# Access Assessment Report

## 711 Hunter Street, Newcastle West NSW 2302

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| **Project:** | 711 Hunter Street, Newcastle West NSW 2302 |
| **Reference No:** | 114499-Access-r2 |
| **Date:** | 17 October 2022 |
| **Client:** | Hunter Street JV Unit Trust Pty Ltd. |
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## Document Control

| Revision | Date | Description | |
|---|---|---|---|
| 114499-Access-r1 | 13 May 2022 | Draft Access Assessment Report | |
| 114499-Access-r2 | 17 October 2022 | Final Access Assessment Report | |
| | | Prepared by | Verified by |
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| | |  |  |

## BCA Logic Acquired by Jensen Hughes

BCA Logic was acquired by Jensen Hughes, the largest specialist fire and safety engineering firm in the world, in September 2021.

A respected global leader in safety, security and risk-based engineering and consulting, Jensen Hughes employs more than 1,400 people across 100 countries. This acquisition marks the company's entry into the Australian market and speaks to BCA Logic's experience and expertise in building legislation and regulations, fire, accessibility, and energy consulting.

Partnering with Jensen Hughes allows BCA Logic to further advance our capabilities in all aspects of fire safety engineering and support our clients with an expanded range of complementary services. Both companies share a commitment to technical excellence and exceptional client service.

## Table of Contents

## Tables

## EXECUTIVE SUMMARY

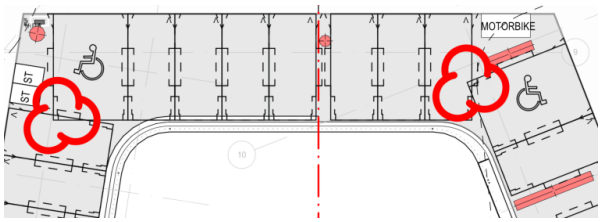
This document provides an assessment of the architectural design drawings for the proposed mixed-use residential development at 711 Hunter Street, Newcastle West NSW 2302 (i.e. referred to as "The development" throughout this report), against the Deemed-to-Satisfy provisions of the provisions relating 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.

Any Performance Solution will need to be detailed in a separate report and must clearly indicate methodologies for achieving compliance with the relevant Performance Requirements.

| Item | Description | BCA Provision |
|---|---|---|
| **General Compliance Matters for Combined DA Stages 1 & 2** | | |
| **1.** | <u>Door Circulation Spaces</u><br>The following door circulation spaces require further design development and/or information to demonstrate spatial planning compliance with AS1428.1-2009:<br>a) Levels 01 to 04 (DA Stages 1 & 2); sliding doors to respective lift lobbies from the car park can be specified to be on power-operation via push buttons to overcome shortfalls in required latch-side clearances as permitted in AS1428.1-2009; and<br>b) Level 01 (DA Stage 2); vestibule/airlock consisting of two (2) consecutive door swings connecting the apartment corridor to the garbage chute discharge store vice-versa.<br>Modify the vestibule/airlock to ensure there is minimum 1450mm clearance between the consecutive door swings for compliance with AS1428.1-2009.<br>Alternatively, please confirm if the garbage chute discharge store is controlled to be accessed by building maintenance personnel only (e.g. commercial cleaner or waste collection services provider). This confirmation is required for the application of BCA/DAPS Clause D3.4 exemption from accessibility requirements.<br>c) Level 04 (DA Stage 2); swing door connecting the adaptable SOU car parking space to the apartment corridor.<br>This doorway can readily be power-operated during subsequent detailed design development stages (post-DA) to overcome the reductions in latch-side clearances as permitted in AS1428.1-2009.<br>d) Level 17 (DA Stage 1); swing door connecting the communal indoor apartment corridor to the outdoor terrace. | D3.1 |

| Item | Description | BCA Provision |
|---|---|---|
| | This doorway can readily be power-operated during subsequent detailed design development stages (post-DA) to over come the reductions in latch-side clearances as permitted in AS1428.1-2009. | |
| **2.** | <u>Commercial Accessible Carparking Spaces</u><br>There are no accessible car parking spaces complying with AS2890.6-2009 proposed for the commercial part of The Development.<br>For Class 5 – commercial part of a building, BCA D3.5 requires provision of accessible carparking spaces complying with AS2890.6-2009 at a rate of no less than 1 space for every 100 carparking spaces or part thereof.<br>Please provide a car parking schedule confirming total number and distribution of car parking spaces to determine the minimum number of accessible car parking spaces required for the commercial part of The Development in accordance with BCA D3.5. | D3.5 |
| **3.** | The following sanitary facilities require further design development and/or information to demonstrate spatial planning compliance with AS1428.1-2009:<br>a) Ground Level (DA Stage 1); bank of male and female sanitary compartments near the loading zone require further design development to ensure provision of at least one ambulant toilet cubicle complying with AS1428.1-2009 inside each gender compartment.<br>b) Ground Level (DA Stage 1); at current stage the End of Trip Facilities associated with Bike Store are understood to be commercial staff only sanitary facilities containing toilets and showers.<br>This will require provision of unisex accessible sanitary facility containing an accessible toilet pan, accessible basin and an accessible shower for compliance with AS1428.1-2009.<br>c) Level 01 (DA Stage 1); bank of male and female sanitary compartments associated with the commercial tenancy require further design development to ensure provision of at least one ambulant toilet cubicle complying with AS1428.1-2009 inside each gender compartment. | F2.4 |
| **4.** | <u>Carparking Spaces for Adaptable SOUs</u><br>There is a proposal for up to twenty-six (26) private carparking spaces for adaptable SOU residents, distributed across levels 01 to 04 and across DA Stages 1 and 2 of The Development.<br>However, there is a proposal for a total of 27 adaptable SOUs. As such, there needs to be an allocation of one (1) | N/A – AS4299(1995) |

| Item | Description | BCA Provision |
|---|---|---|
| | additional private carparking space for an adaptable SOU that can accommodate minimum 3.8m width by 5.4m length car space in line with AS4299-1999.<br><br>Additionally, there are eight (8) adaptable unit car parking spaces proposed on levels 01 to 04, which are currently documented to have minor encroachments into adjacent car parking spaces as typically shown below.<br><br>  <br><br>Ensure all adaptable unit car parking spaces proposed on levels 01 to 04 accommodates minimum 3.8m width by 5.4m length dedicated area whilst not encroaching into other car parking spaces. | |
| **Further Information Required** | | |
| **1.** | <u>Controlling Access to Typical Pocket Gardens</u><br><br>To determine the feasibility of applying BCA/DAPS Clause D3.4 Exemption (subject to certifier's concurrence post-DA), please confirm if typical pocket gardens, which are accessed via glass doors from the communal residential corridors on levels 6 to 25 of DA Stage 2 apartment tower are for building maintenance access only.<br><br>If the typical pocket gardens are confirmed to be designated for use in common by the residents, modifications to the design are required to ensure provision of an accessway to and within the typical pocket gardens for compliance with AS1428.1-2009. | D3.1 & D3.4 |
| **2.** | <u>Controlled Access to Garbage Chute Discharge Stores</u><br><br>Please confirm if all garbage chute discharge store is controlled to be accessed by building maintenance personnel only (e.g. commercial cleaner or waste collection services provider).<br><br>This confirmation is required for the application of BCA/DAPS Clause D3.4 exemption from accessibility requirements. | D3.1 & D3.4 |
| **3.** | <u>Carparking Schedule</u><br><br>Please provide a comprehensive car parking schedule confirming total distribution and numbers and types of car parking spaces proposed across combined DA stages 1 & 2 to determine minimum accessible car parking spaces required in accordance with BCA D3.5 for the commercial part of The Development. | D3.5 |

| Item | Description | BCA Provision |
|---|---|---|
| **4.** | Landscape Documentation<br>Generally, the landscape documentation provided to date is currently in a sketch form and will require further design development and refinement to ensure compliance with BCA D3.1 to D3.3 and relevant AS1428.1-2009. | D3.1, D3.2 and D3.3 |

Note: The Annexures of this Report provide detailed assessments of the proposal against all compliance requirements. Please refer to all Annexures of this report for cross referencing.

# 1 ADOPTION OF BCA 2022

## 1.1. Proposed Introduction

It is proposed to make available the National Construction Code (NCC), Volume One, Building Code of Australia (BCA) 2022 on 1 October 2022 and adoption of general provisions come into effect on 1 May 2023 (except Livable Housing Design requirements). New Livable Housing Requirements come into effect on 1 October 2023. The proposed timeline is summarised below:


*Figure 1- Source: www.abcb.gov.au*

## 1.2. Major Changes known to date

Below is a summary of the proposed changes which were released in the May draft preview. We have also provided a table below for quick reference.

Note: This project has not been assessed against the proposed changes as previously corresponded with relevant project/development management team.

