



# **Access Assessment Report**

1 Kenneth Road & 265 Condamine Street, Manly Vale



Project: 1 Kenneth Road & 265 Condamine Street, Manly Vale

**Reference No:** 112254-Access-r3

Date: 8 December 2021

Client: Gartner Trovato Architects

Client Contact: Brenton Fischer

Email: bfischer@austcorpholdings.com.au

BCA Logic Contact: Alexanda Lederthoug

**Direct:** (02) 8484 4036

Email: alederthoug@bcalogic.com.au

### **Document Control**

Revision	Date	Description	
112254-Access-r1	9 September 2020	Access Assessment Report (DA Stage)	
112254-Access-r2	29 November 2021	Updated Access Assessment F	Report (DA Stage)
112254-Access-r3	8 December 2021	Updated Access Assessment F	Report (DA Stage)
		Prepared by	Verified by
		Alexanda Lederthoug	Warwick Hunter
		Assistant Building Regulations Consultant	Accredited Certifier Grade A1, No. BDC 2417 Manager Building Regulations
		Lexa Sod	W.A



### **Table of Contents**

1	BAS	IS OF ASSESSMENT	5
	1.1.	Location	5
	1.2.	Purpose	5
	1.3.	Limitations	6
	1.4.	Federal Disability Discrimination Act (DDA)	6
	1.5.	Disability Access to Premises Standards (Premises Standards)	6
	1.6.	Design Documentation	7
2	KEY	COMPLIANCE CONSIDERATION	8
	2.1.	General	8
	2.2.	Classification	8
	2.3.	Dimensions and Tolerances	9
	2.4.	Council's Development Control Plan Requirements (DCP)	9
	2.5.	Residential Sole Occupancy Units	10
	2.6.	Areas Required to be Accessible	11
	2.7.	Livable Housing Design Guidelines Requirements (LHDG)	11
	2.8.	Adaptable Housing Code Assessment Summary (AS4299)	11
3	MAT	TERS FOR FURTHER CONSIDERATION	12
Α	NNEXU	RE A DESIGN DOCUMENTATION	13
Α	NNEXU	RE B PREMISES STANDARDS & BCA ASSESSMENT	15
Α	NNEXU	RE C LHDG ASSESSMENT	30
Α	NNEXU	RE D ADAPTABLE HOUSING	35
Α	NNEXU	RE E COMPLIANCE SPECIFICATION	44



### **Tables**

Table 1.	Building Classification	8
Table 2.	Controls for Accessibility	9
Table 3.	Residential Sole Occupancy Units	10
Table 4.	Areas Required to be Accessible	11
Table 5.	Architectural Plans	14
Table 6.	BCA 2019 Summary	17
Table 7.	LHDG Assessment	31
Table 8.	Class C	36



#### 1 BASIS OF ASSESSMENT

#### 1.1. Location

The building development, the subject of this report, is located at 1 Kenneth Road & 265 Condamine Street, Manly Vale. The building is a mixed-use development incorporating basement and lower ground carparking, lower ground and ground floor retail, and ground floor – level 4 residential sole-occupancy units. The building has pedestrian access off both Kenneth Road and Condamine Street, and vehicular access to the lower ground carparking off Kenneth Road.



**Approximated Satellite Image Courtesy of Nearmap** 

#### 1.2. Purpose

The purpose of this report is to assess the proposed building 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 with the:

- Disability (Access to Premises Buildings) Standards 2010 (the Premises Standards) as intended to give certainty to meeting the building's design obligations under the Disability Discrimination Act 1992 (the DDA) in relation to those matters covered by the Premises Standards;
- Design Quality of Residential Apartment Development 2015 (SEPP65);
- Building Code of Australia 2019 (BCA2019) Volume 1 Amendment 1 Part D3 and Clauses E3.6, F2.4 and F2.9;
- > Northern Beaches Council's Warringah Development Control Plan 2011 (the DCP);
- > Adaptable Housing Code AS4299:1995 (AS4299) as/if required by the relevant DCP; and
- Applicable Australian Standards AS1428.1:2009 Amdt.1&2 (AS1428.1), AS/NZS1428.4.1:2009 Amdt.1&2 (AS1428.4.1) and AS/NZS2890.6:2009 (AS2890.6).



