

GARTNER TROVATO ARCHITECTS

# ACCESS ASSESSMENT REPORT

*Long Reef - 1010-1014 Pittwater Road*

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## PREPARED FOR

Antony Westwood  
[antony@g-t.com.au](mailto:antony@g-t.com.au)

## PREPARED BY

Emma Bennett  
[emma.bennett@jensenhughes.com](mailto:emma.bennett@jensenhughes.com)



**JENSEN HUGHES**

Jensen Hughes Pty Limited, Trading as BCA Logic  
Suite 302, Level 3, 151 Castlereagh St, Sydney NSW 2000  
Postal Address: PO Box Q1440, Queen Victoria Building NSW 1230


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Cynthia Lawes  
Registered Certifier  
QBCC A11419882

12 April 2024

 **Access Institute**  
Qualified Access Consultant

Signed:

## Jensen Hughes Australia

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## *Executive Summary*

This document provides an assessment of the architectural design drawings for the proposed residential development located at Long Reef, 1010-1014 Pittwater Road Collaroy NSW 2097 against the Deemed-to-Satisfy provisions of the provisions relating to Access for Persons with a Disability.

Part 2 'Matters for Further Consideration' of this report outlines the identified compliance issues that require further information or consideration and/or assessment as Performance Solutions.

The Annexures of this Report provide detailed assessments of the proposal against compliance requirements.

## 1.0 Basis of Assessment

### 1.1 LOCATION

The building development, the subject of this report, is located at Long Reef, 1010-1014 Pittwater Road Collaroy NSW 2097.

The development comprises a five (5) storey mixed use residential development containing three (3) residential tenancies at ground floor level and residential apartment buildings located above.

The residential portion of the building is served by three (3) separate non-fire isolated stairs.

The building has basement level carparking and a small number of carparks located at the rear of the ground floor level retail tenancies.



*Street Elevation of development*

### 1.2 PURPOSE

The purpose of this report is to assess the proposed development against the documents and their relevant Deemed to Satisfy requirements. The report is intended to clearly outline those areas where compliance is not achieved and provide recommendations to achieve compliance:

- > Disability (Access to Premises-Buildings) Standards 2010;
- > Design Quality of Residential Apartment Development 2015 (SEPP65)
- > Building Code of Australia 2022 (BCA2022)– Part D4 and Clauses E3D7 and F4D5;
- > Warringah Development Control Plan 2011 (DCP);
- > Adaptable Housing Code AS4299:1995 (AS4299) – As required by DCP; and
- > Applicable Australian Standards AS1428.1:2009, AS1428.4.1:2009 and AS2890.6:2009.

### 1.3 LIMITATIONS

This report is limited to an assessment of the access and amenity provisions for people with a disability against the documents as outlined in 1.2 above. It is not an assessment of the proposal against all provisions of the BCA2022 and if this is required, a separate report will be necessary.

This report does not include nor imply any detailed assessment for design, compliance or upgrading for:

- > The structural adequacy or design of the building;
- > The inherent derived fire-resistance ratings of any existing or proposed structural elements of the building (unless specifically referred to); and
- > The design basis and/or operating capabilities of any existing or proposed electrical, mechanical or hydraulic fire protection services.

This report does not include, or imply compliance with:

- > The Disability Discrimination Act (it cannot be guaranteed that that a complaint under the DDA will not be made, however should the building comply with BCA2022 and the Premises Standard then those responsible for the building cannot be subject to a successful complaint);
- > BCA2022 Sections B, C, E, F, G, H, I, J, Parts D2 and D3;
- > Demolition Standards not referred to by the BCA2022;
- > Work Health and Safety Act;
- > Construction Safety Act;
- > Requirements of other Regulatory Authorities including, but not limited to, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning and the like;
- > Conditions of Development Consent when issued by Warringah Council; and
- > This report does not assess the safety of the particular aspects of the building but merely the minimum standards called up by the documents outlined in Part 1.2 of this report.

#### 1.4 FEDERAL DISABILITY DISCRIMINATION ACT (DDA)

Disability is broadly defined and includes disabilities which are physical, intellectual, psychiatric, neurological, cognitive or sensory (a hearing or vision impairment), learning difficulties, physical disfigurement and the presence in the body of disease-causing organisms.

All organisations have a responsibility, under the DDA, to provide equitable, dignified access to goods and services and to premises used by the public. Premises are broadly defined and would include all areas included within the subject development.

The DDA applies nationally and is complaint based. While the Disability (Access to Premises – Buildings) Standards 2010 and the BC2022 are recognised as a design standard to satisfy certain aspects of the DDA, compliance with the BCA2022 and the referenced standards does not guarantee that a complaint will not be lodged.

#### 1.5 DISABILITY ACCESS TO PREMISES STANDARDS (PREMISES STANDARDS)

The aim of the Premises Standards is to provide the building and design industry with detailed information regarding the required access provisions associated with the design and construction of new buildings and upgrade to existing buildings.

The Premises Standards intend to provide certainty for the building industry in relation to meeting the requirements for access in new and upgraded buildings. They only apply to elements addressed within the Standards. All other elements related to premises will still be subject to the existing provisions of the DDA.

The Premises Standards generally align with the BCA2022 and reference a range of Australian Standards relating to access and other associated matters.

They do not apply to existing buildings that are not undergoing upgrade, however they introduce the concept of the “Affected Part”. This means that new works need to be connected to the building’s Principal Pedestrian Entrance by an accessible path of travel. This can mean that upgrade to the building may be necessary even where none is proposed.

## 1.6 DESIGN DOCUMENTATION

This report has been based on the Design plans and Specifications listed in Annexure A of this Report.

## 1.7 DEFINITIONS

### *Accessible*

Having features to enable use by people with a disability.

### *Accessway*

A continuous accessible path of travel (as defined in AS 1428.1) to, into or within a building.

### *Affected Part*

The affected part is;

- (a) The principal pedestrian of an existing building that contains a new part; and
- (b) Any part of an existing, that contains a new part, which is necessary to provide a continuous accessible path of travel from the entrance to the new part.

### *Continuous Accessible Path of Travel*

An uninterrupted path of travel to, into or within a building providing access to all access facilities.

### *Luminance Contrast*

The light reflected from one surface or component, compared to the light reflected from another surface or component.

### *Ramp*

An inclined surface on a continuous accessible path of travel between two landings with a gradient steeper than 1 in 20 but not steeper than 1 in 14.

### *Tactile Indicators*

Tactile Ground Surface Indicators (TGSIs)

Truncated cones and/or bars installed on the ground or floor surface, designed to provide pedestrians who are blind or vision-impaired with warning or directional orientation information.

### *Adaptable*

A housing unit which is designed and constructed to meet the performance requirements of Clause 2.2 of AS 4299-1995.

### *Livable*

A housing unit which has at least one wheelchair accessible entry with an accessible path of travel to the living area and to a toilet that is either accessible or visitable.

## 2.0 Key Compliance Consideration

### 2.1 GENERAL

The following is a summary of all the individual elements that relate directly to the ability of a person with a disability to access all the portions of the building required to be accessible.

Accessibility has been assessed against the documents outlined in Part 1.2 of this Report. The Annexures to this report provide detailed assessments of the proposal against ALL relevant Deemed-to-Satisfy Provisions and prescriptive requirements.

Note: It is important that the Annexures are read in conjunction with the items below, as some matters may not have had sufficient information provided to allow a detailed assessment to be undertaken.

The abbreviations outlined below have been used in the following tables.