***Livable housing***

Volumes One and Two contain new livable housing requirements for Class 1a buildings (houses and townhouses) and Class 2 sole-occupancy units (individual apartments). This puts in place features based on the Livable Housing Design Guidelines silver standard, with a voluntary gold standard also available for features over and above silver.

***Consistent volume structure***

BCA2022 uses a new structure and clause referencing system to create better consistency across all volumes. While the new Section-Part-Type-Clause system makes the NCC look different at first, it's intended to improve user experience and make it more web accessible.

The new structure results in a reorganisation of specifications and parts, some of which are contained in the table below.

## 1.3. Summary of Major Changes

| Summary of Major Changes | | |
|---|---|---|
| Clause Reference | | Description of proposed changes |
| BCA 2019 | BCA2022 | |
| - | G7 | **Livable housing design** |

# 2 BASIS OF ASSESSMENT

## 2.1. Location and Description

This Accessibility Assessment report has been prepared by BCA Logic Pty Ltd (A Jensen Hughes company) on behalf of Hunter Street JV CoP/L (the applicant). It accompanies a Statement of Environmental Effects (**SEE**) in support of a Development Application (DA) at 711 Hunter Street, Newcastle West (the site).

This Building Code of Australia assessment report assesses the development's ability to achieve compliance with the Building Code of Australia.

The development has undergone an Architectural Design Competition where three competitors put forward their designs in accordance with the brief. The Plus Architecture scheme was recommended by the Jury as the winning scheme in the competitive design process.

The overall outcome of the proposal aims to develop a mixed-use precinct with high quality tower forms providing a positive relationship to the immediate surrounds and acknowledging the surrounding heritage context. The proposal intends to act as a landmark for Newcastle West with a curated mix of eclectic and creative retail, F&B and commercial opportunities activating the ground levels.

The key features are summarised below:

- Demolition of the existing commercial premises and ancillary structures on-site;
- Construction of a mixed-use precinct forming active ground and podium levels reaching 5 storeys of retail and commercial tenancies, with two tower forms for residential apartments reaching 26 storeys comprising of 258 apartments;
- Podium level car park for 300 cars incorporated within the podium levels;
- Communal open space for residents located on level 5 and 17;
- Vehicle access to the site via Little King Street;
- Associated landscaping with the public domain improvements;
- An urban plaza fronting National Park Street providing opportunities for activation and public art; and
- Construction of ancillary infrastructure and utilities as required.

It is noted that the overall development will form two separate concurrent DAs. Stage 1 will form the northern tower and podium elements and Stage 2 will form the southern tower and podium elements. These separate DA components are explored further below.

**Stage 1:**

The northern tower will include commercial and retail tenancies at ground level which will be accessible via National Park Street, Little King Street and Hunter Street. The podium levels will be situated above ground and contain car parking for both visitors and residents, accessed via Little King Street. Level 5 to Level 25 will contain a mixture of residential apartments ranging from 1 bedroom to 3 bedrooms. A numerical breakdown of Stage 1 is shown below:

- 136 apartments including: 35 one bedroom, 74 two bedroom, 26 three bedroom, 1 four bedroom.
- Total GFA: 13, 581 sqm
- Floor space ratio: 5.41:1
- Total car parking spaces: 165 spaces over 4 podium levels

**Stage 2:**

The southern tower will include commercial and retail tenancies at ground level which will be accessible via National Park Street, Little King Street and Hunter Street. The podium levels will be situated above ground and contain car parking for both visitors and residents, accessed via Little King Street. Level 1 to Level 25 will contain a mixture of residential apartments ranging from 1 bedroom to 3 bedrooms.

- 122 apartments including: 35 one bedroom, 72 two bedroom, 15 three bedroom.
- Total GFA: 12,027 sqm
- Floor space ratio: 5.43:1
- Total car parking spaces: 135 spaces over 4 podium levels

Both stages will include surrounding landscaping, public domain works and green spaces. The strata and stratum approach are detailed further in the SEE.


**Source: Urbis**

## 2.2. Report Format

This Accessibility Assessment Report has reviewed the relevant accessibility requirements for DA Stages 1 and 2 both individually and collectively. This report format ensures that in the event one of the DA Stage is not constructed, the remaining DA stage is still capable of compliance with relevant accessibility requirements – subject to further design coordination during subsequent development stages post-DA.

Throughout this report, there are references to 'The Development' to describe both DA Stages 1 and 2 of 711 Hunter Street, Newcastle West NSW 2302.

## 2.3. 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 (DAPS);
- State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development (SEPP 65);

- Building Code of Australia 2019 (BCA) Volume One Amendment 1 – Part D3 and Clauses E3.6 and F2.4;
- Relevant sections and clauses of Newcastle Council's Development Control Plan 2012 (DCP):
  - Section 3.03 (Residential Development), Clause 3.03.04 (Configuration), sub-clause A (Universal design); and
  - Section 7.03 (Traffic, Parking and Access), Clause 7.03.02 (Parking provision), sub-clause E (Parking for people with a disability);
- Adaptable Housing Code AS4299:1995 (AS4299);
- Applicable Australian Standards AS1428.1:2009, AS1428.4.1:2009 and AS2890.6:2009.

## 2.4. Exclusions and Limitations

This DA stage access report is limited to a high-level spatial budgeting assessment of the accessibility and amenity provisions for people with a disability against the documents as outlined in 1.2 above. It is not a detailed design/construction certificate (CC) accessibility assessment of the proposal against all provisions of the BCA2019 and if this is required, a separate report will be necessary (e.g. CC Stage Access Report).

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

- Any detailed set out and selection requirements of Tactile Ground Surface Indicators (TGSIs) as per BCA/DAPS Clause D3.8 and referenced AS1428 series; and
- Any detailed set out and selection of accessibility elements associated with stairs, walkways and ramps such as handrails, kerb/kerb-rail, stair nosing edges etc; and
- Any passenger lift shop drawings and specifications etc; and
- Any accessible building elements requiring luminance contrasts and slip resistance; and
- Any detailed civil and landscape drawings without clear annotations/dimensions of proposed falls and grades along required accessway/s; and
- Any detailed door types, hardware schedules etc; and
- Any hearing augmentation requirements; and
- Any signage requirements; and
- Any selections and set outs of sanitaryware, fixtures and fittings as per BCA/DAPS Clauses F2.4 and F2.9 and AS1428.1-2009; and
- Any glazing along an accessway as per BCA/DAPS Clause D3.12; and
- Any floor surface treatments and details; and
- The structural adequacy or design of the building; and
- 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 BCA2019 and the Premises Standard then those responsible for the building cannot be subject to a successful complaint); and

- BCA 2019 Sections B, C, D (excl. Part D3), E (excl. Clause E3.6), F (excl. Clause F2.4), G, H, I, J; and
- Demolition Standards not referred to by the BCA 2019; and
- Work Health and Safety Act; and
- Construction Safety Act; and
- 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; and
- Conditions of Development Consent issued by the Local Consent Authority; 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.

## 2.5. 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 BC2019 are recognised as a design standard to satisfy certain aspects of the DDA, compliance with the BCA2019 and the referenced standards does not guarantee that a complaint will not be lodged.

## 2.6. Disability (Access to Premises – Buildings) Standards 2010 (DAPS)

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 BCA 2019 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.

## 2.7. Design Documentation

This report has been based on the DA design documentations as listed in Annexure A of this Report.

## 2.8. Key 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.

*Adaptable Housing*

Adaptable housing is a benchmark or basis on which to develop the accommodation needs of users of all ages and abilities by incorporating sensible design features often lacking in other housing, serves as a bonus to the owners and occupants. Adaptable housing will have features, dimensions and materials designed for safety and ease of use and promote continuation of existing community and family networks.

NB: For the intents and purposes of this DA stage access report, Class 2 Adaptable sole-occupancy units (i.e. Adaptable Housing within the context of high-density residential apartments) will need to be designed spatially to demonstrate potential for adaptability whilst meeting the Performance Requirements of Clause 2.2 of AS4299-1995 and Class C – All Essential Features of the same standard.

*Livable Home*

A 'Livable Home' is designed and built to meet the changing needs of occupants across their lifetime.

Livable homes include key easy living features that make them easier and safer to use for all occupants including: people with disability, ageing Australians, people with temporary injuries, and families with young children.

A 'Livable Home' is designed to:

- be easy to enter; and
- be easy to navigate in and around; and
- be capable of easy and cost-effective adaptation, and
- be responsive to the changing needs of home occupants.

NB: For the intents and purposes of this DA stage access report, Class 2 'Livable' sole-occupancy units (i.e. Livable Homes within the context of high-density residential apartments) will need to be designed in line with spatial requirements of Silver Level performance criteria of Livable Housing Design Guidelines.

*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 also known as 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 with vision impairments with warning or directional orientation information.

*Visitability*

To be visitable by people who use wheelchairs, in that there must be at least one wheelchair accessible entry and path of travel to the living area and to a toilet that is either accessible or visitable.

