-03; D3-08.

Pre-Adaption Requirements:

9.1 Accessible Entrance

Entrances to adaptable housing units are to comply with AS4299 Clauses 4.3.1 and 4.3.2. AS4299 which require that the entry doors comply with AS1428.2 **at time of construction**. The minimum clear opening width of the doorway is to be 850mm and allow for wheelchair maneuverability (provide minimum 1550mm long area in front of the doorway). Entrances to the adaptable housing units to be weatherproofed.
Door hardware is to comply with AS1428. In this regard, entry door hardware is to be in the accessible height range of 900-1100mm above finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

Compliance Summary:

To be addressed during detailed design

Commentary:

The entry doorway to the adaptable units offers require circulation areas per AS1428.1 at time of construction.

9.2 Visitable Toilet

Each adaptable housing unit is required to have a toilet on the entry floor that is a visitable toilet within the meaning of AS4299 **at time of construction**. The toilet is to be installed in compliance with AS1428 (correct set-out distance from fixed walls) and have the capacity to accommodate a grabrail that complies with Figure 4.5 of AS4299. Slip resistant floors are also required. A visitable toilet is defined as a toilet which has a space of minimum 1250x900mm in front of the toilet clear of door swings.

Compliance Summary:

To be addressed during detailed design

Commentary:

The bathroom within the adaptable units requires a visitable toilet arrangement at time of construction –1200 x 900mm circulation area is required froward of the pan.

9.3 Accessible Path of Travel from Entry to Visitable Toilet & Living Area

The performance requirements of AS4299 require the provision of an accessible path of travel, within the meaning of AS1428.1 (2009), from the entrance to the visitable toilet and a living area. Door circulation and corridor widths need to be designed to reflect this requirement.

Compliance Summary:

Compliant

Commentary:

An accessible path of travel is provided between the entry doors to the living areas and the bathroom.

Post Adaption Requirements:

9.4 Private Car Accommodations

Private carparking spaces for adaptable housing units shall be large enough to enable a person with a wheelchair to get in and out of both the car and the parking space. A width of 3.8m is necessary to enable the driver to alight, open the passenger door and assist a person with a disability into a wheelchair.

Carparking spaces for the adaptable units to have a minimum floor plan dimension of 3.8m x 6.0 (AS4299, Clause 3.7.2). A clear vertical clearance of 2.5m is desirable.

The introduction of AS2890.6 in 2009 offers an approach to the provision of accessible carparking that can be easily accommodated in a standard carparking layout. It offers an accessible space 2400mm wide with a circulation area 2400mm wide adjacent to the space (4800mm for a single space). The circulation area can be "shared" between two accessible spaces (7200mm for two spaces). This offers carparking spaces in excess of the minimum requirement of AS4299 (3800mm).

Compliance Summary:

Compliant

Commentary:

Carparking for the adaptable units has been provided at the basement levels. The configuration is in keeping with AS2890.6. The number of accessible residential spaces is considered adequate for the adaptable apartments.

9.5 Letterboxes

Letterboxes to adaptable housing units should be located on a hard standing area connected by an accessible path of travel to the adaptable housing unit.

Compliance Summary:

Compliant

Commentary:

Letterboxes are provided at the entrance to each Block, satisfying AS4299 requirements.
An accessible path of travel is provided from the letterboxes to the entrance of the adaptable units.

Accessibility Requirements:

Letterboxes to adaptable apartments should be provided within the accessible height range of 600-1100mm affl.

9.6 Doorways

Doorways throughout adaptable housing units are required to have a clear opening width of 820mm. **At time of construction, an accessible path of travel within the meaning of AS1428.1 is required from the entrance to the visitable toilet and living area.** Other door circulation areas are to comply with AS1428.1 on adaption of the unit.
All door hardware is to be operable with one hand and in the height range of 900-1100mm above the floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

Compliance Summary:

Compliant

Commentary:
Doorways are provided with adequate circulation areas

9.7 Internal Corridors

There is a requirement for all corridors to be minimum 1000mm.