#### 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 BCA2019 and reference can be made to separate report 112254-BCA-r1 prepared by BCA Logic.

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 (the DDA) (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 surety is provided to those responsible for the building's design);
- BCA2019 Sections B, C, D (except Part D3), E (except Clause E3.6), F (except for Clauses F2.4 and F2.9), G, H, I & J (reference can be made to separate report 112254-BCA-r1 prepared by BCA Logic);
- Demolition Standards not referred to by the BCA2019;
- > 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 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.

#### 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 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.

### 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.



Ref: 112254-Access-r3

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 BCA2019 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.



#### 2 **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 a detailed assessment of the proposal against ALL relevant Deemed-to-Satisfy Provisions and prescriptive requirements. 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.

Not Applicable. The Deemed-to-Satisfy clause is not applicable to the proposed N/A

design.

The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the Complies

proposed design.

'COMPLIANCE READILY ACHIEVABLE'. It is considered that there is not enough

information included in the documentation to accurately determine strict compliance CRA - Refer with the individual clause requirements. However, with further design development, Annexure E compliance can readily be achievable. This item is to be read in conjunction with the

BCA Specification included within Annexure D of this report.

Further Information is necessary to determine the compliance potential of the building FΙ

design.

Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to PS

satisfy the relevant Performance Requirements.

DNC Does Not Comply.

BCA Clause simply provides a statement not requiring specific design comment or **Noted** 

confirmation.

#### 2.2. Classification

Under the provisions of Parts A6 of BCA2019 and Part A4 of the Access Code, the building has been classified as follows:

Table 1. Building Classification

Class	Level	Description
Class 7a	Part basement, part Lower Ground	Carparking
Class 7b	Part basement, part lower ground level	Bulky Goods, Bins Store and Storage
Class 6	Part lower ground, part Level 1	Retail
Class 5	Part level 1	Commercial
Class 2	Part level 1, levels 2 – 4	Residential



#### 2.3. 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 minimal dimensions have been met, or able to be 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.

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

Northern Beaches Council's Warringah DCP 2011 provides Council's planning controls on the provision of Accessibility / Adaptability / Universal Design under Part D18 of that Plan. The Controls for Accessibility under Part D18 of the DCP are as follows:

Table 2. Controls for Accessibility

Requirement	Control	Comment	Compliance
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 slipper surfaces, steps and stairs and narrow paths should be avoided.	Further design development to be assessed where compliance is readily achievable.	Achievable
2	There are to be continuous, independent and barrier-free access ways incorporated into the design of buildings.	Access is to be provided to, within and throughout the building in accordance with the access provisions of the BCA and Premises Standards which will satisfy such requirements.	Achievable
3	Pathways are to be reasonably level with minimal cross fall and sufficient width, comfortable seating and slipresistant floor surfaces.	Further design development to be assessed where compliance is readily achievable.	Achievable
4	Where there is a change of level from the footpath to commercial or industrial floor levels, ramps rather than steps should be incorporated.	Walkways are proposed rather than steps in applicable areas. Further design development to be assessed where compliance is readily achievable.	Achievable
5	There is to be effective signage and sufficient illumination for people with a disability.	Further design development to be assessed where compliance is readily achievable.	Achievable
6	Tactile ground surface indicators for the orientation of people with visual impairments are to be provided in accordance with the relevant Australian Standard.	Tactile indicators are provided to paths required to be accessible.	Complies



Requirement	Control	Comment	Compliance
7	Access for people with a disability is to be provided at the main entrance to the development.	Further design development of platform lift to be assessed where compliance is readily achievable.	Achievable
8	Development is to comply with Australian Standard AS1428.2.	Access is to be provided to, within and throughout the building in accordance with the access provisions of the BCA and Premises Standards. Such requirements do not impose the requirements of AS1428.2 to the building.	N/A
9	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	Of the twenty-seven (27) SOUs three (3) are intended to be adaptable SOUs satisfying the essential requirements as discussed under Part 2.6 below.	Achievable

### 2.5. Residential Sole Occupancy Units

The following table summarises 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 BCA2019;