# 3 KEY COMPLIANCE CONSIDERATION

## 3.1. General Accessibility Compliance Matters

High-level spatial assessment of the DA architectural design documentation for The Development against relevant Deemed-to Satisfy Provisions of the Building Code of Australia 2019 Volume One Amendment 1 (BCA), Disability (Access to Premises – Buildings) Standards 2010 (DAPS) has identified the following areas where compliance with the BCA/DAPS require further spatial development and refinement:

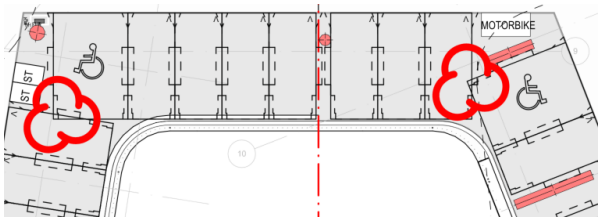
a) There is a proposal for up to twenty-six (26) private carparking spaces for adaptable SOU residents, distributed across levels 01 to 04 and across DA Stages 1 and 2 of The Development.

However, there is a proposal for a total of 27 adaptable SOUs. As such, there needs to be an allocation of one (1) additional private carparking space for an adaptable SOU that can accommodate minimum 3.8m width by 5.4m length car space in line with AS4299-1999.

b) There are no accessible car parking spaces complying with AS2890.6-2009 proposed for the commercial part of The Development.

Please provide a car parking schedule confirming total number and distribution of car parking spaces to determine the minimum number of accessible car parking spaces required for the commercial part of The Development in accordance with BCA D3.5.

c) There are eight (8) non-compliant adaptable unit car parking spaces proposed on levels 01 to 04, which are currently documented to have minor encroachments into adjacent car parking spaces as typically shown below.

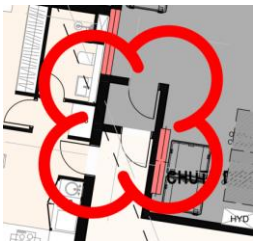



Ensure all adaptable unit car parking spaces proposed on levels 01 to 04 accommodates minimum 3.8m width by 5.4m length dedicated area whilst not encroaching into other car parking spaces.

d) The following door circulation spaces require further design development and/or information to demonstrate spatial planning compliance with AS1428.1-2009:

i. Levels 01 to 04 (DA Stages 1 & 2); sliding doors to respective lift lobbies from the car park can be specified to be on power-operation via push buttons to overcome shortfalls in required latch-side clearances as permitted in AS1428.1-2009; and

ii. Level 01 (DA Stage 2); vestibule/airlock consisting of two (2) consecutive door swings connecting the apartment corridor to the garbage chute discharge store vice-versa.



Modify the vestibule/airlock to ensure there is minimum 1450mm clearance between the consecutive door swings for compliance with AS1428.1-2009.

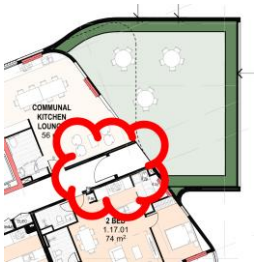
Alternatively, please confirm if the garbage chute discharge store is controlled to be accessed by building maintenance personnel only (e.g. commercial cleaner or waste collection services

provider). This confirmation is required for the application of BCA/DAPS Clause D3.4 exemption from accessibility requirements.

iii. Level 04; swing door connecting the adaptable SOU car parking space to the apartment corridor as shown in the floorplan excerpt below.

This doorway can readily be power-operated during subsequent detailed design development stages (post-DA) to overcome the reductions in latch-side clearances as permitted in AS1428.1-2009.

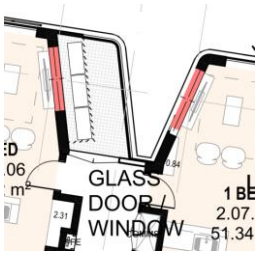
iv. Level 17; swing door connecting the communal indoor apartment corridor to the outdoor terrace for DA stage 1 tower as shown in the floorplan excerpt below.




This doorway can readily be power-operated during subsequent detailed design development stages (post-DA) to over come the reductions in latch-side clearances as permitted in AS1428.1-2009.

e) To determine the feasibility of applying BCA/DAPS Clause D3.4 Exemption (subject to certifier's concurrence post-DA), please confirm the designated uses for the following areas of The Development:

i. Typical pocket gardens, which are accessed via glass doors from the communal residential corridors on levels 6 to 25 of DA Stage 2 apartment tower as shown below.




If the typical pocket gardens are confirmed to be designated for use in common by the residents, modifications to the design are required to ensure provision of an accessway to and within the typical pocket gardens for compliance with AS1428.1-2009.

ii. Please confirm if all garbage chute discharge store is controlled to be accessed by building maintenance personnel only (e.g. commercial cleaner or waste collection services provider).

This confirmation is required for the application of BCA/DAPS Clause D3.4 exemption from accessibility requirements.

f) The following sanitary facilities require further design development and/or information to demonstrate spatial planning compliance with AS1428.1-2009:

i. Ground Level (DA Stage 1); bank of male and female sanitary compartments near the loading zone require further design development to ensure provision of at least one ambulant toilet cubicle complying with AS1428.1-2009 inside each gender compartment.

ii. Ground Level (DA Stage 1); at current stage the End of Trip Facilities associated with Bike Store are understood to be commercial staff only sanitary facilities containing toilets and showers.

This will require provision of unisex accessible sanitary facility containing an accessible toilet pan, accessible basin and an accessible shower for compliance with AS1428.1-2009.

iii. Level 01 (DA Stage 1); bank of male and female sanitary compartments associated with the commercial tenancy require further design development to ensure provision of at least one ambulant toilet cubicle complying with AS1428.1-2009 inside each gender compartment.

## 3.2. Classification

Under the provisions of Part A6 of BCA 2019 and Part A4 of the Access Code, the building has been classified as follows:

Table 1. Building Classification

| Class | Level | Description |
|---|---|---|
| 2 | Ground, Levels 5 to 25 | Residential sole occupancy units and associated areas. |
| 5 | Ground Floor | Commercial sole occupancy units and associated areas. |
| 6 | Ground Floor | Retail sole occupancy units and associated areas. |
| 7a | Ground Floor – Level 04 | Car parking and associated areas. |
| 7b | Ground Floor – Level 04 | Storage areas. |

## 3.3. Dimensions and Tolerances

The Premises Standards and BCA contains the minimum standards for building construction and safety, and therefore generally stipulates minimum dimensions which must be met. BCA Logic's assessment of the plans and specifications has been undertaken to ensure the minimum 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 maters such as access for people with disabilities, stair and corridor widths and balustrade heights.

## 3.4. 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. | Nil at current stage. | Nil at current stage. |

## 3.5. Council's Development Control Plan Requirements (DCP)

Newcastle Development Control Plan 2012 (DCP) provides Council's planning objectives and controls on the provision of Universal Design and Accessible Car Parking under Section 3.03 (Residential Development) and Section 7.03 (Traffic, Parking and Access) of that DCP.

The Controls for Universal Design are found under Clause 3.03.04 (Configuration), sub-clause A (Universal design) and Controls for Accessible Car Parking are found under Clause 7.03.02 (Parking provision), sub-clause E (Parking for people with a disability) as per following tables 3 to 4 below.

Table 3. Controls for Universal design

| **Clause 3.03.04 Configuration<br>A. Universal design** | | | |
|---|---|---|---|
| **Control No.** | **Control** | **Assessment Comment** | **Compliance** |
| **Performance Criteria**<br>1. Universal design features are included in dwellings to promote flexible housing for all community members. | | | |
| **Acceptable Solutions**<br><u>The following controls apply to all forms of residential development.</u> | | | |
| 1. | Seniors housing development complies with the requirements of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004. | Not applicable as the development is not a seniors housing development. | Not Applicable |
| 2. | All other dwellings include the Liveable Housing Design Guidelines Silver Level | Through consultation with a client sourced planning consultancy, The Development aims to propose the following alternative to meet the underlying DCP intent of promoting flexible housing options for a broad spectrum of the community rather than limiting the community's options by proposing all Sole-Occupancy Units (SOUs) to be Silver Level Livable Housing dwellings:<br>- no less than ten percent (10%) of all residential SOUs to be designated as Class C Adaptable Housing units in accordance with AS4299-1995; and<br>- no less than 10% of all SOUs to be designated as Livable Housing dwellings incorporating Silver Level design criteria in accordance with Livable Housing | Further Information Required |

| Clause 3.03.04 Configuration<br>A. Universal design | | | |
|---|---|---|---|
| **Control No.** | **Control** | **Assessment Comment** | **Compliance** |
| | | Australia Design Guidelines (LHDG).<br><br>Please confirm with council if the above alternative proposal can be considered as meeting the underlying DCP intent of promoting flexible housing options for a broad spectrum of the community.<br><br>Please provide an apartment schedule confirming the 10% adaptable and 10% livable approach.<br><br>Note: The above provision can satisfy State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development (SEPP 65). | |