### 2.2 CLASSIFICATION

Under the provisions of Parts A6 of BCA2022 and Part A4 of the Access Code, the building has been classified:

*Table 1: Building Classification*

Class	Level	Description
Class 7a	Basement & Ground (partial)	Carpark
Class 7b	Basement	Storage
Class 6	Ground (partial)	Retail
Class 2	Level 1 to 3	Sole Occupancy Units

### 2.3 DIMENSIONS AND TOLERANCES

The Premises Standards and BCA contain the minimum standards for building construction and safety, and therefore generally stipulate minimum dimensions which must be met. Jensen Hughes's assessment of the plans and specifications has been undertaken to ensure the minimal dimensions have been met.

The designer and builder should ensure that the minimum dimensions are met onsite and consideration needs to be given to construction tolerances for wall set outs, applied finishes and skirtings to corridors and bathrooms for example, tiling bed thicknesses and the like which can adversely impact on critical matters such as access for people with disabilities, stair and corridor widths and balustrade heights.



## 2.4 AREAS REQUIRED TO BE ACCESSIBLE

The following areas of the building are required to be accessible:

*Table 5: Areas Required to be Accessible.*

Area / Room	Description
Class 2 Residential apartments and corridors	Common areas of the residential levels Accessible apartments
Class 5 Commercial Tenancies	All areas used by the occupants including amenities
Class 6 Retail Tenancies	All areas used by the occupants including amenities
Class 7a Car parking on Basement Level	To and within any level containing accessible car parking spaces

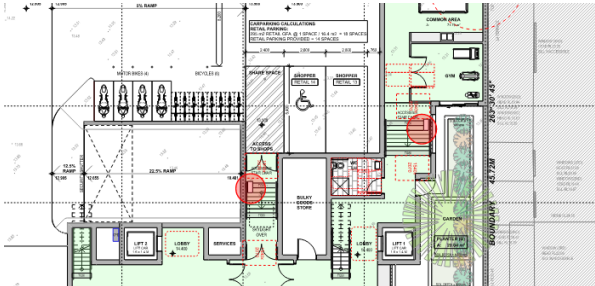
Note: The limitations and exemptions of Clauses D3.2, D3.3 and D3.4 of the BCA2022 and Access Code have been considered where applicable in the process of developing the above table.

## 2.5 PERFORMANCE BASED DESIGN – PERFORMANCE SOLUTIONS

There are specific areas throughout the development where strict Deemed-to-Satisfy Premises Standards and BCA Compliance will not be achieved by the proposed design and site constraints. These matters will need to be address in a detailed Performance Solution Report to be prepared for this development under separate cover:

*Table 2: Performance Solutions*

Item	Description of Performance Solution	DTS Provision
1.	<p><b>Stairway platform lift – Ground floor level – to provide access between:</b></p> <ol style="list-style-type: none"> <li><b>Lift 1 and 2 lobby junctions from shopper carpark; and</b></li> <li><b>Lift 1 lobby and Residential Common area</b></li> </ol> <p>BCA Part E3D7 (1) (b) (iii) states: in an accessible building stairway platform lift must not be used where it is possible to install another type of passenger lift.</p> <p>A platform lift has been installed where it would be possible to install another type of passenger lift.</p> <p>Conditions of acceptance of a stairway platform lift through performance:</p> <ol style="list-style-type: none"> <li>Landing required by D4 (1540mmx2070mm), and location of control button must be clear of any door swings.</li> <li>Accessible Sanitary facility to be provided in retail tenancies.</li> <li>Handrail extension length to be provided.</li> </ol>	E3D7 (1) (b) (iii)

Item	Description of Performance Solution	DTS Provision
		
2.	<p><b>Platform lift obstructs handrail on one side.</b></p> <p>BCA Part D4D4 requires every stairway, except for ramps and stairways in areas exempted by D4D5, to comply with—</p> <ol style="list-style-type: none"> <li>for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1.</li> </ol> <p>A handrail meeting AS 1428.1 requires handrails on both sides.</p> <p>The platform stair lift obstructs a portion of the handrail.</p> <p>A performance solution is to be provided to justify the reduced usable handrail termination to the side the platform lift is located on.</p>	D4D4
2.	<p><b>Basement egress stairs are not fire isolated.</b></p> <p>BCA Part D4D4 requires every stairway, except for ramps and stairways in areas exempted by D4D5, to comply with—</p> <ol style="list-style-type: none"> <li>for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1.</li> </ol> <p>A handrail meeting AS 1428.1 requires handrails on both sides, with terminations and extensions meeting AS1428.1 (2009) and TGSIs top and bottom meeting AS/NZS 1428.4.1 (2009).</p> <p>A performance solution is to be provided to justify the comparison to Basement stairs leading to street as used as an egress only.</p> <p><b>Noting other stairs connecting basement and residential/ retail areas must meet AS1428.1 (2009) in their entirety i.e. be provided with handrails on both sides and TGSIs both top and bottom. Discussion with Design Team as design progresses.</b></p>	D4D4

## 2.6 COUNCIL'S DEVELOPMENT CONTROL PLAN REQUIREMENTS (DCP)

### Warringah DCP Part D – Design - D18 Accessibility and Adaptability

This control applies to all development for

1. non-residential purposes on land in relation to the Accessibility Requirements of this section
2. residential purposes on land in relation to the Adaptability Requirements of this section
3. to which Warringah Local Environmental Plan 2011 applies.

#### Objectives

To ensure vehicular access points for parking, servicing or deliveries, and pedestrian access are designed to provide vehicular and pedestrian safety.

To ensure convenient, comfortable and safe access for all people including older people, people with prams and strollers and people with a disability.

To provide a reasonable proportion of residential units that should be designed to be adaptable and easily modified to promote 'ageing in place' and for people with disabilities.

The Controls for Accessibility Warringah Local Environmental Plan 2011 are:

*Table 3: Controls for Accessibility*

Item No	Control	Comment
1.	The design is to achieve a barrier free environment with consideration given to the design of door handles and switches, entrances, and corridors. Steep, rough and slippery surfaces, steps and stairs and narrow paths should be avoided.	Design incorporates accessible features and will be developed as design progresses.
2.	There are to be continuous, independent, and barrier-free access ways incorporated into the design of buildings.	Design incorporates a continuous accessway and will be developed as design progresses.
3.	Pathways are to be reasonably level with minimal cross fall and sufficient width, comfortable seating, and slip-resistant floor surfaces.	Design incorporates accessible features and will be developed as design progresses.
4.	Where there is a change of level from the footpath to commercial or industrial floor levels, ramps rather than steps should be incorporated	There is a level threshold between the foot path and all commercial/ residential entrances.
5.	There is to be effective signage and sufficient illumination for people with a disability.	Design incorporates accessible features and will be developed as design progresses.