Table 3. Residential Sole Occupancy Units

Unit Type	SOU's
	In accordance with Part D18 Requirement 9 of the DCP 10% of dwellings are to meet the essential Class C requirements of AS4299. For the twenty seven (27) SOUs, three (3) shall be adaptable.
Adaptable SOUs	Units K.04, K.08 and K.10 are designated as adaptable units. This satisfies the three (3) adaptable units as required. Initial pre/post adaptation plans showing potential adaptability at a later date is provided for each nominated unit.
	In accordance with the Livable Housing Design Guide 20% of dwellings are to meet the silver level requirements. For the twenty seven (27) SOUs, six (6) shall be silver level livable.
Livable SOUs	Units C.11, C.13, C.17, K.04, K.08 and K.10 are designated as silver level livable based on the carparking allocation. This satisfies the six (6) livable units required as laid out in the Living Housing Design Guidelines.
	Note: Adaptable SOUs can provide the dual purpose of Adaptability and Liveable Housing Design features. The units K.04, K.08 and K.10 are noted to serve both purposes of being adaptable and livable in correspondence with this concession.



#### 2.6. Areas Required to be Accessible

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

Table 4. Areas Required to be Accessible

Area / Room	Description	
Class 2	To and within not less than one (1) of each type of room or space used in common by the residents and to the entrance doorway of each sole-occupancy unit, however not to and within the sprinkler pump room and plant room.	
Class 5	To and within all areas of the commercial tenancies normally used by the occupants.	
Class 6	To and within all areas of the retail tenancies normally used by the occupants.	
Class 7a	To and within any level containing accessible car parking spaces	
Class 7b	To and within the bin rooms, storage areas and bulky goods store.	

Note: The limitations and exemptions of Clauses D3.2, D3.3 and D3.4 of the BCA2019 and Access Code been considered where applicable in the process of developing the above table.

### 2.7. 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.

Annexure C of this Report includes an assessment against the relevant requirements of the LHDG. 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.

#### 2.8. Adaptable Housing Code Assessment Summary (AS4299)

Three (3) adaptable units are required in the development. The adaptable units are required to comply with AS4299 – Class C (essential features incorporated). Initial pre and post adaption plans have been provided to demonstrate how the design would permit later alterations to suit individual requirements at minimal extra costs.

It is noted that Units K.04, K.08 and K.10 are designated as adaptable units. This satisfies the three (3) adaptable units required by Part D18 Requirement 9 of the Warringah Council DCP (2011).



### 3 MATTERS FOR FURTHER CONSIDERATION

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. In this review it has been identified in the design that there are matters requiring further consideration, which include the following:





# Annexure A – Design Documentation

This report has been based on the following design documentation.

Table 5. Architectural Plans

Architectural Plans Prepared by Gartner Trovato Architects			
Drawing Number	Revision	Date Title	Title
DA04	Е	7 <sup>th</sup> December 2021	BASEMENT PLAN
DA05	E	7 <sup>th</sup> December 2021	LOWER GROUND FLOOR
DA06	E	7 <sup>th</sup> December 2021	LEVEL 01
DA07	E	7 <sup>th</sup> December 2021	LEVEL 02
DA08	E	7 <sup>th</sup> December 2021	LEVEL 03
DA09	E	7 <sup>th</sup> December 2021	LEVEL 04



ANNEXURE B	PREMISES STANDARDS & BCA ASSESSMENT

#### **Annexure B - Premises Standards & BCA Assessment**

N/A Not Applicable. The Deemed-to-Satisfy clause is not applicable to the proposed

design.

Complies

The relevant provisions of the Deemed-to-Satisfy clause have been satisfied by the

proposed design.

'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

BCA Specification included within Annexure C of this report.

Further Further Information is necessary to determine the compliance potential of the building

**Information** design.

CRA - Refer

Annexure E

Solution

**Performance** Performance Solution with respect to this Deemed-to-Satisfy Provision is necessary to

satisfy the relevant Performance Requirements.

**DNC** Does Not Comply.

Noted BCA Clause simply provides a statement not requiring specific design comment or

confirmation.