Table 4. Controls for Parking for people with a disability

| Clause 7.03.02 Parking provision<br>E. Parking for people with a disability | | | |
|---|---|---|---|
| **Control No.** | **Control** | **Assessment Comment** | **Compliance** |
| **Objectives**<br>1. Ensure adequate provision of parking for people with a disability.<br>2. Provide conveniently located and signposted parking for people with a disability. | | | |
| **Controls** | | | |
| 1. | A proportion of parking spaces is designed and designated by appropriate pavement marking and signposting as parking for people with a disability. Minimum rates are in accordance with the Building Code of Australia. | Please provide a comprehensive car parking schedule confirming total distribution and numbers and types of car parking spaces proposed across combined stages 1 & 2 to determine minimum accessible car parking spaces required for BCA D3.5 assessment (i.e. min. accessible car parking spaces required for classes 5/commercial and 6/retail that will need to comply with AS2890.6-2009). | Further Information Required |
| 2. | Parking for people with a disability is designed and constructed in accordance with current | There are no accessible car parking spaces complying with AS2890.6-2009 proposed for the | Further Design Development Required |

| Clause 7.03.02 Parking provision<br>E. Parking for people with a disability | | | |
|---|---|---|---|
| **Control No.** | **Control** | **Assessment Comment** | **Compliance** |
| | relevant Australian Standards (AS2890 and AS1428), and the Building Code of Australia. | commercial part of The Development.<br><br>For Class 5 – commercial part of a building, BCA D3.5 requires provision of accessible carparking spaces complying with AS2890.6-2009 at a rate of no less than 1 space for every 100 carparking spaces or part thereof.<br><br>Please provide a car parking schedule confirming total number and distribution of car parking spaces to determine the minimum number of accessible car parking spaces required for the commercial part of The Development in accordance with BCA D3.5. | |
| 3. | Parking spaces for people with a disability are identified by a sign incorporating the appropriate international symbol. The signage and indicative directions are visible from a vehicle at the entrance to the car park. | There are no accessible car parking spaces complying with AS2890.6-2009 proposed for the commercial part of The Development.<br><br>For Class 5 – commercial part of a building, BCA D3.5 requires provision of accessible carparking spaces complying with AS2890.6-2009 at a rate of no less than 1 space for every 100 carparking spaces or part thereof.<br><br>Please provide a car parking schedule confirming total number and distribution of car parking spaces to determine the minimum number of accessible car parking spaces required for the commercial part of The Development in accordance with BCA D3.5. | Further Design Development Required |
| 4. | Parking spaces for people with a disability are located close to wheelchair accessible entrances or lifts. | Please provide a comprehensive car parking schedule confirming total distribution and numbers and types of car parking spaces proposed across combined stages 1 & 2 to determine minimum accessible car parking spaces required for BCA D3.5 assessment (i.e. min. accessible car parking spaces required for | Further Information Required |

| Clause 7.03.02 Parking provision<br>E. Parking for people with a disability | | | |
|---|---|---|---|
| **Control No.** | **Control** | **Assessment Comment** | **Compliance** |
| | | classes 5/commercial and 6/retail parts that will need to comply with AS2890.6-2009). | |
| 5. | A continuous accessible path of travel is provided from each parking space for people with a disability to the closest accessible public entrance. | Please provide a comprehensive car parking schedule confirming total distribution and numbers and types of car parking spaces proposed across combined stages 1 & 2 to determine minimum accessible car parking spaces required for BCA D3.5 assessment (i.e. min. accessible car parking spaces required for classes 5/commercial and 6/retail parts that will need to comply with AS2890.6-2009). | Further Information Required |
| 6. | The minimum floor to ceiling clearance above parking spaces for people with a disability is 2.5m and the minimum floor to ceiling height clearance throughout the accessible path of travel is 2.3m. | This spatial requirement can readily be coordinated, post-DA when detailed sections become available whilst coordinating structural and services design. | Compliance Readily Achievable |
| 7. | The applicant is required to demonstrate, to the satisfaction of Council, how parking restrictions are enforced. Council may enter into an agreement with the owner/operator of the premises to allow Council's Compliance Officers to enter the site to enforce parking restrictions. Should such an arrangement be mutually agreed, it will be included as a condition of consent. | Unable to confirm at this time.<br><br>This operational requirement can readily be coordinated, addressed amongst the applicant and Council post-DA. | Compliance Readily Achievable |

## 3.6. Residential Sole-Occupancy Units (SOUs)

Through consultation with a client sourced planning consultancy, The Development aims to propose a minimum of ten percent (10%) Class C Adaptable Housing SOUs and 10% Silver Level Livable Housing SOUs for each DA Stage as an alternative to meeting the underlying DCP intent of promoting flexible housing options for a broad spectrum of the community rather than limiting the community's options by proposing all Sole-Occupancy Units (SOUs) to be Silver Level Livable Housing dwellings.

The following table summarises the required accessible features for the proposed Residential SOUs. This is based upon SEPP 65, Apartment Design Guide (ADG), underlying intent of Council DCP.

Table 5. Residential Sole-Occupancy Units (SOUs)

| Unit Type | SOUs | |
|---|---|---|
| **Adaptable SOUs** | **DA Stage 1** | **DA Stage 2** |
| | SOUs identified as 1.06.06, 1.07.06, 1.08.06, 1.09.06, 1.10.06, 1.11.06, 1.12.06, 1.13.06, 1.14.06, 1.15.06, 1.16.08, 1.17.07, 1.18.05 & 1.19.05. | SOUs identified as 2.01.01, 2.02.01, 2.03.01, 2.04.01, 2.14.05, 2.15.05, 2.16.05, 2.17.05, 2.18.05, 2.19.05, 2.20.05, 2.21.05 & 2.22.05. |
| | Fourteen (14) Adaptable SOUs out of total one-hundred and thirty-seven (137) SOUs. This is an Adaptable Housing provision rate of no less than 10%. | Thirteen (13) Adaptable SOUs out of total one-hundred and ten (110) SOUs. This is an Adaptable Housing provision rate of no less than 10%. |
| | **Combined DA Stages 1 & 2** | |
| | Twenty-seven (27) Adaptable SOUs out of total two-hundred and forty-seven (247) SOUs. This is an Adaptable Housing provision rate of no less than 10%. | |
| **Livable SOUs** | **DA Stage 1** | **DA Stage 2** |
| | SOUs identified as 1.05.01, 1.05.04, 1.06.06, 1.06.07, 1.07.06, 1.07.07, 1.08.06, 1.08.07, 1.09.06, 1.09.07, 1.10.06, 1.10.07, 1.11.06, 1.11.07, 1.12.06, 1.12.07, 1.13.06, 1.13.07, 1.14.06, 1.14.07, 1.15.06, 1.15.07, 1.16.07, 1.16.08, 1.17.06, 1.17.07, 1.18.05 & 1.19.05. | SOUs identified as 2.01.01, 2.01.02, 2.02.01, 2.02.02, 2.03.01, 2.03.02, 2.04.01, 2.04.02, 2.06.01, 2.07.01, 2.08.01, 2.09.01, 2.10.01, 2.11.01, 2.12.01, 2.13.01, 2.14.01, 2.14.05, 2.15.01, 2.15.05, 2.16.01, 2.16.05, 2.17.01, 2.17.05, 2.18.01, 2.18.05, 2.19.01, 2.19.05, 2.20.01, 2.20.05, 2.21.01, 2.21.05, 2.22.01, 2.22.05, 2.23.01 & 2.24.01. |
| | Twenty-eight (28) Livable SOUs out of total 137 SOUs. This is a Livable Housing provision rate of no less than 20%. | Thirty-six (36) Livable SOUs out of total 110 SOUs. This is a Livable Housing provision rate of no less than 20%. |
| | **Combined DA Stages 1 & 2** | |
| | Ninety-one (91) Livable SOUs out of total two-hundred and forty-seven (247) SOUs. This is a Livable Housing provision rate of no less than forty-nine percent (49%). | |

Note: Class C Adaptable SOUs can provide the dual purpose of adaptability and Livable Housing Silver Level design features.

## 3.7. Areas Required to be Accessible

The following areas of the building and/or part of the building are required to be accessible:

Table 6. Areas Required to be Accessible

| Area / Room | Description |
|---|---|
| {Class 2}<br><br>Part Levels 01 & 02 | Common areas<br><br>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.<br><br>To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking |

| Area / Room | Description |
|---|---|
| | facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like.<br>Where a ramp complying AS1428.1 or a passenger lift is installed –<br>(a) to the entrance doorway of each sole-occupancy unit; and<br>(b) to and within rooms or spaces for use in common by the residents,<br>located on the levels served by the lift or ramp. |
| {Class 5}<br>Part Level 01 | To and within all areas normally used by the occupants. |
| {Class 6}<br>Ground Floor & Level 02 | To and within all areas normally used by the occupants. |
| {Class 7a}<br>Ground Floor, Mezzanine, Part Levels 01 to 04 | To and within any level containing accessible car parking spaces. |
| {Class 7b}<br>Ground Floor – Level 01 | To and within all areas normally used by the occupants. |

Note: The limitations and exemptions of Clauses D3.2, D3.3 and D3.4 of the BCA 2019 and Access Code been considered where applicable in the process of developing the above table.