Compliance Summary:

Compliant

9.8 Bathrooms

Bathrooms within an adaptable housing unit are to comply with AS1428 after adaption. Issues to be considered include slip resistant floor, shower minimum 1100x1160mm with future provision for accessible features including handheld shower and grabrails, shower waterproofing to AS3740, recessed sop holder, washbasin with knee clearance, adequate circulation areas, automatic control of hot water, double GPO next to the mirror and the provision of capstan or lever taps. Refer to AS4299, Clause 4.4.4.

Compliance Summary:

Compliant

Commentary:
Bathrooms offer an accessible layout.

9.9 Kitchens

Essential requirements for kitchens within an adaptable housing unit allow for future adaption and include items such as sinks, taps, cooktops, location of oven, cupboard handles, general power outlets, dimensions of the space and location of refrigerator. Kitchens are required to have a clear space between benches of 1550mm. An area of bench top 800mm wide is required that can be adjusted through the height range of 750 – 850mm above floor level. Alternatively, a section of this dimension needs to be easily replaceable to achieve this requirement.

Compliance Summary:

Compliant

Commentary:
Kitchen offers circulation areas as described above.

9.10 Bedrooms

At least one bedroom within an adaptable housing unit is required to have adequate space for a wardrobe and a queen size bed with minimum 1540mm wide circulation at the foot of the bed and 1000mm at the side of the bed (1200mm preferred) for compliance with AS1428.2, Clause 6.1.

Compliance Summary:

Compliant

Commentary:

Bedroom 1 offers compliant circulation areas.

9.11 Living Area

Living areas within an adaptable housing unit are required to have circulation areas that allow a wheelchair to maneuver within the space at time of construction. In this regard, an area with 2250mm diameter is required, clear of furniture. AS4299, Clause 4.7 outlines this requirement. A telephone outlet adjacent to a general power outlet is also a requirement for living areas.

Compliance Summary:

Compliant

Commentary:

The living area within the adaptable unit is an open-plan area which is meets the circulation requirements of AS4299.

9.12 Laundry

Requirements for laundry areas within adaptable housing units include the provision for an automatic washing machine / clothes dryer with clear space in front of the appliances. An area of 1550mm diameter will achieve this requirement. Laundries are to have slip resistant floors and door circulation areas in compliance with AS1428.1.

Compliance Summary:

Compliant

Commentary:

Laundries offer compliance being in a cupboard configuration.

9.13 Floors Generally

AS4299 requires that all floor surfaces including bathrooms, laundry and external paved surfaces be slip resistant to comply with AS3661.1.
Non-essential items include that after modification, carpets should have short pile and consideration should be given to the fire hazard indices. Floors should be easily cleanable and bold patterns should be avoided to eliminate confusion for persons with vision impairment.

Compliance Summary:

To be addressed during detailed design

9.14 Ancillary Items

Ancillary items are not considered essential items. Switches such as light switches must be located within the accessible height range of 900-1100mm above the floor level. Power outlets should be located at a height not less than 600mm affl – a height of 1000mm is preferred. They should be located not less than 500mm from internal corners.

Compliance Summary:

To be addressed during detailed design

10 Universal Housing Requirements | SEPP 65

The NSW Government promotes better apartment design across NSW through the State Environmental Planning Policy No. 65 – Design Quality of Residential Apartments Development. Developments are to provide a minimum 20% of apartments that achieve silver level for livable housing.

In addition to the adaptable units, eight (8) units capable of achieving Silver Level LHA requirements are provided within Building D – unit type Building D-2BS.4.

Livable housing requirements are summarised below:

10.1 Dwelling Access

There is a safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.