Item No	Control	Comment
6.	<p>Tactile ground surface indicators for the orientation of people with visual impairments are to be provided in accordance with the relevant Australian Standard.</p> <p><b>Note</b> Australian Standard AS1428.4:2002 'Design for Access and Mobility Part 4: Tactile Indicators' applied at the time the DCP was adopted.</p>	Design incorporates TGSIs and will be developed as design progresses.
7.	Access for people with a disability is to be provided at the main entrance to the development.	Access has been provided to all entrances to the development including the main entrance.
8.	Development is to comply with Australian Standard AS1428.2.	Design to incorporate accessible features and be developed as design progresses, noting joinery to incorporate features in alignment with AS 1428.2 (1992), where relevant.
9.	<p>Where a development comprises at least 5 dwellings, 10% (rounded up to next whole number) of dwellings shall be capable of being adapted (Class C) under AS4299</p> <p>Where a development comprises at least five (5) dwellings, 10% (rounded up to next whole number) of dwellings shall be capable of being adapted (Class C) under AS4299.</p> <p><b>Note:</b> Evidence of compliance with the Adaptable Housing Class C requirements of AS 4299 shall be submitted when lodging a DA and certified by an experienced and qualified housing professional (e.g. Architect or Accredited Building Certifier).</p>	Detailed assessments are noted in Annexure-C on this report

## 2.7 RESIDENTIAL SOLE OCCUPANCY UNITS

The following table summarizes the required accessible features for the proposed Residential SOUs. This is based upon the Premises Standards Access Code, SEPP65 Apartment Design Guide, Council DCP and BCA2022:

*Table 4: Residential Sole Occupancy Units*

Unit Type	SOU's
Adaptable SOU's	<p>The following units are identified and designed as Adaptable SOU's:</p> <ol style="list-style-type: none"> <li>1. Unit 06</li> <li>2. Unit 16</li> <li>3. Unit 17</li> </ol> <p>Refer to Section 2.10 and Annexure D of this report.</p>
Liveable SOU's	<p>The following units are identified and designed as Liveable Housing SOUs:</p> <ol style="list-style-type: none"> <li>1. Unit 10</li> <li>2. Unit 11</li> <li>3. Unit 12</li> </ol> <p>The SEPP 65 Apartment Design Code requires that residential apartment developments achieve a benchmark that at least 20% of the total apartments incorporate the Liveable Housing Guideline's silver level universal design features.</p> <p>It is currently understood there will be a total of 21 residential dwellings/ within the development.</p> <p>The required minimum 20% benchmark provision of Silver Level Livable dwellings as required by SEPP 65 has been met with a combination of adaptable and Livable.</p> <p>Refer to Section 2.10 and Annexure D of this report.</p>

*Note: Adaptable SOU's can provide the dual purpose of adaptability and Livable Housing design features.*

## 2.8 LIVEABLE HOUSING DESIGN GUIDELINES REQUIREMENTS (LHDG)

The SEPP 65 Apartment Design Code requires that residential developments achieve a benchmark that at least 20% of the total apartments incorporate the Livable Housing Guideline's silver level universal design features. Annexure B of this Report includes an assessment against the relevant requirements of the LHDG.

Class C Adaptable dwellings designed and built in accordance with AS4299-1995 can also count towards Silver Level Livable SOUs due to overlapping requirements where the Class C Adaptable dwellings are more onerous.

The Annexure B of this Report includes an assessment against the relevant Silver Level Livable Housing requirements of Livable Housing Australia Design Guidelines.

Note: These Guidelines do not take precedence over the requirements of the Disability (Access to Premises – Buildings) Standards 2010 or the Building Code of Australia.

## 2.9 ADAPTABLE HOUSING CODE ASSESSMENT SUMMARY (AS4299)

The adaptable units are required to comply with AS4299 –Class C (Essential features incorporated). Pre and post adaption plans will be needed to demonstrate how the design would permit later alterations to suit individual requirements at minimal extra cost.

The Annexure C of this Report includes an assessment against the relevant adaptability requirements of AS4299-1995.

## 2.10 SPATIAL PLANNING MATTERS

### 2.10.1 BCA Part D4 – Access for people with a disability

#### 2.10.1.1 BCA Part D4D2 – General building access requirements

BCA D4D2 requires an accessway meeting AS 1428.1 to be provided, for a:

**Class 6 -**

- (a) to and within all areas normally used by the occupants.

**Class 7a -**

- (a) access must be provided to and within any level containing accessible carparking spaces.

**Class 2 -**

- (a) 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.
- (b) 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, individual shop, eating area, or the like.
- (c) Where a ramp complying with AS 1428.1 or a passenger lift is installed—
  - (i) to the entrance doorway of each sole-occupancy unit; and
  - (ii) to and within rooms or spaces for use in common by the residents.
- (d) The requirements of (c) only apply where the space referred to in (c)(i) or (ii) is located on the levels served by the lift or ramp.

Access to each level is accessed via a lift from either the basement level or lift lobbies on Pittwater Road Ground Level lift via lift 1, lift 2 and lift 3 respectively.

A Stairway platform lift connects the shopper car parking to Pittwater Road Ground Level which is connected to retail access. The stairway platform lift will be addressed through performance.

All areas associated with the residential Class 2 Part have been provided with a passenger lift and as such all communal areas are required to be accessible including residential storage areas and any residential bin areas.

Retail bin areas are shown to be accessible noting it is recommended that loose furniture like bins, are located away from room door circulation to ensure access to those spaces can be provided.

As the design progresses Design Team to ensure all areas are accessed by staff/ residents to meet this clause.

### Doorways

All doors on an accessway are required to meet AS 1428.1 (2009) and have the following features, including but not limited to:

1. Minimum of 850mm clearance width (920mm doors) incl. active leaf of double doors. Any acoustic, smoke seals or the like are required to be clear of the minimum dimension.
2. Circulation spaces at doorways to meet Clause 13.3 as shown in Figures 31 & 32 and be no steeper than 1:40 for the required circulation space – location of any automatic door controls/ security swipe access to meet AS1428.1
3. Door force to be no greater than 20N to, initially open the door, swing or slide the door; and hold the door open between 60° and 90°. Heavy set or door subject to external forces should be considered to be provided with assistive control/automation.

4. All doors on an accessway to be provided with a solid band equivalent of a 50 mm width with a minimum 30% luminance contrast (LC) between elements as required by AS1428.1. where doorways are glazed two solid elements are required to be provided.
5. Air locks or similarly enclosed spaces are required to have a minimum 1450mm between the door leaf swing of each door as shown in Figure 34 (in part) of AS1428.1

The following doors to be provided with door circulation meeting Clause 13 as the design progresses:

1. Residential bin doorways:
  - a. Adjacent to stair 1 and
  - b. off Pittwater Road.
2. Corridor from carpark Ground Level to Pittwater Road

The regrading of the footpath is providing the entrance doors with a door circulation with a gradient not steeper than 1:40 to meet AS 1428.1 (2009) Clause 13 noting all door circulation should be within the confines of the site boundary.

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

#### **2.10.1.2 BCA Part D4D3 – Access to buildings**

BCA D4D3 requires an accessway meeting AS1428.1 (2009) to be provided to a building required to be accessible:

- (a) from the main points of a pedestrian entry at the allotment boundary; and
- (b) from another accessible building connected by a pedestrian link; and
- (c) from any required accessible carparking space on the allotment.

The regrading of the footpath is providing the entrance doors with a door circulation with a gradient not steeper than 1:40 providing access from the main points of pedestrian entrance at that allotment - noting all door circulation should be within the confines of the site boundary.

Accessible car parking and subsequent lifts provide access throughout the building from the accessible car parking – stairway platform lifts to be addressed via performance.

Access from Pittwater Road access into the corridor leading to parking to be confirmed if intended to be an entry or if provided as exit only.

The design documentation indicates that the design is capable of meeting this clause as a part of the DA stage submission, any detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

#### **2.10.1.3 BCA Part D4D4 – Parts of buildings required to be accessible.**

##### **Stairs – General Circulation (non- fire isolated)**

BCA Part D4D4 requires non-fire-isolated stairways to meet AS 1428.1 (2009) Clause 11.

Non-fire-isolated stairways provide access between:

1. Basement Level car park to Pittwater Road level (Internal) – Gridline A2.
2. Basement Level car park to Pittwater Road– Gridline F2.
3. Lift 1 and 2 lobby junctions from shopper carpark.
4. Lift lobby proximity to Residential levels being, Stair 1, Stair 2, Stair 3.