### 3.8. Livable 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.

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.

## 3.9. Assessment of Adaptable Housing Provisions for Combined DA Stages 1 & 2

There are no council planning controls explicitly requiring provision of Adaptable Housing written within Newcastle DCP. Nonetheless, through consultation with a client sourced planning consultancy, The Development will be voluntarily proposing no less than ten percent (10%) of all residential SOUs for each DA Stage to be designated as Class C Adaptable Housing units in accordance with AS4299(1995).

This proposal is above and beyond the planning controls of DCP yet aims to meet the underlying DCP intent of promoting flexible housing options for a broad spectrum of the community rather than limiting the community's options by proposing all Sole-Occupancy Units (SOUs) to be Silver Level Livable Housing dwellings.

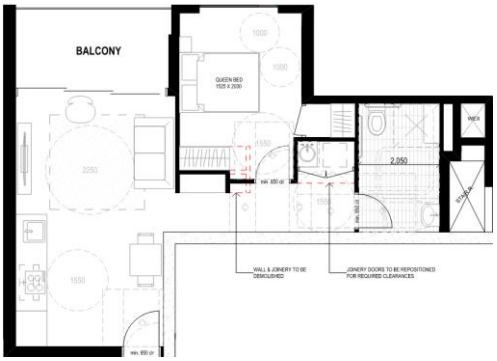
The voluntary provisions of Adaptable Housing SOUs are to comply with AS4299(1995) – Class C (All Essential features incorporated). Pre and post adaption plans will be needed to demonstrate how the design would permit later alterations to suit individual requirements at minimal extra cost.

### 3.9.1. Assessment of Adaptable Housing Design (AS4299-1995 Class C) for DA Stage 1

High-level assessment of DA Stage 1 architectural design documentation of typical adaptable SOU layouts in their pre-adaptation and post-adaptation stages have demonstrated spatial potential for adaptation in line with Class C ('All Essential' features) and Clause 2.2 Performance Requirements of AS4299 – 1995 as summarised in the following:

**1 Bedroom Adaptable SOU Type Layout for DA Stage 1**


Pre-adaptation Stage Layout of Example Unit 1.17.01




Post-adaptation Stage Layout of Example Unit 1.17.01

The proposed adaptation strategy for 1 Bedroom Type Adaptable SOU associated with DA Stage 1 of The Development as indicated on drawing PLA-DA-S1-6000 via example unit 1.17.01 generally involves the following minor works and modifications:

- Adaptable Unit Entry
  - Unit entry is detailed with minimum 850mm clear opening width from pre-adaptation stage and maintained with this exact dimension and set out to post-adaptation stage.
  - Internal unit entry door circulation space can readily and easily be provided through relocating loose furniture items.
- Adaptable Internal Corridor
  - Internal corridor appears to achieve minimum 1m in clear width and the architect will need to add all critical clear width dimensions during detailed design development stages post-DA to demonstrate compliance.
- Adaptable Internal Doorways
  - All internal swing doorways have been detailed from pre-adaptation stage to achieve minimum 850mm clear opening width for compliance with AS1428.1-2009 and all doors are

proposed to be maintained in their compliant dimensions and set outs to post-adaptation stage.

NB: As best practice (i.e. technically not required in AS4299-1995 Class C – All Essential features), it is recommended for the sliding doorways leading out to the balcony from the bedroom is detailed to comply with AS1428.1-2009.

- Adaptable Bedroom
  - The bedroom is proposed with minor works such as reduction of the robe, demolition of internal walls associated with the robe and joinery items outside the bedroom entry doorway to accommodate required clearances and circulation spaces around a queen size bed of minimum 1530mm width by 2030mm length and approaches on both sides of the bedroom entry door for compliance with AS1428.1-2009.

    NB: It is to be noted that the demolition of internal walls are permitted in Clause 2.2(d) of AS4299 – 1995, provided the walls being demolished are non-load bearing and free of electrical and plumbing services.

    Detailed compliance requirements can readily be coordinated to comply during subsequent detailed design development stages, post-DA.

- Adaptable Bathroom
  - Overall bathroom shell of 2050mm width by approximately 3000mm in length (architect to add exact dimension for the length) appears to be identical between pre-adaptation and post-adaptation stages with exception to the nib wall associated with the vanity being demolished as part of adaptation.
  - Pre-adaptation stage vanity carcass and nib wall can readily be detailed (e.g. wall on continuous vertical angles) during detailed design development stages post-DA for ease of adaptation.
  - A hob-less shower has been proposed at pre-adaption stage with a glazed shower screen as means separating water from the shower wetting the adjacent toilet pan. The process of modification primarily involves the removal of the shower screen.

    The proposed modification can readily meet relevant Performance Requirements of Clause 2.2 of AS4299 – 1995 subject to refining the finer details of the shower screen (e.g. screen installed on continuous vertical angles from outset) to ensure ease of adaptation whilst minimising cost and extent of works (e.g. re-tiling and re-waterproofing tiled wall and/or floor).
  - Pre-adaptation toilet pan is readily visitable from outset by accommodating minimum 900mm wide by 1250mm long circulation space in front of a toilet pan, which is located at a corner of the bathroom to comply with both Class C (All Essential Features) requirements of AS4299-1995 and Silver Level requirements of Livable Housing Design Guidelines.

- Adaptable Laundry
  - A separate laundry room is not proposed. A laundry cabinet is proposed from pre-adaption stage and maintained in the same location between pre-adaptation and post-adaptation stages. The cabinetry doors can readily be modified (e.g. removed) to accommodate required minimum 1550mm clear diameter turning circle in front of laundry appliances at post-adaptation stages.

- Adaptable Kitchen
  - The kitchen is of a single row bench type with inbuilt cooktop and sink with a recessed area for a fridge and loose furniture items can readily and easily be relocated to accommodate minimum 1550mm clear diameter turning circle in front of the kitchen bench at post-adaptation stage.

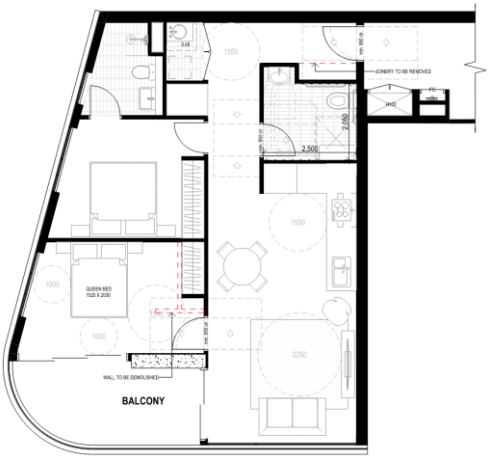
    Detailed adaptable kitchen compliance requirements such as work surfaces, GPOs etc. can readily be coordinated and designed to comply during subsequent detailed design development stages, post-DA.

- Adaptable Living Area
  - Due to the open plan of the living area, loose furniture items can readily and easily be relocated to accommodate minimum 2250mm clear diameter turning circle as required.

NB: Refer to Annexure B for all detailed Compliance Specifications.

**2 Bedroom Type Adaptable SOU Layout for DA Stage 1**


Pre-adaptation Stage Floorplan of Example Unit 1.07.06




Post-adaptation Stage Floorplan of Example Unit 1.07.06

The proposed adaptation strategy for 2 Bedroom Type Adaptable SOU associated with DA Stage 1 of The Development as indicated on drawing PLA-DA-S1-6000 via example unit 1.07.06 generally involves the following minor works and modifications:

- Adaptable Unit Entry
  - Unit entry doorway is detailed with minimum 850mm clear opening width and proposed with a removal of an internal joinery item on the latch-side of the entry door when this door swings towards the user to accommodate required door circulation space for compliance with AS1428.1-2009.

    NB: It is recommended for the architect to add internal door circulation space dimensions (i.e. minimum 530mm latch-side clearance along minimum 1450mm clear depth for a frontal approach when the door swings towards the user for compliance with AS1428.1-2009) at both pre-adaptation and post-adaptation stage plans.
- Adaptable Internal Corridor
  - Internal corridor appears to achieve minimum 1m in clear width and the architect will need to add all critical clear width dimensions during detailed design development stages post-DA to demonstrate compliance.
- Adaptable Internal Doorways
  - All internal swing doorways can readily be detailed from pre-adaptation stage to achieve minimum 820mm clear opening width and can demonstrate potential for adaptation to achieve minimum 850mm clear opening width at post-adaptation stage.