### Building Code of Australia 2019 Assessment Summary (BCA2019) / Premises Standards (Access Code)

Table 6. BCA 2019 Summary

Clause	Clause Requirements	Comment	Status
Section D: Access and Egress			
Part D2 – Construction of Exits			
D2.15: Thresholds	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless —  (a)  (b)  (c) in a building required to be accessible by Part D3, the doorway —  (i) opens to a road or open space; and  (ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or  (d) in other cases —  (i) the doorway opens to a road or open space, external stair landing or external balcony; and  (ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway open.	Not enough details provided for a DA stage assessment for thresholds. Further assessment to be done with design development where compliance is readily achievable.	CRA – Refer Annexure E
D2.17: Handrails	<ul> <li>(a) Except for handrails referred to in D2.18, handrails must be –</li> <li>(i) located along at least one side of the ramp or flight; and</li> <li>(ii)</li> <li>(iii)</li> </ul>	Handrails are shown to be provided to the three (3) non-fire-isolated stairs serving the ground and upper residential levels in each of the three (3) residential buildings.  The two (2) fire-isolated stairs serving the basement levels and discharging to the residential entrances on the street level shall provide one (1) handrail located on one side consistently where sufficient space is available	CRA – Refer Annexure E



Section D: Access and Egress		
		nstallation. Further design development to be ed where compliance is readily achievable.
	stair treads and the floor surface of the ramp	rance stairs served by Condamine Street is d with two (2) handrails in accordance with and comply.
	<ul><li>(vi) continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and</li></ul>	
	(vii) in a required exit serving an area required to be accessible, designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (a)(iii)(B).	
	(b) Handrails –	
	(i)	
	(ii)	
	(c) Handrails required to assist people with a disability must be provided in accordance with D3.3	
	(d) (e)	
D2.21: Operation of latch	- Further	ugh details provided for a DA stage assessment. assessment to be done with design development Annexure E
	(i) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area required to be accessible by Part D3 –	ompliance is readily achievable.



Section D: Access and Egress	
	(A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and
	(B) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or
	(ii) a single hand pushing action on a single device which is located between 900 mm and 1.2 mm from the floor; ad
	(iii) where the latch operation device referred to in (ii) is not located on the door leaf itself –
	(A) manual controls to power-operated doors must be at lest 25 mm wide, proud of the surrounding surface and located –
	(aa) not less than 500 mm from an internal corner; and
	(bb) for a hinged door, between 1 m and 2 m from the door leaf
	(cc) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position.
	(B) braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device.
	(b) The requirements of (a) do not apply to a door that –
	(i)
	(ii) serves only, or is within –



Section	Section D: Access and Egress			
		(A) a sole-occupancy unit in a Class 2 building or a Class 4 part of a building; or		
		(B) (C) (D) (iii) serves – (A) (B) (iv) (v) (c)		
	B – Access for People with	a Disability		
D3.0:	Deemed-to-Satisfy Provisions	Informational.	Noted	Noted
D3.1:	General Building Access Requirements	Class 2 –  From a pedestrian entrance to at least 1 floor containing SOU's, to the entrance doorway of each SOU located on that level, and any other level served by a passenger lift or an accessible ramp.  To and within not less than 1 of each type of room or space for use in common by the residents.  Class 5 –  To and within all areas normally used by the occupants.  Class 6 –  To and within all areas normally used by the occupants.  Class 7a –	Two (2) pedestrian entrances are provided in the building. There is an entrance provided from Condamine Street on the eastern side of the three (3) buildings on the lower ground floor. This entrance provides a platform lift and accessible stairs to Retail 1 and a walkway (1:20) to the lobby of the east building which contains a lift accessing all residential levels and required facilities in the lower levels.  The second entrance is provided on level 1, accessed via Kenneth Road on the northern side of the three (3) buildings. A walkway is provided (1:20) which provides access to a corridor where Retail 02 and Commercial 03 can be entered directly. Further down the corridor contains the lobby for north building which provides a lift	CRA – Refer Annexure E