Stairways that are not fire isolated but used exclusively as egress only may be considered to be addressed via performance.

Stairway at Lift 1 and 2 lobby junctions from shopper carpark with platform lift to be addressed through performance for reduction in handrail use where the platform lift is located.

The design documentation indicates that the design is capable of meeting this required as a part of the DA stage submission, any detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

### **Stairs – fire isolated**

BCA D4D4 (a) (iii) requires fire-isolated stairways to meet AS 1428.1 (2009) Clause 11 (f) & (g).

Fire Isolated stairs provide egress from:

1. Basement level car park to Pittwater Road – Gridline A7.

The design documentation indicates that the design is capable of meeting this required as a part of the DA stage submission and any detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

### **Corridor Terminations**

BCA Part D4D4 requires accessways to be provided with:

1. Passing spaces (1800x2000mm) complying with AS 1428.1 at 20m max. intervals where direct line of sight is not available.
2. Turning spaces (1540x2070mm) complying with AS 1428.1 within 2m of the end of accessways (including corridors or the like); and at 20m max. intervals along an accessway.

Design documentation indicates passing spaces have been provided throughout this development via turn spaces at lift lobby junctions.

Design documentation indicates turning spaces generally meet the requirement of this clause with the exception of the following areas to be addressed at subsequent design stages:

1. Residential bin area adjacent to Pittwater Road
2. Corridor leading to Pittwater Road adjacent to retail 01.
3. Stair platform lift landing.
4. End of accessway at stair landing adjacent to Apartment 04 on Level 01

The design documentation indicates that the design is capable of meeting this required as a part of the DA stage submission and any detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

#### **2.10.1.4 BCA Part D4D5 – Exemptions**

BCA Part D4D5 states the following areas are not required to be accessible:

- (a) An area where access would be inappropriate because of the particular purpose for which the area is used: (e.g., plant rooms, service areas, heavy / toxic item storage, etc.)
- (b) An area that would pose a health or safety risk for people with a disability.
- (c) Any path of travel providing access only to an area exempted by (a) or (b).

The following areas in the building may be considered to not be accessible due to the specific uses of the room or space:

1. Sprinkler pump room.
2. Services/Storage (unless for the use of the residents).
3. Services.
4. Bulky goods store.

Any unique areas to be D4D5 exempted are required to be confirmed and agreed upon with the Design Team and JH.

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

#### **2.10.1.5 BCA Part D4D7 – Signage**

As design progresses, the Design Team provides details of signage for review. An elevation showing signage set-out, including height and location relative to door etc. should be provided for review.

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

#### **2.10.1.6 BCA Part D4D8 – Hearing augmentation**

BCA Part D4D8 requires a hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—

- (a) in a room in a Class 9b building; or
- (b) in an auditorium, conference room, meeting room or room for judicatory purposes; or at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.

Design Team to confirm the provision of any inbuilt amplification systems in any office meeting rooms.

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

#### **2.10.1.7 BCA Part D4D9 – Tactile Indicators**

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

#### **2.10.1.8 BCA Part D4D12 – Glazing on an accessway**

A glazing schedule has not been provided at this stage of the documentation. However, it is anticipated that detailed door and window schedule noting the location of transoms and/or opaque decals as necessary.

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

### **2.10.2 BCA Part E3D7 – Passenger lifts**

Access to and within areas on each level is accessed via a lift from the basement level. Lift lobbies directly connect Pittwater Road to residential levels via lift 1, lift 2 and lift 3 respectively.

Stairway platform lift – Ground floor level – provide access between:

1. Retail and shopper carpark; and

2.

### **Landings**

BCA Part Access and egress to and from lift well landings to comply with Parts D2, D3 and D4.

Stairway platform lift top to be provided with landings meeting Part D4, minimum 1540x2070mm minimum as design progresses.

### **Passenger lift types and their limitations.**

BCA Part E3D7 (1) requires in an accessible building, stairway platform lifts must not:

1. be used where it is possible to install another type of passenger lift; and
2. when in the folded position, encroach on the minimum width of a stairway required by D2D8 to D2D11.

Stairway platform lifts - Provision of lift type to be addressed via performance.

### **Accessible features required for passenger lifts.**

BCA Part E3D8 requires, in an accessible building, every passenger lift must have the following features where applicable:

1. Lift floor dimensions of not less than 1400 mm wide x 1600 mm deep for all lifts which travel more than 12 m.
2. Details as required by BCA E38D8 meet AS 1735.12 (1999)

Design documentation indicates Lift 1, Lift 2 and Lift 3 are 1600x1400mm which meets the spatial requirements of this clause.

Design Team to ensure, as the design progresses, that details as required by BCA Part E38D8 meet AS 1735.12 (1999)

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

## **2.10.3 BCA Part F4D5 – Accessible sanitary facilities**

### **Unisex Accessible Toilets.**

BCA Part F4D5 (a) requires, in a building required to be accessible that accessible unisex sanitary compartments are to be provided in accessible parts of the building in accordance with F4D6.

Accessible unisex sanitary facilities have been provided on the ground floor for use for:

1. Residential (RH)
2. Retail Shopper (RH)

Transfer types (right handed or left handed) to be provide evenly through the building- a left hand transfer is required to be provided.

Although a separate Accessible Unisex Sanitary Facility is proposed for use by all staff in a common area to the carpark, consideration should be made to provide each tenancy with an Accessible Unisex Sanitary Facility. The design currently, would require a person with an ambulant disability or, a person who uses a mobility aid to, exit the retail tenancy to the street, reenter the building, use the platform stair lift and cross the car park to use a facility that may be appropriate for them.

Circulation space for the Retail Accessible Unisex Sanitary Facilities to be refined as design progresses.

A sanitary compartment suitable for use by a person with ambulant disability is not required to be provided for use by males and females separately in this development as informed by the BCA Consultant.

Design Team to ensure, as the design progresses, that details fixtures and fittings meet AS1428.1 (2009)

This detailed requirement can readily be coordinated and addressed to comply during subsequent detailed development stages.

### **3.0 Conclusion**

Based upon a high-level spatial planning assessment into the general building, it has been determined that the development demonstrates an ability to meet relevant building legislation, subject to design development, as per the items contained within Section 2.10 – Spatial Planning Matters of this Report.

### **4.0 Statement of Compliance**

The design documentation as referred to in this report has been assessed against the applicable provisions for Accessibility as outlined in Part 1.2 of this report. It is considered that such documentation complies or is capable of complying (as outlined in Part 2 of this Report) with those documents.

# *Annexures*

## Annexure A: Design Documentation

This report has been based on the following design documentation.