- Path of travel should be minimum 1000mm wide with no steps; an even, slip resistant surface; crossfall not more than 1:40; and maximum slope of 1:14.
- Where ramps are required, landings at 9m intervals are to be provided and are to be not less than 1200mm in length.
- Where a carparking space is relied upon as the safe and continuous pathway to the dwelling, it should be at least 3200mm wide….
- Step ramps where provided to have a maximum gradient of 1:10, clear width of 1000mm and maximum length of 1900mm.
- Where ramps adjoin gates or doorways, landings no less than 1200mm in length, exclusive of the door swing, are required.

Compliance Summary:

Compliant

10.2 Dwelling Entrance

There is at least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.

- Entrance doors to have a clear opening with of 820mm and have a level transition (5mm allowable tolerance – where in excess of 5mm, threshold ramp up to 56mm high is allowable)).
- Reasonable shelter from the weather is required.

— 1200x1200mm level landing area required on the arrival side of the door.

Compliance Summary:
Compliant Configuration

Commentary:
Entrances offer shelter and the required landing area. Door sizes and threshold details to be addressed during detailed design.

Accessibility Requirements:
We recommend the use of an 870mm door leaf to achieve a clear opening of 820mm.

10.3 Internal Corridors and Doors

Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.

— Doorways on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes to have a clear opening with of 820mm and level transition between surfaces (5mm allowable tolerance).
— Corridors to be 1000mm wide.

Compliance Summary:
Complaint

Commentary:
Corridors offer adequate clear width. Door sizes and threshold details to be addressed during detailed design.

Accessibility Requirements:
We recommend the use of an 870mm door leaf to achieve a clear opening of 820mm.

10.4 Toilet

The ground (or entry) level has a toilet to support easy access for home occupants and visitors.

— A toilet on the ground / entry floor is required to have a circulation area in front of the toilet pan 900x1200mm.
— Toilet pan is to be provided in a corner of a room.

Compliance Summary:
Compliant

Commentary:
The ensuite provides a toilet that meets this requirement.

10.5 Shower

The bathroom and shower are designed for easy and independent access for all home occupants.

- A bathroom is required to have a non-slip hobless shower, located on the corner of the room.

Compliance Summary:

Compliant

Commentary:

The ensuite provides a toilet that meets this requirement.

10.6 Reinforcement of Bathroom & Toilet Walls

The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.

- Walls to enable safe installation of grabrails to toilet, bath and shower.
- Reinforcement to be in the form of 25mm noggins or plywood sheeting with 12mm thickness.

Compliance Summary:

To be addressed during detailed design stages.

10.7 Internal Stairways

Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation.

- Stairs to have a continuous handrail to one side of the stair where the rise is greater than 1m.

Compliance Summary:

Not applicable

11 Best Practice Measures for Consideration

We recommend a best practice approach to accessibility that goes beyond minimum standards and embraces the intent of the DDA. The following measures will promote inclusion and participation for all users.

11.1 Accessways

We recommend that the accessible path of travel be a minimum 1200mm wide to comply with AS1428.2. Wider pathways will allow easy access for more people who have a permanent disability, people with a temporary disability, people pushing prams and elderly people using walking frames and the like. This is in keeping with the principles of Universal Design.

For or a wheelchair and a pram to pass 1500mm is required and for two wheelchairs to pass requires 1800mm.

11.2 Automatic Entrance Doors

The provision of automatic sliding doorways maximizes access for people with a disability. Further, delivery drivers, people carrying parcels and the elderly also benefit from the provision of automatic doors.

Automatic doors provide safe, convenient access for everyone, regardless of age or ability in keeping with universal design principles. They also offer COVID-19 mitigation measures, reducing the transfer of germs and bacteria.

11.3 Accessible Service Counters

The provision of an accessible section of counter will benefit people using wheelchairs and people of short stature.

AS1428.2 contains access requirements for service counters and recommends the height of the counter be between 750mm(±20) and 850mm (±20) above the finished floor level and have foot and knee clearance under the counter. The minimum width of an accessible counter and clearance below is recommended as 900mm.

11.4 Hearing Augmentation at Service Counters

For buildings that are required to be accessible, the BCA (Clause D3.7) requires hearing augmentation systems at service counters **where the user is screened from the service provider**.