Section D: Access and Egress			
	To and within any level containing accessible carparking spaces.	serving all residential levels and required facilities in the lower levels.	
	Class 7b –  To and within the bin rooms.	No access provided to the storage area in the rear of commercial 03, consideration for access to be assessed at CC stage.	
D3.2: Access to Buildings	<ul> <li>(a) An accessway must be provided to a building required to accessible –</li> <li>(i) from the main points of a pedestrian entry at the allotment boundary; and</li> <li>(ii)</li> <li>(iii) from any required accessible carparking space on the allotment.</li> <li>(b) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and –</li> <li>(i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and</li> <li>(ii) in a building with a total floor area more than 500 m², a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance, except for pedestrian entrances serving only areas exempted by D3.4.</li> <li>(c) Where a pedestrian entrance required to be accessible has multiple doorways—</li> <li>(i) if the pedestrian entrance consists of not more than 3 doorways — not less than 1 of those doorways must be accessible; and</li> <li>(ii) if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those</li> </ul>	Access is provided to the building directly off both Kenneth Road and Condamine Street. An accessible stair is provided to the east entrance. Not enough details have been provided for a DA stage assessment for platform lift operability. Further design development to be assessed where the platform lift provides a power latch mechanism.  The north entrance provides an accessible 1:20 walkway to the entrance path of the north building. Sufficient circulation space for turning spaces and continuous access is available to the main lobby of the north and south building.	CRA – Refer Annexure E



Section D: Access and Egress			
	<ul> <li>(d) For the purposes of (c)—</li> <li>(i) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where—</li> <li>(A) all doorways serve the same part or parts of the building; and</li> <li>(B) the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D3.2); and</li> <li>(ii) a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D3.2).</li> <li>(e) Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.</li> </ul>		
D3.3: Parts of Buildings to be Accessible	<ul> <li>Walkways and ramps must comply with clause 10 of AS 1428.1-2009.</li> <li>Non-fire-isolated stairways must comply with Clause 11 of AS 1428.1-2009.</li> <li>Fire-isolated stairways must comply with clause 11 (f) &amp; (g) of AS 1428.1-2009.</li> <li>The accessways must be provided with:</li> <li>Passing spaces (1800x2000mm) complying with AS1428.1 at 20m max. intervals where direct line of sight is not available.</li> <li>Turning spaces (1540x2070mm) complying with AS1428.1 within 2m of the end of accessways (including corridors or the like); and at 20m max. intervals along an accessway.</li> </ul>	The three (3) non-fire-isolated stairs in the buildings serving the upper residential levels and residential entrance levels provide handrails on both sides in accordance with AS1428.1.  The fire-isolated stairs serving the lower basement levels in the east and north buildings are to provide one (1) handrail throughout in accordance with Clause 11 (f) & (g) of AS1428.1 where compliance is readily achievable with design development.  Further design development to be assessed where sufficient space is available to provide compliant turning spaces to accessways on the residential entrance levels (Lower ground and Level 1).  The common areas used by the occupants of the building are to be provided with compliant continuous paths and turning spaces in accordance with AS1428.1	CRA – Refer Annexure E



Sectio	Section D: Access and Egress			
		> An intersection of accessways satisfies the spatial requirements for a passing and turning space.	requirements. To be further assessed with design development where compliance is readily achievable.	
D3.4:	Exemptions	Certain areas can be exempted under this clause if they pose a health or safety risk for people with disability and/or access would be inappropriate because the particular purpose for which this area is used.	The following areas within this development have been identified as potential excepted areas, subject to certifier's approval:  > Lower Ground Plant Rooms > Lower Ground Sprinkler Pump Room > Lower Ground EDB	Noted
D3.5:	Accessible Car Parking	Accessible carparking spaces to be in compliance with this Clause, AS2890.6 and AS1428.1 in the proportion required by BCA2019 and Council DCP.  Generally, accessible carparking spaces compliant with AS2890.6 will require 2400x5400mm plus an adjacent shared zone of 2400x5400mm. Bollard, demarcation and accessible signage to comply with AS2890.6. Vertical clearance to be 2500mm min over the carparking and 2200mm over the accessway, compliant with AS2890.6.  Note: Adaptable parking spaces will require to comply with AS4299 (or AS2890.6 if described in DCP).  Note: Livable housing parking spaces will require to comply with LHDG only when forming part of the SOU's access.	There is a single accessible visitor carparking space proposed, located on the lower ground floor carpark. The ratio of accessible to non-accessible carparking spaces is compliant with Table D3.1.  It shall be ensured that the accessible carparking space has a width of not less than 2400mm, to be further assessed with design development, pending details of the clear heights achieved throughout the carpark, including the access ramp, to ensure compliance with AS2890.6.	CRA – Refer Annexure E
D3.6:	Signage	<ul> <li>Braille and tactile signage complying with Specification D3.6 and incorporating the international symbol of access, or deafness as appropriate, must identify each:         <ul> <li>sanitary facility; and</li> <li></li> <li>identify each door required by E4.5 to be provided with an exit sign and state "Exit" and "Level" and either:</li> </ul> </li> </ul>	Not enough details provided for a DA stage assessment. Further assessment to be done with design development where compliance is readily achievable.	CRA – Refer Annexure E