*Table 7: Architectural Plans*

Architectural Plans Prepared by Gartner Trovato Architects			
Drawing Number	Revision	Date	Title
DA-00	[C - WIP]		COVER SHEET
DA-02	[B]		SITE PLAN
DA-03	[C - WIP]		BASEMENT PLAN
DA-04	[B]		GROUND FLOOR PLAN
DA-05	[C - WIP]		LEVEL 1 PLAN
DA-06	[C - WIP]		LEVEL 2 PLAN
DA-07	[B]		LEVEL 3 PLAN
DA-08	[B]		ROOF PLAN
DA-09	[B]		SECTION A
DA-10	[B]		SECTION B
DA-11	[B]		SECTION C
DA-12	[B]		SECTION D
DA-13	[B]		SECTION E
DA-14	[B]		SECTION 2
DA-15	[B]		SECTION 3
DA-16	[B]		NORTH & EAST ELEVATIONS
DA-16	[B]		SOUTH & WEST ELEVATIONS

## Annexure B: LHDG Assessment

Table 8: LHDG Assessment

Item	Design Element	Comment	Compliance
1.	<i>Dwelling (SOU) Access</i>		
	<p><b>Silver Level</b></p> <p>(a) Provide a safe, continuous step-free pathway from the front boundary of the property to an entry door to the dwelling.</p> <p>(a) This provision does not apply where the average slope of the ground where the path would feature is steeper than 1:14.</p> <p>(b) The path of travel referred to in (a) should have a minimum clear width of 1000mm and have;</p> <p>(i) No steps;</p> <p>(ii) An even, firm, slip resistant surface;</p> <p>(iii) A crossfall of not more than 1:40;</p> <p>(iv) A maximum pathway slope of 1:14</p> <p>Where ramps are required they should have landings provided at no greater than 9m for a 1:14 ramp and no</p>	<p>A continuous step-free path from the property boundary of the property is to be provided.</p> <p>Further details noting crossfalls, materials and slip resistance can be further coordinated during detailed design phases post-DA stage.</p>	<p>CRA</p> <p>Refer to Annexure D</p>

Item	Design Element	Comment	Compliance
	<p>greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length.</p> <p>(c) The path of travel referred to in (a) may be provided via an associated car parking space for the dwelling. Where a car parking space is relied upon as the safe and continuous pathway to the dwelling entrance, the space should incorporate:</p> <p>(i) Minimum dimensions of at least 3200 mm (width) x 5400mm (length);</p> <p>(ii) An even, firm and slip resistant surface; and</p> <p>(iii) A level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen).</p> <p>(d) A step ramp may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should provide:</p> <p>(i) A maximum gradient of 1:10</p> <p>(ii) A minimum clear width of 1000mm (please note: width should reflect the pathway width)</p> <p>(iii) A maximum length of 1900 mm</p> <p>(e) Where a ramp is part of the pathway, level landings no less than 1200mm in length, exclusive of the</p>		



Item	Design Element	Comment	Compliance
	<p>swing of the door or gate than opens onto them, must be provided at the head and foot of the ramp.</p> <p><b>Note:</b> The width of the landing will be determined by the adjoining pathway. If the landing directly adjoins the doorway, please refer to Element 2 for dimensional requirements.</p>		
2.	<i>Dwelling (SOU) Entrance</i>		
	<p><b>Silver Level</b></p> <p>(a) The dwelling should provide an entrance door with –</p> <ul style="list-style-type: none"> <li>(i) A minimum clear opening width of 820mm (see Figure 2(a));</li> <li>(ii) A level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and</li> <li>(iii) Reasonable shelter from the weather.</li> </ul> <p>(b) A level landing area of at least 1200mm x 1200mm should be provided at the level (step free) entrance door. A level landing area at the entrance door should be provided on the arrival side of the door (i.e. the external side of the door) to allow a person to safely stand and then open the door.</p>	The current documents note provision of doors to AS1428.1.	CRA

Item	Design Element	Comment	Compliance
	<p>(c) Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided (see Figure 1(b)).</p> <p>(d) The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1.</p> <p><b>Note:</b> The entrance must incorporate waterproofing and termite management requirements as specified in the NCC.</p>		
3.	<i>Internal Doors and Corridors</i>		
	<p><b>Silver Level</b></p> <p>(a) Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide:</p> <p>(i) A minimum clear opening width of 820mm (see Figure 2(a)); and</p> <p>(ii) A level transition and threshold (maximum vertical tolerance of 5mm between abutting surfacers if allowable provided the lip is rounded or bevelled).</p>	<p>The current document indicates:</p> <ul style="list-style-type: none"> <li>Provision of 820mm clear opening for internal doors is capable of being met.</li> <li>It is anticipated that door schedules confirming the above shall be provided during post-DA coordination stages</li> <li>Corridor width noted to be 1000mm clear</li> </ul>	<p>CRA</p> <p>Refer to Annexure D</p>

Item	Design Element	Comment	Compliance
	<p>(b) Internal corridors/passageways to the doorways referred to in (a) should provide a minimum clear width of 1000mm</p> <p>* Corridor widths should be measured as described in Clause 6.3 of AS 1428.1 – 2009</p>		
4.	<i>Toilet</i>		
	<p><b>Silver Level</b></p> <p>(a) Dwellings should have a toilet on the ground (or entry) level that provides:</p> <p>(i) A minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and</p> <p>(ii) A minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a).</p> <p>(iii) The toilet pan should be located in the corner of the room (if the toilet is located in a combined toilet / bathroom) to enable installation of grabrails at a future date. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6.</p>	<p>The current documents indicate:</p> <ul style="list-style-type: none"> <li>1200mm clear circulation space forward of the pan has been provided</li> <li>Pan is located in the corner of the room.</li> </ul>	<p>CRA</p> <p>Refer to Annexure D</p>

Item	Design Element	Comment	Compliance
5.	<i>Shower</i>		
	<p><b>Silver Level</b></p> <p>(a) One bathroom should feature a slip resistant, hob-less shower recess. Shower screens are permitted provided they can be easily removed at a later date.</p> <p>(b) The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date.</p> <p>For hob-less specification please see Australian Standard AS3740-3.6.</p> <p>Reinforcement guidelines for walls in bathrooms and toilets are found in element 6.</p>	<p>The current documents note the following:</p> <ul style="list-style-type: none"> <li>• The shower is located in the corner</li> <li>• Details of hob-less shower is anticipated to be coordinated and provided at post-DA stages</li> </ul>	<p>CRA</p> <p>Refer to Annexure D</p>
6.	<i>Reinforcement of bathroom &amp; toilet walls</i>		
	<p><b>Silver Level</b></p> <p>(a) Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails.</p> <p>(b) The walls around the toilet are to be reinforced by installing:</p>	<p>The current documents indicate:</p> <ul style="list-style-type: none"> <li>• Provision of reinforced walls to afford future installation of grabrails</li> <li>• Detailed wall schedule specifying thickness of noggings and sheeting is anticipated to be coordinated and provided at post-DA stages</li> </ul>	<p>CRA</p> <p>Refer to Annexure D</p>

Item	Design Element	Comment	Compliance
	<ul style="list-style-type: none"> <li>(i) Noggings with a thickness of at least 25mm in accordance with Figure 6(a); or</li> <li>(ii) Sheeting with a thickness of at least 12mm in accordance with Figure 6(b).</li> </ul> <p>(c) The walls around the bath are to be reinforced by installing:</p> <ul style="list-style-type: none"> <li>(i) Noggins with a thickness of at least 25mm in accordance with Figure 7(a); or</li> <li>(ii) Sheeting with a thickness of at least 12mm in accordance with Figure 7(b).</li> </ul> <p>(d) The walls around the hob-less shower recess are to be reinforced by installing:</p> <ul style="list-style-type: none"> <li>(i) Noggins with a thickness of at least 25mm in accordance with Figure 8(a); or</li> <li>(ii) Sheeting with a thickness of at least 12mm in accordance with Figure 8(b).</li> </ul>		
7.	<i>Internal stairways</i>		
	<b>Silver Level</b> (a) Stairways in dwellings must feature:	Not Applicable - The design of the units in this development are all single storeys.	N/A