With the introduction of sneeze-screens as part of COVID-19 mitigation measures, the provision of hearing augmentation at service counters has become a critical accessibility issue for people with hearing impairment.

11.5 Luminance Contrast

Luminance contrast assists people with a vision impairment to navigate the built environment. Mandatory items that require luminance contrast are tactile indicators, accessible toilet seats and doorways as outlined in other sections of this report. The following can also be provided as a best practice measure to ensure ease of use:

- Minimum 30% luminance contrast between floors and walls or between walls and skirting boards;
- Minimum 30% luminance contrast between the ground surface and obstructions such as columns, bollards and street furniture;
- To assist people with vision impairment locate the building entrance, consider providing features with a minimum 30% luminance contrast to the background surface such as an entry mat or awning.
- Minimum 30% luminance contrast between the floor and the entrance mat (this allows people with vision impairment to locate the entrance;
- Minimum 30% luminance contrast between walls and handrails.

11.6 Visual Indication to Glazing (additional measures)

To ensure full height glazing that can be mistaken for a doorway is highlighted, we recommend the provision of a “double decal” as per international precedent. This involves the provision of two (2) decal strips that have a minimum 30% luminance contrast to each other. As such, the background colour does not need to be relied upon.

11.7 Wayfinding – Signage

Signs and symbols should be provided to inform all users. A signage system which informs all users is encouraged. The use of pictograms and directional cues is recommended as is the use of luminance contrast to ensure the message is clear and legible.

11.8 Terminology (Best-practice recommendation)

The use of positive terminology such as “accessible” should be used when referring to accessible facilities such as toilets and carparking. This term is preferable to “disabled” which is commonly used. This principle is to be adopted through the design and documentation of a project and on signage throughout the completed building.

11.9 Emergency Call Button in Sanitary Compartments

If provided, emergency call button should be located at 600+/- 20mm above the finished floor level in front of the toilet roll holder to enable ease of access for someone who has fallen off the pan. People do fall off the pan, in particular those with no or limited upper trunk control.

11 Conclusion

This report demonstrates that the fundamental aims of accessibility legislation are achievable within the proposed Residential Development located at 87-89 John Whiteway Drive Gosford. Spatial planning and general arrangements of facilities will offer inclusion for all building users.

Disability is often defined as any limitation, restriction or impairment which restricts everyday activities and has lasted or is likely to last for at least 6 months. Disabilities can be very varied. They can be physical, cognitive, intellectual, mental, sensory, or developmental. They can be present at birth or can occur during a person's lifetime. They can also be permanent or temporary. In Australia, almost one in five people – 4.3 million – have a disability with one in three having severe or profound core activity limitation.

Equity and dignity are important aspects in the provision of access to buildings for all users. With respect to people with a disability, equity and dignity are sometimes overlooked in the construction of new buildings por refurbishment works. The design approach needs to maintain a high level of equity for people with disabilities and meet the performance requirements of the BCA. The performance requirements adopt two main concepts in the provision of access for people with a disability being to the degree necessary and safe movement. Both of these concepts need to be achieved within the context of equitable and dignified access.

In this respect, a wide range of disabilities needs consideration and a compromise reached between requirements of different disability groups. Measures need to be implemented to ensure inclusion of all users, not a particular disability group in isolation.

APPENDIX 1 | Reviewed Documentation

Architectural documentation prepared by marchese partners has been reviewed as follows.