Section D: Access and Egress	Section D: Access and Egress			
	<ul> <li>(aa) the floor level number; or</li> <li>(bb) a floor level descriptor; or</li> <li>(cc) a combination of (aa) and (bb)</li> <li>Signage to accessible sanitary facilities must identify if the facility is suitable for left or right handed use; and</li> <li>Signage to identify an ambulant accessible facility in accordance with AS 1428.1 must be located on the door of the facility; and</li> <li>Where a bank of facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be places at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex facility.</li> </ul>			
D3.7: Hearing Augmentation	Not applicable.	Hearing augmentation is not required in this building.	N/A	
D3.8: Tactile Indicators	<ul> <li>(a) For a building required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— <ol> <li>(i) stairway, other than a fire-isolated stairway; and</li> <li>(ii)</li> <li>(iii)</li> <li>(iv) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and</li> <li>(v) in the absence of a suitable barrier— <ol> <li>(A) an overhead obstruction less than 2 m above floor level, other than a doorway; and</li> </ol> </li> </ol></li></ul>	Tactile indicators are shown at the top and bottom landings of the stairs providing access to the residential levels in all three (3) buildings.  It is noted at this stage, where currently shown tactile indicators are all 600mm in length. In accordance with AS1428.4.1-2009 where the distance from the nearest riser to the wall is less than 3000mm the TGSI's are to be 300 – 400mm in length.  Compliance is readily achievable. Further details around tactile ground surface indicator design to be provided at CC stage.	CRA – Refer Annexure E	



Section D:	: Access and Egress			
		(B) an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point,		
		except for areas exempted by D3.4. (b)		
		(b) Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1.		
		TGSIs to be provided in compliance with this Clause, AS1428.1, AS1428.4.1 and AS4586/HB198 at bottom and top of stairs / ramps (except fire-isolated).		
sp	Vheelchair seating paces in Class 9b ssembly Buildings	Not applicable.	The clause is not applicable to this building.	N/A
D3.10: Sv	wimming Pools	Not applicable.	There is no swimming pool proposed in the building.	N/A
D3.11: Ra	amps	On an accessway a series of connected ramps must not have a combined vertical rise of 3.6m and a landing for a step ramp must no overlap a landing for another step ramp or ramp.	There is no series of connected ramps which have a combined vertical rise of 3.6m.	Complies
D3.12: GI Accessway	-	On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.	Compliance is readily achievable. Further details around glazing decals to be provided with design development at CC stage.	CRA – Refer Annexure E
Specificati	Specification D3.6 – Braille and Tactile Signs			
1. Sc	cope	Informational	Noted	Noted
		I.	I .	