Item	Design Element	Comment	Compliance
	(i) A continuous handrail on one side of the stairway where there is a rise of more than 1m.  <b>Note:</b> This is a requirement for all new homes under the NCC.  Homes built prior to 2014 may benefit from this element.		
8.	<i>Kitchen Space</i>		
	<b>Silver Level</b>  No requirements.		N/A
9.	<i>Laundry Space</i>		
	<b>Silver Level</b>  No requirements.		N/A
10.	<i>Ground (or entry level) bedroom space</i>		
	<b>Silver Level</b>  No requirements.		N/A
11.	<i>Switches and power points</i>		

Item	Design Element	Comment	Compliance
	<b>Silver Level</b> No requirements		N/A
12.	<i>Door and tap hardware</i>		
	<b>Silver Level</b> No requirements.		N/A
13.	<i>Family/living room space</i>		
	<b>Silver Level</b> No requirements.		N/A
14.	<i>Windowsills</i>		
	<b>Silver Level</b> No requirements.		N/A
15.	<i>Flooring</i>		
	<b>Silver Level</b> No requirements.		N/A





### Annexure C: Adaptable Housing

<b>N/A</b>	Not Applicable. The clause is not applicable to the proposed design.
<b>Complies</b>	The relevant provisions have been satisfied by the proposed design.
<b>CRA – Refer Annexure C</b>	‘COMPLIANCE READILY ACHIEVABLE.’ It is considered that there is not enough information included in the documentation to accurately determine strict compliance with the individual clause requirements. However, with further design development, compliance can readily be achievable. This item is to be read in conjunction with the Compliance Specification included within Annexure D of this report.
<b>FI</b>	Further Information is necessary to determine the compliance potential of the building design.
<b>DNC</b>	Does Not Comply.
<b>Noted</b>	A statement not requiring specific design comment or confirmation.

Table 9: Class C

Item	Room/Item	Clause	Comment	Compliance
<i>Drawings</i>				
1.	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages	2.3	Pre and post adaption plans is anticipated to be coordinated and provided at post-DA stages	CRA
<i>Siting</i>				
3.	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1	3.3.2	<p>The Current documents indicate:</p> <ul style="list-style-type: none"> <li>No street parking will be provided.</li> <li>An accessway from the street frontage is provided. Details of the accessway indicating cross-falls in accordance with AS1428.1-2009 is anticipated to be provided at post-DA stage.</li> <li>Access will be provided from the basement carpark to all SOUs via lifts. Accessible parking areas are located adjacent to the lift lobby at Basement Level.</li> </ul>	CRA
<i>Letterboxes in Estate Developments</i>				

Item	Room/Item	Clause	Comment	Compliance
11.	Letterboxes to be on hard standing area connected to accessible pathway.	3.8	Letterboxes for the residential units are provided adjacent to each respective Lift Lobby area and connected to an accessible pathway.	CRA
<i>Private Car Accommodation</i>				
14.	Carparking space or garage min area 6.0x3.8m	3.7.2	<p>The Current documents indicate:</p> <ul style="list-style-type: none"> <li>No garages are provided within this development. The adaptable car spaces are intended to be enclosed and located within basement car park.</li> <li>The sizing of the car spaces are suitable. This is to be further clarified at the CC stage of the development.</li> <li>Clear height of 2.5m over the carparking space and 2.3m leading to it appears be achieved. This is to be further clarified at the CC stage of the development.</li> </ul>	CRA
<i>Accessible Entry</i>				
20.	Accessible entry	4.3.1	<p>The Current documents indicate:</p> <ul style="list-style-type: none"> <li>The entry door to the adaptable unit is to have a minimum clear opening of 850mm and</li> </ul>	CRA

Item	Room/Item	Clause	Comment	Compliance
			<p>comply with door circulation spaces under AS1428.1. This is to be further detailed at post-DA stage.</p> <ul style="list-style-type: none"> <li>Circulation spaces at front doorways indicate compliance be achieved in accordance with AS1428.1 requirements. This is to be further detailed at post-DA stage.</li> </ul>	
21.	Accessible entry to be level (i.e., max. 1:40 slope)	4.3.2	Units are accessed from a common, level corridor within the building.	CRA
23.	Threshold to be low-level	4.3.2	Common corridors assumed to be flat.	CRA
24.	Landing to enable wheelchair manoeuvrability	4.3.2	The SOU's entry doors are internal to the building.	CRA
25.	Accessible entry door to have 850mm minimum clearance	4.3.1	The entry door to the adaptable unit is to have a minimum clear opening of 850mm and comply with door circulation spaces meeting AS1428.1. This is to be further detailed at post-DA stage.	CRA
27.	Door lever handles and hardware to AS1428.1	4.3.4	Detailed door hardware schedule to be provided post-DA phase	CRA
<i>Interior: General</i>				

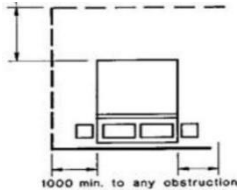
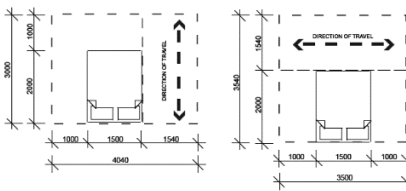
Item	Room/Item	Clause	Comment	Compliance
32.	Internal doors to have 820mm min. clearance	4.3.3	Internal doors are noted to have a minimum clear opening of 820mm and provisioning to be increased to 850mm at post-adaptation stage. This is to be further detailed at post-DA stage.	CRA
33.	Internal corridors width of 1000mm min.	4.3.7	Internal corridors within the unit are to have a minimum width of 1000mm and circulation space at doorways to be in compliance with AS1428.1. . This is to be further detailed at post-DA stage.	CRA
34.	Provision for compliance with AS1428.1 for door approaches	4.3.7	The documents indicate that circulation spaces at doorways within the unit are capable of complying with AS1428.1-2009. . This is to be further detailed at post-DA stage.	CRA
<i>Living Room &amp; Dining Room</i>				
36.	Provision for circulation space of 2250mm min. diameter	4.7.1	A circulation space of min. 2250mm diameter is to be made available in the living areas after the furniture has been placed. . This is to be further detailed at post-DA stage.	CRA
38.	Telephone adjacent to GPO	4.7.4	Telephone outlet adjacent to GPO in living/dining area to be indicated on post adaption plan.  To be noted on relevant engineers' documents at construction stage	CRA

Item	Room/Item	Clause	Comment	Compliance
41.	Potential illumination level min. 300Lux	4.1.0	Lighting to comply at construction stage.  To be noted on relevant engineers' documents at construction stage	CRA
<i>Kitchen</i>				
42.	Minimum width 2.7m (1550mm clear between benches)	4.5.2	1550mm min. clearance is provided in front of sink and appliances. This is to be further detailed at post-DA stage.	CRA
43.	Provision for circulation at doors to comply with AS1428.1	4.5.1	This is to be further detailed at post-DA stage.	N/A
44.	Provision for benches planned to include at least one work surface of 800mm length, adjustable in height from 750 mm to 850mm or replaceable. Refer to Figure 4.8.	4.5.5	To be updated post adaption, with no works required at this stage.	Noted
45.	Refrigerator adjacent to work surface	4.5.5	To be updated post adaption, with no works required at this stage.	Noted
46.	Kitchen sink adjustable to heights from 750mm to 850mm or replaceable	4.5.6	To be updated post adaption, with no works required at this stage.	Noted
47.	Kitchen sink bowl max. 150mm deep	4.5.6	To be updated post adaption, with no works required at this stage.	Noted