S4.55

JWD GOSFORD

87-89 JOHN WHITEWAY DRIVE
GOSFORD NSW 2250

S4.55 2ND SUB DRAWING LIST

DWG NO.	TITLE	REV
001 SITE PLANS		
DA001.0	COVER SHEET	02
DA001.1	SITE LOCATION	12
DA001.2	SITE ANALYSIS	12
DA001.3	SITE COMPLIANCE SCHEME	14
DA001.4A	SITE COVERAGE (FOOTPRINT)	13
DA001.4B	OPEN SPACE	13
DA001.4C	COMMUNAL OPEN SPACE	3
DA001.5	SITE PLAN	15
DA001.7	OVERALL BUILDING DIMENSIONS	6
002 FLOOR PLANS (OVERALL)		
DA002.1	BASEMENT	19
DA002.2	GROUND FLOOR PLAN	19
DA002.3	LEVEL 1	16
DA002.4	LEVEL 2	15
DA002.5	LEVEL 3	14
DA002.6	LEVEL 4	14
DA002.7	LEVEL 5	14
DA002.8	LEVEL 6	13
DA002.9	LEVEL 7	13
DA002.10	LEVEL 8	14
DA002.11	LEVEL 9	13
DA002.15	ROOF PLAN	14
003 ELEVATIONS (OVERALL)		
DA003.0	MATERIAL PALETTE	11
DA003.1	ELEVATIONS (OVERALL)	14
DA003.2	ELEVATIONS (OVERALL)	14
DA003.3	ELEVATIONS	14
005 SITE SECTIONS		
DA005.1	SITE SECTIONS (OVERALL)	13
DA005.2	SITE SECTIONS (OVERALL)	13
DA005.3	SITE SECTIONS (OVERALL)	13
DA005.4	SITE SECTION (COMMUNAL BUILDING B)	5
DA005.9	CUT AND FILL DIAGRAMS	14
DA005.10	CUT AND FILL DIAGRAMS	14
DA005.11	CUT AND FILL DIAGRAMS	2
006-007 COMPLIANCE/DIAGRAMS		
DA006.1	SEPP COMPLIANCE BUILDING A	11
DA006.2	SEPP COMPLIANCE BUILDING B	11
DA006.3	SEPP COMPLIANCE BUILDING C	11
DA006.4	SEPP COMPLIANCE BUILDING D	11
DA006.5	HOURS OF SUN BUILDINGS A & B	11
DA006.6	HOURS OF SUN BUILDINGS C&D - SHEET 1	10
DA006.7	HOURS OF SUN BUILDINGS C&D - SHEET 2	10
DA006.7B	SOLAR ACCESS SUMMARY - BUILDINGS A & B	5
DA006.7B -02	SOLAR ACCESS SUMMARY - BUILDINGS C & D	1
DA006.7C	SOLAR ACCESS - 3D VIEWS - SHEET 1	5
DA006.7D	SOLAR ACCESS - 3D VIEWS - SHEET 2	5
DA006.8	NATURAL VENTILATION BUILDINGS A & B	10
DA006.9	NATURAL VENTILATION BUILDINGS C&D - SHEET 1	9
DA006.10	NATURAL VENTILATION BUILDINGS C&D - SHEET 2	9
DA006.11	OVERALL SEPP COMPLIANCE AND UNIT CALCULATIONS	12