    This can be readily detailed during subsequent design development stages, post-DA.

    NB: As best practice (i.e. technically not required in AS4299-1995 Class C – All Essential features), it is recommended for at least one sliding doorway leading out to the balcony from the bedroom is detailed to comply with AS1428.1-2009.
- Adaptable Bedroom

- The bedroom is proposed with minor works such as reconfiguration of the robe, demolition of internal walls associated with the robe to accommodate required clearances and circulation spaces around a queen size bed of minimum 1530mm width by 2030mm length and approaches on both sides of the bedroom entry door for compliance with AS1428.1-2009.

  NB: It is to be noted that the demolition of internal walls are permitted in Clause 2.2(d) of AS4299 – 1995, provided the walls being demolished are non-load bearing and free of electrical and plumbing services.

  Detailed compliance requirements can readily be coordinated to comply during subsequent detailed design development stages, post-DA.

> Adaptable Bathroom

- Overall bathroom shell has been dimensioned to achieve 2050mm in width by 2500mm in length and the overall shell appears to be identical between pre-adaptation and post-adaptation stages.
- A hob-less shower has been proposed at pre-adaption stage with a glazed shower screen as means separating water from the shower wetting the adjacent toilet pan. The process of modification primarily involves the removal of the shower screen.

  The proposed modification can readily meet relevant Performance Requirements of Clause 2.2 of AS4299 – 1995 subject to refining the finer details of the shower screen (e.g. screen installed on continuous vertical angles from outset) to ensure ease of adaptation whilst minimising cost and extent of works (e.g. re-tiling and re-waterproofing tiled wall and/or floor).
- Pre-adaptation toilet pan is readily visitable from outset by accommodating minimum 900mm wide by 1250mm long circulation space in front of a toilet pan, which is located at a corner of the bathroom to comply with both Class C (All Essential Features) requirements of AS4299-1995 and Silver Level requirements of Livable Housing Design Guidelines.

> Adaptable Laundry

- A separate laundry room is not proposed. A laundry cabinet is proposed from pre-adaption stage and maintained in the same location between pre-adaptation and post-adaptation stages. The cabinetry doors can readily be modified (e.g. removed if and when required) to accommodate required minimum 1550mm clear diameter turning circle directly in front of laundry appliances at post-adaptation stages.

> Adaptable Kitchen

- The kitchen at pre-adaption stage consists of L-shaped bench with a cooktop and sink with a recessed area for a fridge. This layout stays exactly the same at post-adaptation stage and can accommodate minimum 1550mm clear diameter turning circle between kitchen appliances.

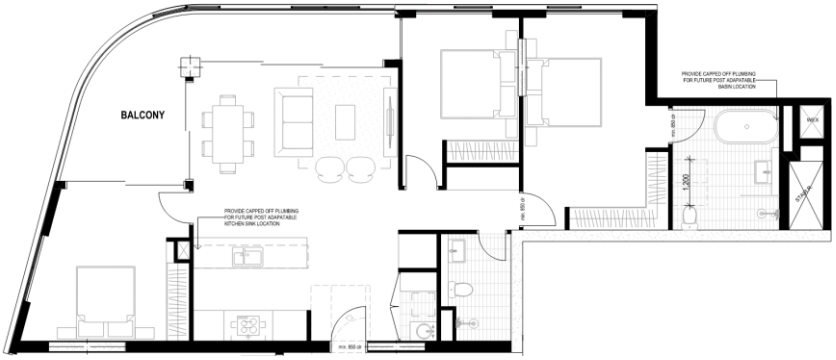
  Detailed adaptable kitchen compliance requirements such as work surfaces, GPOs etc. can readily be coordinated and designed to comply during subsequent detailed design development stages, post-DA.

> Adaptable Living Area

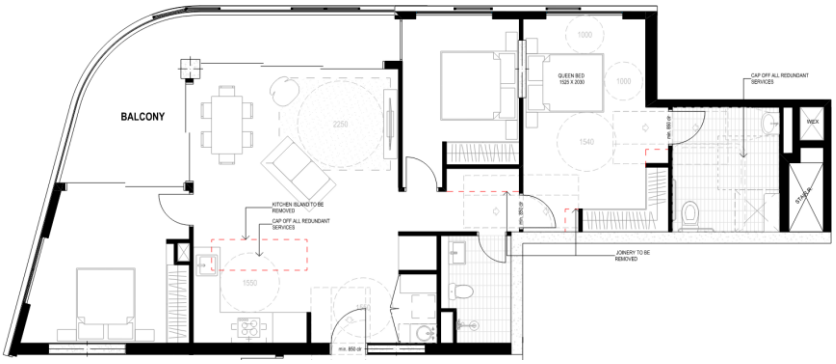
- Due to the open plan of the living area, loose furniture items can readily and easily be relocated to accommodate minimum 2250mm clear diameter turning circle as required.

NB: Refer to Annexure B for all detailed Compliance Specifications.

**3 Bedroom Type Adaptable SOU Layout for DA Stage 1**




Pre-adaptation Stage Floorplan of Example Unit 1.18.05




Post-adaptation Stage Floorplan of Example Unit 1.18.05

The proposed adaptation strategy for 3 Bedroom Type Adaptable SOU associated with DA Stage 1 of The Development as indicated on drawing PLA-DA-S1-6001 via example unit 1.18.05 generally involves the following minor works and modifications:

- Adaptable Unit Entry
  - Unit entry doorway is detailed with minimum 850mm clear opening width and appears to achieve compliant door circulation spaces on both sides of the doorway from pre-adaptation stage and appears to maintain spatial compliance to post-adaptation stage.

    NB: It is recommended for the architect to add internal door circulation space dimensions (i.e. minimum 530mm latch-side clearance along minimum 1450mm clear depth for a frontal approach when the door swings towards the user for compliance with AS1428.1-2009) at both pre-adaptation and post-adaptation stage plans.
- Adaptable Internal Corridor
  - Internal corridor appears to achieve minimum 1m in clear width and the architect will need to add all critical clear width dimensions during detailed design development stages post-DA to demonstrate compliance.
- Adaptable Internal Doorways
  - All internal swing doorways can readily be detailed from pre-adaptation stage to achieve minimum 820mm clear opening width and can demonstrate potential for adaptation to achieve minimum 850mm clear opening width at post-adaptation stage.

    NB: As best practice (i.e. technically not required in AS4299-1995 Class C – All Essential features), it is recommended for the sliding doorways leading out to the balcony from the bedroom is detailed to comply with AS1428.1-2009.
- Adaptable Bedroom

- The bedroom is proposed with minor works such as reduction of the robe, demolition of internal walls associated with the robe and joinery items outside the bedroom entry doorway to accommodate required clearances and circulation spaces around a queen size bed of minimum 1530mm width by 2030mm length and approaches on both sides of the bedroom entry door for compliance with AS1428.1-2009.

  NB: It is to be noted that the demolition of internal walls are permitted in Clause 2.2(d) of AS4299 – 1995, provided the walls being demolished are non-load bearing and free of electrical and plumbing services.

  Detailed compliance requirements can readily be coordinated to comply during subsequent detailed design development stages, post-DA.

> Adaptable Bathroom

- Adaptable bathroom's shell appears to be sufficient in overall room dimensions (architect to add exact dimensions in terms of width and length) and identical between pre-adaptation and post-adaptation stages.
- The pre-adaption stage bathroom has a vanity with inbuilt basin and a free-standing bathtub that is provided from outset. These sanitaryware are removed as part of the process of adaptation allowing the resident to install an accessible basin for compliance with AS1428.1-2009 without encroaching into required minimum circulation spaces for the shower recess and toilet pan.

  NB: The vanity plinth can readily be detailed to be of a carcass type with continuing tiling on the wall and floor where the plinth comes into contact. This can be readily detailed to comply during subsequent detailed design development stages, post-DA.
- A hob-less shower has been proposed at pre-adaption stage with a glazed shower screen as means separating water from the shower wetting the adjacent basin. The process of modification primarily involves the removal of the shower screen and the re-orientation of the shower.

  The proposed modification has the potential to meet relevant Performance Requirements of Clause 2.2 of AS4299 – 1995 subject to refining the finer details of the shower screen (e.g. glass screen enclosure and swing door installed on continuous vertical angles from outset) to ensure ease of adaptation whilst minimising cost and extent of works (e.g. re-tiling and re-waterproofing tiled wall and/or floor) and provision of capped off services from outset for the shower re-orientation to comply with AS1428.1-2009 at post-adaptation stage.
- Pre-adaptation toilet pan is readily visitable from outset by accommodating minimum 900mm wide by 1250mm long circulation space in front of a toilet pan, which is located at a corner of the bathroom to comply with both Class C (All Essential Features) requirements of AS4299-1995 and Silver Level requirements of Livable Housing Design Guidelines.