Item	Room/Item	Clause	Comment	Compliance
48.	Tap set capstan or lever handles or lever mixer	4.5.6(e)	To be updated post adaption, with no works required at this stage.	Noted
49.	Tap set located within 300mm of front of sink	4.5.6(e)	To be updated post adaption, with no works required at this stage.	Noted
51.	Cook tops to include either front or side controls with raised cross bars	4.5.7	To be updated post adaption, with no works required at this stage.	Noted
52.	Cook tops to include isolating switch	4.5.7	Cook tops to be provisioned with isolating switches or gas stop valves that can be easily and safely operated with the cook top is in use.  To be updated post adaption, with no works required at this stage.	Noted
53.	Work surface min. 800mm length adjacent to cook top at same height	4.5.7	Work surface adjacent to, and at the same height as the, cook top of 800mm to be indicated on post adaption plan. This is to be further detailed at post-DA stage.	Noted
54.	Oven located adjacent to an adjustable height or replaceable work surface	4.5.8	The oven is to be adjacent to an 800mm wide work surface and to be indicated on post adaption plan. This is to be further detailed at post-DA stage.	Noted

Item	Room/Item	Clause	Comment	Compliance
59.	GPOs to comply with AS 1428.1. At least one double GPO within 300mm of front of work surface	4.5.11	GPOs to comply with AS1428.1. At least one double GPO within 300mm of front of work surface.  To be noted on relevant engineers' documents at construction stage	CRA
60.	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position	4.5.11	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position.  To be noted on relevant engineers' documents at construction stage	CRA
61.	Slip-resistant floor surface	4.5.4	Floors to be slip resistant to comply with AS3661.1. Certificate to be provided at CC stage.  Note: AS4586:2013/HB 198:2014 is satisfactory. Please provide NATA Accredited Lab Slip Test reports referencing slip ratings in both wet and dry surface conditions and referencing AS4586-2013 and HB198-2014 at post-DA stage.	CRA
<i>Main Bedroom</i>				
62.	At least one bedroom of area sufficient to accommodate queen size bed, wardrobe, and circulation space requirements of AS1428.2	4.6.1	Adaptable bedroom (3750x3160 mm) is to be provided catering 1000mm clear space at one side and at the end of the bed.	CRA



Item	Room/Item	Clause	Comment	Compliance
			<p>Circulation space at one side of the bed of 1540x2070mm is to be provided to allow wheelchair circulation space of 180°. This is shown on all the pre and post adaptation documents.</p> <p>Note: Queen size bed is 1520mm W x 2030mm L.</p> <p>Note: Turning bays at bed base according to AS4299:1995 or on the side of the bed closest to the door approach (in the direction of travel) according to LHDG 2015 (Design Element 11) are considered suitable – see figures below.</p>  <p>AS4299:1995 (AS1428.2:1992)</p>  <p>LHDG 2015</p>	

Item	Room/Item	Clause	Comment	Compliance
<i>Bathroom</i>				
75.	Provision for bathroom area to comply with AS1428.1	4.4.1	The bathroom + shower area is to comply with Clause 15 of AS1428.1-2009 (2350x2750mm).  Note: Extra capped-off plumbing services to be provided if fixtures relocation is required at post-adaptation stage. It is recommended to arrange fixtures in post-adaptation location where possible.	CRA
76.	Slip-resistant floor surface	4.4.2	Floors to be slip resistant to comply with AS3661.1. Certificate to be provided at CC stage. Note: AS4586:2013/HB 198:2014 is satisfactory.	CRA
77.	Shower recess-no hob. Minimum size 1160x1100mm to comply with AS1428.1 (Refer Figures 4.6 and 4.7)	4.4.4(f)	Shower to be hob-less. The post adaption plans to show AS1428.1 compliant sizes and fit-out.	CRA
78.	Shower area waterproofed to AS3740 with floor to fall to waste	4.4.4(f)	Entire bathroom to comply with AS3740. This is to be further detailed at post-DA stage.	CRA
79.	Recessed soap holder	4.4.4(f)	Soap holder to be recessed. This is to be further detailed at post-DA stage.	CRA
80.	Shower taps positioned for easy reach to access side of shower sliding track	4.4.4(f)	Shower head and taps to be located at a height and clearance compliant to AS1428.1. This is to be further detailed at post-DA stage.	CRA

Item	Room/Item	Clause	Comment	Compliance
82.	Provision for adjustable, detachable handheld shower rose mounted on a slider grabrail or fixed hook (plumbing and wall – strengthening provision)	4.4.4(h)	Provisioning provided on the documents.  Note: Extra capped-off plumbing services to be provided if fixture relocation is required at post-adaptation stage, including 700mm height shower outlet with back-flow retention valve.	CRA
83.	Provision for grabrail in shower (Refer to Figure 4.7) to comply with AS1428.1	4.4.4(h)	This is to be further detailed at post-DA stage.	CRA
86.	Tap sets to be capstan or lever handles with single outlet	4.4.4(c)	Taps may be updated post adaption –to be noted on the documents. No work at this stage.	Noted
88.	Provision for washbasin with clearances to comply with AS1428.1	4.4.4(g)	Taps may be updated post adaption – to be noted on the documents.	CRA
90.	Double GPO beside mirror	4.4.4(d)	Double GPO to be provided beside mirror – to be noted on the documents.	CRA
<i>Toilet</i>				
92.	Provision of either “visitable toilet” or accessible toilet	4.4.3	The adaptable units to be provided at pre-adaptation stage with a “visitable” toilet at entry level with 900x1250mm clearance in front of WC pan (door not to encroach).	CRA

Item	Room/Item	Clause	Comment	Compliance
93.	Provision to comply with AS1428.1	4.4.1	The bathroom area is to comply with Clause 15 of AS1428.1-2009 in relation to dimensions of fixtures, location, and circulation spaces. This is to be further detailed at post-DA stage.	CRA
94.	Location of WC pan at correct distance from fixed walls	4.4.3	Pan to be located correct distances from the walls in accordance with AS1428.1-2009. This is to be further detailed at post-DA stage.	CRA
95.	Provision for grab rail zone (Refer Figure 4.6)	4.4.4(h)	This is to be further detailed at post-DA stage.	CRA
96.	Slip resistant floor surface (vitreous tiles or similar)	4.4.2	Floors to be slip resistant to comply with AS3661.1. Certificate to be provided at CC stage. Note: AS4586:2013/HB 198:2014 is satisfactory.	CRA
<i>Laundry</i>				
98.	Circulation at doors to comply with AS 1428.1	4.8	This is to be further detailed at post-DA stage.	CRA
99.	Provision for adequate circulation space in front of or beside appliances (min. 1550x1550mm)	4.8	This is to be further detailed at post-DA stage.	CRA
100.	Provision for automatic washing machine	4.8(e)	This is to be further detailed at post-DA stage.	CRA
102.	Where clothesline is provided, an accessible path of travel to this	4.8(a)	This is to be further detailed at post-DA stage.	N/A

Item	Room/Item	Clause	Comment	Compliance
105.	Double GPO	4.8(g)	Double GPO to be noted on the CC documents.	CRA
108.	Slip-resistant floor surface	4.9.1	Floors to be slip resistant to comply with AS3661.1. Certificate to be provided at CC stage. Note: AS4586:2013/HB 198:2014 is satisfactory.	CRA
<i>Door Locks</i>				
110.	Door hardware operable with one hand, located 900–1100mm above floor	4.3.4	Door hardware operable with one hand, located 900–1100mm above floor.  This is to be further detailed at post-DA stage.	CRA

## Annexure D: Compliance Specification

### Design Certification

Further due to the level of detail provided at this stage the following items are to form part of a design statement or specification:

#### General

1. Tactile ground surface indicators will be installed at the top and bottom of stairways / ramps (other than fire isolated stairways / ramps); and where an overhead obstruction is less than 2 metres above the floor level. Tactile ground surface indicators will comply with Sections 1 and 2 of AS1428.4.1.
2. On an accessway where there is no chair rail, handrail, or transom, all frameless or fully glazed doors, sidelights or glazing capable of being mistaken for a doorway or opening will be clearly marked and comply with Clause 6.6 of AS1428.1-2009. A solid non-transparent contrasting line not less than 75mm wide is to extend across the full width of the glazing panel. The lower edge of the contrasting line is to be located between 900-1000mm above the plane of the finished floor level. The contrasting line is to provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 metres of the glazing on the opposite side.
3. All doorways will have a minimum luminance contrast of 30% in accordance with Clause 13.1 of AS1428.1-2009.
4. Fixtures and fittings in accessible sanitary facilities will be provided and installed in accordance Clause 15 of AS1428.1-2009.
5. Fixtures and fittings in ambulant facilities will be provided and installed in accordance Clause 16 of AS1428.1-2009.
6. Walkways will comply with Clause 10 of AS1428.1-2009.
7. For the walkways, the floor or ground surface abutting the sides of the walkway will be firm and level of a different material to that of the walkway at the same level and follow the grade of the walkway and extend horizontally for a minimum of 600mm or be provided with a kerb or kerb rail in accordance with Clause 10.2 of AS1428.1-2009.
8. Stairways will comply with Clause 11 of AS1428.1-2009.
9. The fire isolated stairs will comply with Clause 11.1(f) and (g) of AS1428.1-2009.
10. Handrails will comply with Clause 12 of AS1428.1-2009.
11. Grabrails will comply with Clause 17 of AS1428.1-2009.
12. Accessible car spaces will achieve compliant headroom clearances in accordance with Clause 2.4 of AS2890.6-2009.
13. Demarcation will be provided in the accessible car space and adjacent shared zone in accordance with Clause 3.1 and 3.2 of AS2890.6. Refer to Annexure B1 for a diagrammatic explanation.
14. Bollards will be provided in the shared disabled car space area in accordance with Clause 2.2.1(e) of AS2890.6-2009. Refer to Annexure B1 for a diagrammatic explanation.
15. Switches and power points will comply with Clause 14 of AS1428.1-2009.
16. Floor and ground floor surfaces on accessible paths and circulation spaces including the external areas will comply with Clause 7 of AS1428.1-2009. Any level difference over 3mm must be ramped according AS1428.1 Clause 10.5.
17. Braille and tactile signage will comply with BCA2022 Clause D3.6.
18. Signage will comply with Clause 8 of AS1428.1-2009.
19. The passenger lifts will comply with BCA2022 Table E3.6b and AS1735.12.

20. The unobstructed height of a continuous accessible path of travel will be a minimum of 2000mm and 1980mm at doorways.
21. Door handles and the like, will be in accordance with Clause 13.5 of AS1428.1-2009.

#### *Adaptable Housing Units*

1. All ground surfaces will be slip resistant to comply with HB197/AS4856.
2. Letterboxes will be on a hard stand area connected to an accessible pathway in accordance with Clause 3.8 of AS4299.
3. The unit entry doors to the adaptable units will comply with the circulation spaces required under AS1428.2 in accordance with Clause 4.3.1 of AS4299.
4. Door hardware will be compliant with AS1428.1-2009 and all external doors will be keyed alike in accordance with Clause 4.3.4 of AS4299.
5. Internal door openings within the adaptable units will have a clear opening of 820mm with door circulation spaces complying with AS1428.1 in accordance with Clauses 4.3.3 and 4.3.7 respectively of AS4299.
6. A telephone outlet will be provided adjacent to GPO in living/dining area in accordance with Clause 4.7.4 of AS4299.
7. The kitchen cabinet design will allow for the removal of the cabinets under the sink and adjacent work surface in accordance with Clause 4.5.6 of AS4299.
8. Cook tops to be provisioned with isolating switches or gas stop valves that can be easily and safely operated with the cook top is in use in accordance with Clause 4.5.7 of AS4299.
9. GPO's will comply with AS 1428.1 with at least one double GPO provided within 300mm of front of work surface and a GPO for refrigerator will be easily reachable when the refrigerator is in its operating position in accordance with Clause 4.5.11 of AS4299.
10. The adaptable bathroom will be provisioned for the fit-out to comply with AS1428.1 in accordance with 4.4.1 of AS4299.
11. The shower of the adaptable bathroom will be hob-less in accordance with Clause 4.4.4(f) of AS4299.
12. The bathrooms will be waterproofed to comply with AS3740.
13. The soap holder will be recessed in accordance with Clause 4.4.4(f) of AS4299.
14. Shower heads and taps will be located at a height and clearance compliant with AS1428.1 in accordance with Clause 4.4.4(f) of AS4299.
15. Provision for the installation of all grabrails, shower hardware, and folding seat will be provided in the adaptable bathroom in accordance with Clause 4.4.4(h) of AS4299.
16. Provision for the installation of a washbasin with clearances as required by AS1428.1 will be provided in accordance with Clause 4.4.4(g) of AS4299.
17. A double GPO will be provided beside the mirror in the adaptable bathroom in accordance with Clause 4.4.4(d) of AS4299.
18. Provision for the toilet to comply with AS1428.1, will be provided, including locating the pan in the correct position, and the provision for the installation of all grabrails in accordance with Clauses 4.4.1, 4.4.3 and 4.4.4(h) of AS4299.
19. Where a clothesline is provided, and accessible path of travel will be provided to this in accordance with Clause 4.8(a) of AS4299.
20. A double GPO will be provided in the laundry, as will a shelf at a height of 1200mm maximum in accordance with Clause 4.8 of AS4299.
21. Lighting will be provided to the adaptable units in accordance with Clause 4.10 of AS4299.

*SEPP 65 – Livable Housing Design Guidelines (LHDG)*

1. Entrance door to have 820mm min. clear door width opening, level transition (5mm max. vertical tolerance) and reasonable shelter from the weather.
2. Entrance door to have 1200x1200mm level landings.
3. “Ramped threshold” (Fig 1b) allowed between 5-56mm height change.
4. Level & “step-free” entrance connected to the “safe and continuous pathway”.
5. Waterproofing and termite management at entry door (as per NCC).
6. Garages to have minimum 3200x5400mm, an even, firm and slip resistant surface with 1:40 max. level surface (1:33 max. asphalt).
7. All internal doors to have 820mm min. clear door opening at entry level rooms, 5mm max. vertical tolerance surface, and 1000mm min. internal corridors at entry level rooms.
8. Toilet to be on entry level (ground floor).
9. If WC is located in a separate room. WC pan circulation space to be 900x1200mm front if WC (door not to encroach) (Fig 3a).
10. If WC is located within a bathroom. WC pan circulation space to be in the corner of the room to enable installation of grabrails (door not to encroach) (Fig 3b).
11. Bathroom to have slip resistant and hob-less shower recess (portable shower screens allowed)
12. Shower recess located in a room corner to enable the installation of grabrails.
13. Walls to be constructed of solid masonry or concrete, otherwise to be reinforced (1100N min. withstand in all directions).
14. For WC, the reinforcement to be 25mm thick noggings (Fig 6a), or 12mm thick sheeting (Fig 6b)
15. For baths, reinforcement to be 25mm thick noggings (Fig 7a), or 12mm thick sheeting (Fig 7b)
16. For showers, reinforcement to be 25mm thick noggings (Fig 8a), or 12mm thick sheeting (Fig 8b)
17. A continuous stairway handrail where there is a rise of more than 1m.