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DWG NO.	TITLE	REV
~~DA007.1~~	~~GROSS FLOOR AREA - FLOOR TO FLOOR~~	~~12~~
DA007.1B	GROSS FLOOR AREA - BUILDINGS A & B	1
DA007.1C	GROSS FLOOR AREA - BUILDINGS C & D	1
DA007.1D	GROSS FLOOR AREA - BUILDINGS C & D	1
DA007.2D	CIRCULATION DIAGRAMS	3
DA007.3	HEIGHT PLANE - LEP	12
DA007.5	WASTE MANAGEMENT DIAGRAMS - SHEET 1	11
DA007.6	WASTE MANAGEMENT DIAGRAMS - SHEET 2	11
008 UNIT TYPES		
~~DA008.1~~	~~TOWNHOUSE (2 BETHROOMS)~~	~~8~~
~~DA008.2~~	~~TOWNHOUSE (3 BEDROOMS)~~	~~7~~
~~DA008.3~~	~~TYPICAL UNIT TYPES~~	~~8~~
~~DA008.4~~	~~TYPICAL UNIT TYPES~~	~~7~~
~~DA008.5~~	~~TYPICAL UNIT TYPES~~	~~8~~
~~DA008.6~~	~~TYPICAL UNIT TYPES~~	~~7~~
~~DA008.7~~	~~TYPICAL UNIT TYPES~~	~~8~~
~~DA008.8~~	~~TYPICAL UNIT TYPES~~	~~8~~
~~DA008.10~~	~~TYPICAL UNIT TYPES~~	~~8~~
~~DA008.12~~	~~TYPICAL UNIT TYPES~~	~~8~~
~~DA008.13~~	~~TYPICAL UNIT TYPES~~	~~7~~
~~DA008.14~~	~~TYPICAL UNIT TYPES~~	~~7~~
~~DA008.15~~	~~TYPICAL UNIT TYPES~~	~~7~~
~~DA008.16~~	~~PENTHOUSES - BLOCK D~~	~~7~~
DA008.17	TYPICAL UNIT TYPES	1
DA008.18	TYPICAL UNIT TYPES	1
DA008.19	TYPICAL UNIT TYPES	1
DA008.20	TYPICAL UNIT TYPES	1
DA008.21	TYPICAL UNIT TYPES	1
DA008.22	TYPICAL UNIT TYPES	1
DA008.23	TYPICAL UNIT TYPES	1
DA008.24	TYPICAL UNIT TYPES	1
DA008.25	TYPICAL UNIT TYPES	1
DA008.26	TYPICAL UNIT TYPES	1
DA008.27	TYPICAL UNIT TYPES	1
DA008.28	TYPICAL UNIT TYPES	1
DA008.29	TYPICAL UNIT TYPES	1
DA008.30	TYPICAL UNIT TYPES	1
DA008.31	TYPICAL UNIT TYPES	1
DA008.32	TYPICAL UNIT TYPES	1
DA008.33	TYPICAL UNIT TYPES	1
DA008.34	TYPICAL UNIT TYPES	1
DA008.35	TYPICAL UNIT TYPES	1
DA008.36	TYPICAL UNIT TYPES	1
DA008.37	TYPICAL UNIT TYPES	1
DA008.38	TYPICAL UNIT TYPES	1
DA008.39	TYPICAL UNIT TYPES	1
009 BUILDING A		
DA009.1	BUILDING A - GROUND FLOOR PLAN	12
DA009.2	BUILDING A - LEVEL 1 FLOOR PLAN	12
DA009.3	BUILDING A - LEVEL 2 FLOOR PLAN	12
DA009.4	BUILDING A - LEVEL 3 FLOOR PLAN	12
DA009.5	BUILDING A - LEVEL 4 FLOOR PLAN	12
DA009.6	BUILDING A - LEVEL 5 FLOOR PLAN	12
DA009.7	BUILDING A - ROOF PLAN	12
DA009.8	BUILDING A - ELEVATION ALONG JOHN WHITEWAY DR	12