> Adaptable Laundry

- A separate laundry room is not proposed. A laundry cabinet is proposed from pre-adaption stage and maintained in the same location between pre-adaptation and post-adaptation stages. The cabinetry doors can readily be modified (e.g. removed if and when required) to accommodate required minimum 1550mm clear diameter turning circle directly in front of laundry appliances at post-adaptation stages.

> Adaptable Kitchen

- The kitchen at pre-adaption stage consists of two (2) separate parallel benches with a cooktop on one bench and a sink on the remaining bench with a recessed area for a fridge. There are provisions for capped off plumbing services from outset for future sink relocation.

  At post-adaption stage the kitchen is modified to be a continuous L-shaped bench with the sink relocated to accommodate minimum 1550mm clear diameter turning circle infront of the sink and cook top.

Detailed adaptable kitchen compliance requirements such as work surfaces, GPOs etc. can readily be coordinated and designed to comply during subsequent detailed design development stages, post-DA.

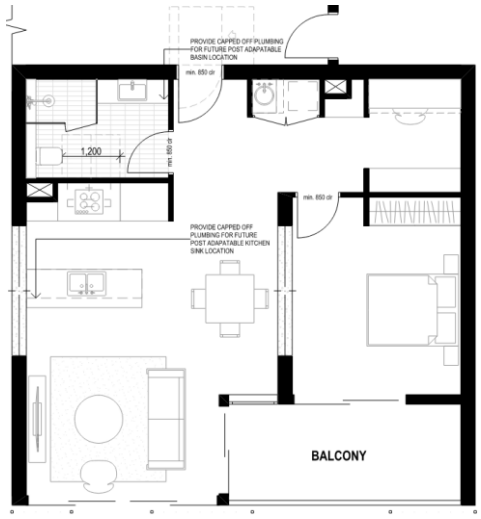
- Adaptable Living Area
  - Due to the open plan of the living area, loose furniture items can readily and easily be relocated to accommodate minimum 2250mm clear diameter turning circle as required.

NB: Refer to Annexure B for all detailed Compliance Specifications.

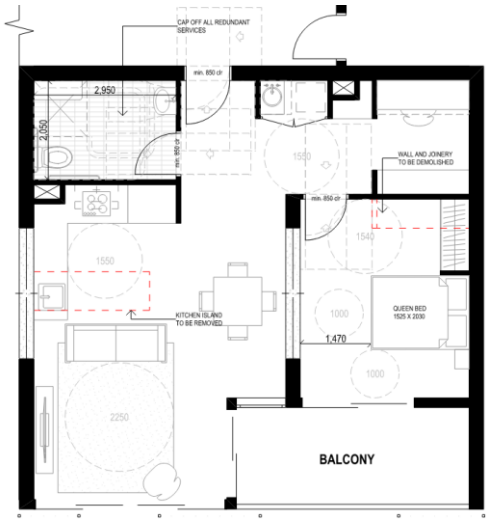
### 3.9.2. Assessment of Adaptable Housing Design (Class C AS4299-1995) for DA Stage 2

High-level assessment of DA Stage 2 architectural design documentation of typical adaptable SOU layouts in their pre-adaptation and post-adaptation stages have demonstrated spatial potential for adaptation in line with Class C ('All Essential' features) and Clause 2.2 Performance Requirements of AS4299 – 1995. The high-level spatial assessment can be summarised as per the following:

**1 Bedroom Type Adaptable SOU Layout for DA Stage 2**




Pre-adaptation Stage Floorplan of Example Unit 2.01.01




Post-adaptation Stage Floorplan of Example Unit 2.01.01

The proposed adaptation strategy for 1 Bedroom Type Adaptable SOU associated with DA Stage 2 of The Development as indicated on drawing PLA-DA-S2-6000 via example unit 2.01.01 generally involves the following minor works and modifications:

- Adaptable Unit Entry
  - Unit entry doorway is detailed with minimum 850mm clear opening width and appears to achieve compliant door circulation spaces on both sides of the doorway from pre-adaptation stage and appears to maintain spatial compliance to post-adaptation stage.

    NB: It is recommended for the architect to add internal door circulation space dimensions (i.e. minimum 530mm latch-side clearance along minimum 1450mm clear depth for a frontal approach when the door swings towards the user for compliance with AS1428.1-2009) at both pre-adaptation and post-adaptation stage plans.
- Adaptable Internal Corridor
  - Internal corridor appears to achieve minimum 1m in clear width and the architect will need to add all critical clear width dimensions during detailed design development stages post-DA to demonstrate compliance.
- Adaptable Internal Doorways

- All internal swing doorways can readily be detailed from pre-adaptation stage to achieve minimum 820mm clear opening width and can demonstrate potential for adaptation to achieve minimum 850mm clear opening width at post-adaptation stage.

  This can be readily detailed during subsequent design development stages, post-DA.

  NB: As best practice (i.e. technically not required in AS4299-1995 Class C – All Essential features), it is recommended for at least one sliding doorway leading out to the balcony from the bedroom is detailed to comply with AS1428.1-2009.

> Adaptable Bedroom

- The bedroom is proposed with minor works such as reduction of the robe, demolition of internal walls associated with the robe and joinery items outside the bedroom entry doorway to accommodate required clearances and circulation spaces around a queen size bed of minimum 1530mm width by 2030mm length and approaches on both sides of the bedroom entry door for compliance with AS1428.1-2009.

  NB: It is to be noted that the demolition of internal walls are permitted in Clause 2.2(d) of AS4299 – 1995, provided the walls being demolished are non-load bearing and free of electrical and plumbing services.

  Detailed compliance requirements can readily be coordinated to comply during subsequent detailed design development stages, post-DA.

> Adaptable Bathroom

- Overall bathroom shell has been dimensioned to achieve 2050mm in width by 2950mm in length and the overall shell appears to be identical between pre-adaptation and post-adaptation stages.
- A hob-less shower has been proposed at pre-adaption stage with a glazed shower screen as means separating water from the shower wetting the toilet pan. The process of modification primarily involves the removal of the shower screen.

  The proposed modification can readily meet relevant Performance Requirements of Clause 2.2 of AS4299 – 1995 subject to refining the finer details of the shower screen (e.g. glass screen continuous vertical angles from outset) to ensure ease of adaptation whilst minimising cost and extent of works (e.g. re-tiling and re-waterproofing tiled wall and/or floor).
- Pre-adaptation toilet pan is readily visitable from outset by accommodating minimum 900mm wide by 1250mm long circulation space in front of a toilet pan, which is located at a corner of the bathroom to comply with both Class C (All Essential Features) requirements of AS4299-1995 and Silver Level requirements of Livable Housing Design Guidelines.

> Adaptable Laundry

- A separate laundry room is not proposed. A laundry cabinet is proposed from pre-adaption stage and maintained in the same location between pre-adaptation and post-adaptation stages. The cabinetry doors can readily be modified (e.g. removed if and when required) to accommodate required minimum 1550mm clear diameter turning circle directly in front of laundry appliances at post-adaptation stages.

> Adaptable Kitchen

- The kitchen at pre-adaption stage consists of two (2) separate parallel benches with a cooktop on one bench and a sink on the remaining bench with a recessed area for a fridge. There are provisions for capped off plumbing services from outset for future sink relocation.

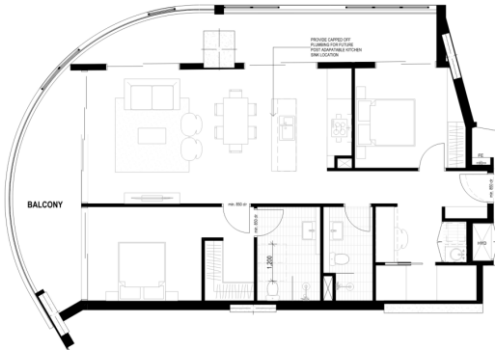
  At post-adaption stage the kitchen is modified to be a continuous L-shaped bench with the sink relocated to accommodate minimum 1550mm clear diameter turning circle infront of the sink and cook top.

  Detailed adaptable kitchen compliance requirements such as work surfaces, GPOs etc. can readily be coordinated and designed to comply during subsequent detailed design development stages, post-DA.

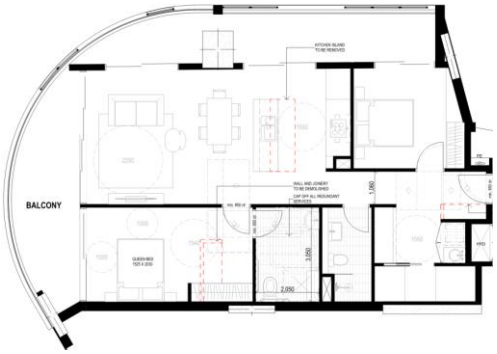
- Adaptable Living Area
  - Due to the open plan of the living area, loose furniture items can readily and easily be relocated to accommodate minimum 2250mm clear diameter turning circle as required.

NB: Refer to Annexure B for all detailed Compliance Specifications.