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DWG NO.	TITLE	REV
DA009.9	BUILDING A - NORTH ELEVATION	12
DA009.10	BUILDING A - WEST ELEVATION	12
DA009.11	BUILDING A - EAST ELEVATION	6
DA009.12	BUILDING A - SECTIONS 2 AND 3	5
DA009.13	BUILDING A - SECTION 1	5
010 BUILDING B		
DA010.1	BUILDING B - GROUND FLOOR PLAN	12
DA010.1B	BUILDING B - GROUND FLOOR PLAN - COMMON AREAS	1
DA010.2	BUILDING B - LEVEL 1 FLOOR PLAN	12
DA010.3	BUILDING B - LEVEL 2 FLOOR PLAN	12
DA010.4	BUILDING B - LEVEL 3 FLOOR PLAN	12
DA010.5	BUILDING B - LEVEL 4 FLOOR PLAN	12
DA010.6	BUILDING B - LEVEL 5 FLOOR PLAN	12
DA010.7	BUILDING B - LEVEL 6 FLOOR PLAN	12
DA010.8	BUILDING B - ROOF PLAN	9
DA010.9	BUILDING B - ELEVATION ALONG JOHN WHITEWAY DR	13
DA010.9B	BUILDING B - TOWNHOUSES (ELEVATION ALONG JWD)	6
DA010.10	BUILDING B - WEST ELEVATION	14
DA010.11	BUILDING B - NORTH ELEVATION	14
DA010.12	BUILDING B - SOUTH ELEVATION	6
DA010.13	BUILDING B - SECTION 1	6
DA010.14	BUILDING B - SECTIONS 2 AND 3	6
DA010.15	BUILDING B - SECTION 4	5
011 BUILDING C		
DA011.0	BUILDING C - COVER PAGE	13
DA011.1	BUILDING C - LEVEL 1 FLOOR PLAN	13
DA011.2	BUILDING C - LEVEL 2 FLOOR PLAN	13
DA011.3	BUILDING C - LEVEL 3 FLOOR PLAN	13
DA011.4	BUILDING C - LEVEL 4-5 FLOOR PLAN	13
DA011.5	BUILDING C - LEVEL 6 FLOOR PLAN	13
DA011.6	BUILDING C - LEVEL 7 FLOOR PLAN	13
DA011.7	BUILDING C - LEVEL 8 FLOOR PLAN	13
DA011.9	BUILDING C - ROOF PLAN	13
DA011.10	BUILDING C - ELEVATION ALONG JOHN WHITEWAY DR	13
DA011.11	BUILDING C - WEST ELEVATION	13
DA011.12	BUILDING C - SOUTH AND NORTH ELEVATION	12
DA011.13	BUILDING C - SECTION	6
DA011.14	BUILDING C - SECTIONS	6
012 BUILDING D		
DA012.0	BUILDING D - COVER PAGE	12
DA012.1	BUILDING D - LEVEL 1 FLOOR PLAN	14
DA012.1B	BUILDING D - LEVEL 1 FLOOR PLAN (PRIVATE OPEN SPACES)	1
DA012.2	BUILDING D - LEVEL 2 FLOOR PLAN	13
DA012.3	BUILDING D - LEVEL 3 FLOOR PLAN	14
DA012.4	BUILDING D - LEVEL 4 FLOOR PLAN	14
DA012.5	BUILDING D - LEVEL 5 FLOOR PLAN	14
DA012.6	BUILDING D - LEVEL 6 FLOOR PLAN	14
DA012.6B	BUILDING D - LEVEL 7 FLOOR PLAN	4
DA012.7	BUILDING D - LEVEL 8 FLOOR PLAN	14
DA012.8	BUILDING D - LEVEL 9 FLOOR PLAN	14
DA012.12	BUILDING D - ROOF PLAN	9
DA012.13	BUILDING D1 - NORTH ELEVATION	10
DA012.13A	BUILDING D1 - SOUTH ELEVATION	3

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DWG NO.	TITLE	REV
DA012.13B	BUILDING D2 - NORTH ELEVATION	4
DA012.14	BUILDING D2 - SOUTH ELEVATION	13
DA012.15	BUILDING D - EAST ELEVATION	14
DA012.16	BUILDING D - WEST ELEVATION	13
DA012.17	BUILDING D - SECTION 1	4
DA012.18	BUILDING D - SECTION 2	4
DA012.19	BUILDING D - SECTION 3	5

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REVISION	DATE	DESCRIPTION	BY
13	18/02/2022	S4.55 MODIFICATION	

NEW DRAWINGS

AMENDED EXISTING DRAWINGS

DA EXISTING DRAWINGS

~~DA DRAWINGS REMOVED FROM SET~~

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CLIENT
ALCEON GROUP PTY LTD

DRAWING TITLE
COVER SHEET

PROJECT
JWD GOSFORD
87-89 JOHN WHITEWAY DRIVE
GOSFORD NSW 2250

SCALE	DATE	DRAWN	CHECKED
NTS	18/02/2022	PA	MA

JOB	DRAWING	REVISION
20104	DA001.0	13