**2 Bedroom Type Adaptable SOU Layout for DA Stage 2**




Pre-adaptation Stage Floorplan of Example Unit 2.14.05




Post-adaptation Stage Floorplan of Example Unit 2.14.05

The proposed adaptation strategy for 2 Bedroom Type Adaptable SOU associated with DA Stage 2 of The Development as indicated on drawing PLA-DA-S2-6001 via example unit 2.14.05 generally involves the following minor works and modifications:

- Adaptable Unit Entry
  - Unit entry doorway is detailed with minimum 850mm clear opening width from outset and maintained to post-adaptation stage.
  - Post-adaptation stage modification will involve demolition of light construction wall and joinery item to accommodate the required internal door circulation space when the door swing towards the user for compliance with AS1428.1-2009.

    NB: It is to be noted that the demolition of internal walls are permitted in Clause 2.2(d) of AS4299 – 1995, provided the walls being demolished are non-load bearing and free of electrical and plumbing services.
- Adaptable Internal Corridor
  - Internal corridor at post-adaption stage has been dimensioned to achieve minimum 1.05m in clear width and the architect will need to duplicate this dimension from pre-adaptation stage layout. This can be readily dimensioned during detailed design development stages post-DA to demonstrate compliance at pre-adaptation stage.
- Adaptable Internal Doorways
  - All internal swing doorways can readily be detailed from pre-adaptation stage to achieve minimum 820mm clear opening width and can demonstrate potential for adaptation to achieve minimum 850mm clear opening width at post-adaptation stage.

    This can be readily detailed during subsequent design development stages, post-DA.

    NB: As best practice (i.e. technically not required in AS4299-1995 Class C – All Essential features), it is recommended for at least one sliding doorway leading out to the balcony from the bedroom is detailed to comply with AS1428.1-2009.
- Adaptable Bedroom
  - The bedroom is proposed with minor works such as demolition and reconfiguration of the robe and associated walls to accommodate required clearances and circulation spaces

around a queen size bed of minimum 1530mm width by 2030mm length and approach to the bedroom-side entry door for compliance with AS1428.1-2009.

NB: It is to be noted that the demolition of internal walls are permitted in Clause 2.2(d) of AS4299 – 1995, provided the walls being demolished are non-load bearing and free of electrical and plumbing services.

Detailed compliance requirements can readily be coordinated to comply during subsequent detailed design development stages, post-DA.

- Adaptable Bathroom
  - Overall bathroom shell has been dimensioned to achieve 2050mm in width by 2950mm in length and the overall shell appears to be identical between pre-adaptation and post-adaptation stages.
  - A hob-less shower has been proposed at pre-adaption stage with a glazed shower screen as means separating water from the shower wetting the toilet pan. The process of modification primarily involves the removal of the shower screen.

    The proposed modification can readily meet relevant Performance Requirements of Clause 2.2 of AS4299 – 1995 subject to refining the finer details of the shower screen (e.g. glass screen continuous vertical angles from outset) to ensure ease of adaptation whilst minimising cost and extent of works (e.g. re-tiling and re-waterproofing tiled wall and/or floor).
  - Pre-adaptation toilet pan is readily visitable from outset by accommodating minimum 900mm wide by 1250mm long circulation space in front of a toilet pan, which is located at a corner of the bathroom to comply with both Class C (All Essential Features) requirements of AS4299-1995 and Silver Level requirements of Livable Housing Design Guidelines.
- Adaptable Laundry
  - A separate laundry room is not proposed. A laundry cabinet is proposed from pre-adaption stage and maintained in the same location between pre-adaptation and post-adaptation stages. The cabinetry doors can readily be modified (e.g. removed if and when required) to accommodate required minimum 1550mm clear diameter turning circle directly in front of laundry appliances at post-adaptation stages.
- Adaptable Kitchen
  - The kitchen at pre-adaption stage consists of two (2) separate parallel benches with a cooktop on one bench and a sink on the remaining island bench with a recessed area for a fridge. There are provisions for capped off plumbing services from outset for future sink island bench relocation.

    Detailed adaptable kitchen compliance requirements such as work surfaces, GPOs etc. can readily be coordinated and designed to comply during subsequent detailed design development stages, post-DA.
- Adaptable Living Area
  - Due to the open plan of the living area, loose furniture items can readily and easily be relocated to accommodate minimum 2250mm clear diameter turning circle as required.

NB: Refer to Annexure B for all detailed Compliance Specifications.

## ANNEXURE A – DESIGN DOCUMENTATION

This report has been based on the following design documentation.

Table 7. Architectural Documents

| Architectural Documents Prepared by Plus Architecture | | | |
|---|---|---|---|
| **Drawing Number** | **Revision** | **Date (DD/MM/YYYY)** | **Title** |
| PLA-SK-0400 20623 | - | 06/10/2022 | GROUND |
| PLA-SK-0400 20623 | - | 06/10/2022 | MEZZANINE |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV1 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV2 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV3 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV4 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV5 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV6-LV13 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV14-LV16 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV17 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV18-LV24 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV25 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV26 |
| PLA-SK-0400 20623 | - | 06/10/2022 | LV27 |
| PLA-DA-S1-6000 | - | 06/10/2022 | ADAPTABLE UNITS (PRE & POST) |
| PLA-DA-S2-6000 | - | 06/10/2022 | ADAPTABLE UNITS (PRE & POST) |
| PLA-DA-S1-6001 | - | 06/10/2022 | ADAPTABLE UNITS (PRE & POST) |
| PLA-DA-S2-6001 | - | 06/10/2022 | ADAPTABLE UNITS (PRE & POST) |
| 20623 Adaptable & Livable schedule.xlsx | - | Received 17/10/2022 | Adaptable & Livable schedule |

Table 8. Landscape Plans

| Landscape Plans Prepared by URBIS | | | |
|---|---|---|---|
| **Drawing Number** | **Revision** | **Date** | **Title** |
| - | - | 30/09/2022 | Hunter GL |
| - | - | 30/09/2022 | Hunter L5 |
| - | - | 30/09/2022 | Hunter L17 |

# ANNEXURE B – 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 BCA2019 Clause D3.6.
18. Signage will need to comply with Clause 8 of AS1428.1-2009.
19. The passenger lifts will comply with BCA 2019 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

22. All ground surfaces will be slip resistant to comply with HB197/AS4856.
23. Letterboxes will be on a hard stand area connected to an accessible pathway in accordance with Clause 3.8 of AS4299.
24. 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.
25. 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.
26. 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.
27. A telephone outlet will be provided adjacent to GPO in living/dining area in accordance with Clause 4.7.4 of AS4299.
28. 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.
29. 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.
30. 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.
31. The adaptable bathroom will be provisioned for the fit-out to comply with AS1428.1 in accordance with 4.4.1 of AS4299.
32. The shower of the adaptable bathroom will be hob-less in accordance with Clause 4.4.4(f) of AS4299.
33. The bathrooms will be waterproofed to comply with AS3740.
34. The soap holder will be recessed in accordance with Clause 4.4.4(f) of AS4299.
35. 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.
36. 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.
37. 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.
38. A double GPO will be provided beside the mirror in the adaptable bathroom in accordance with Clause 4.4.4(d) of AS4299.
39. 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.
40. Where a clothes line is provided and accessible path of travel will be provided to this in accordance with Clause 4.8(a) of AS4299.
41. 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.
42. Lighting will be provided to the adaptable units in accordance with Clause 4.10 of AS4299.

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

43. Entrance door to have 820mm min. clear door width opening, level transition (5mm max. vertical tolerance) and reasonable shelter from the weather.
44. Entrance door to have 1200x1200mm level landings.
45. “Ramped threshold” (Fig 1b) allowed between 5-56mm height change.
46. Level & “step-free” entrance connected to the “safe and continuous pathway”.
47. Waterproofing and termite management at entry door (as per NCC).
48. Garages to have minimum 3200x5400mm, an even, firm and slip resistant surface with 1:40 max. level surface (1:33 max. asphalt).
49. 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.
50. Toilet to be on entry level (ground floor).
51. If WC is located in a separate room. WC pan circulation space to be 900x1200mm front if WC (door not to encroach) (Fig 3a).
52. 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).
53. Bathroom to have slip resistant and hobless shower recess (portable shower screens allowed)
54. Shower recess located in a room corner to enable the installation of grabrails.
55. Walls to be constructed of solid masonry or concrete, otherwise to be reinforced (1100N min. withstand in all directions).
56. For WC, the reinforcement to be 25mm thick noggings (Fig 6a), or 12mm thick sheeting (Fig 6b)
57. For baths, reinforcement to be 25mm thick noggings (Fig 7a), or 12mm thick sheeting (Fig 7b)
58. For showers, reinforcement to be 25mm thick noggings (Fig 8a), or 12mm thick sheeting (Fig 8b)
59. A continuous stairway handrail where there is a rise of more than 1m.