Section	Section D: Access and Egress			
2.	Location of Braille and Tactile Signs	The location of braille and tactile signs shall be in accordance with AS1428.1 and Specification D3.6.	Not enough details available for a DA stage assessment. Further analysis to be done with design development at CC stage.	CRA Refer to Annexure E
3.	Braille and Tactile Sign Specification	All accessible signage to comply with this clause and AS1428.1. Tactile characters to be raised in sentence case with matt finish.	Not enough details available for a DA stage assessment. Further analysis to be done with design development at CC stage.	CRA Refer to Annexure E
4.	Luminance-contrast	All accessible signage to comply with this clause and As1428.1. The sign background to have at least 30% luminance contrast with the 5mm width border, tactile characters and braille. Luminance contrast to be measured on the location once installed.	Not enough details available for a DA stage assessment. Further analysis to be done with design development at CC stage.	CRA Refer to Annexure E
5.	Lighting	Braille and tactile signs to be appropriate illuminated, in complaint with this Clause and AS1428.1. The access pathway must have a minimum luminance contrast of 30%, in accordance with AS1428.1.	Not enough details available for a DA stage assessment. Further analysis to be done with design development at CC stage.	CRA Refer to Annexure E
6.	Braille	Braille must be in accordance with the criteria set out by the Australian Braille Authority.	Not enough details available for a DA stage assessment. Further analysis to be done with design development at CC stage.	CRA Refer to Annexure E

Section	ection E: Services and Equipment				
Part E3	Part E3 – Lift Installations				
E3.0:	E3.0: Deemed-to-Satisfy Provisions Informational. For noting.				
E3.6:	Passenger Lifts	The passenger lifts must be one of the types specified in Table E3.6a, have accessible features in accordance with Table E3.6b, as follows:  > Handrail complying with the provisions for a mandatory handrail in AS 1735.12.	All lift travel more than 12m and therefore shall have floor dimensions not less than 1400mm wide x 2000mm length as currently provided in all three (3) in accordance with Clause E3.2. Lift height and design details to be further assessed at CC stage.	CRA Refer to Annexure E	



#### **Section E: Services and Equipment**

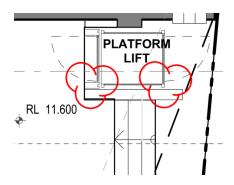
- Lift floor dimensions not less than 1400 mm wide by 1600 mm deep (lifts that travel more than 12m)
- Minimum clear door opening complying with AS 1735.12.
- Passenger protection system complying with AS1735.12.
- Lift car and landing control buttons complying with AS 1735.12.
- > Lighting in accordance with AS 1735.12.
- (a) Automatic audible information within the lift car to identify the level each time the car stops; and
- (b) audible and visual indication at each lift landing to indicate the arrival of the lift car; and
- (c) audible information and audible indication required by (a) and (b) is to be provided in a range of between 20–80 dB(A) at a maximum frequency of 1 500 Hz.

Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received.

Note: Platform lifts can be used up to 4m travel distance.

Note: Stairway lifts are not allowed where is possible to install another type of passenger lift (e.g. unjustifiable hardship, heritage buildings)

The platform lift at the east entry does not travel more than 1000mm and shall provide floor dimensions appropriate to accommodate a wheelchair.



It shall be a power operated door where the button shall be located on the adjacent brick wall adjacent to the latch-side of the lift landing doors. This will address the obstruction to the latch side circulation space created by the brick wall. This will ensure that persons in wheelchairs are able to independently use the platform lift. To be further assessed at CC stage.

#### **Section F: Healthy and Amenity**

#### Part F2 - Sanitary and Other Facilities

F2.0: Deemed-to-Satisfy

Provisions

Informational.

Noted

Noted



Section F: Hea	Ithy and Amenity		
		In a building required to be accessible—	
	(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and		
		(b) accessible unisex showers must be provided in accordance with Table F2.4(b); and	
		(c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and	
F2.4: Access	- · · .	(d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and  A sanitary facility providing dimensions that readily comply with accessible requirements is provided to both the lower ground and level 1 as required. Further	– Refer
Faciliti F2.4)	es (including Table		exure E
		(f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and	
		(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and	
		(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and	
		(i) compartment or an accessible unisex shower need not be provided on a storey or level that is	



Section F: Healthy and Amenity	Section F: Healthy and Amenity			
	not required by D3.3(f) to be provided with a passenger lift or ramp complying with AS 1428.1.			
F2.9: Accessible adult change facilities	Not applicable.	There is no accessible adult change facility required in the building.	N/A	





### Annexure C – LHDG Assessment

Table 7. LHDG Assessment

Item	Design Element	Comment	Compliance
1.	Dwelling (SOU) Access		
	Silver Level		
	(a) Provide a safe, continuous step-free pathway from the front boundary of the property to an entry door to the dwelling.		
	(b) This provision does not apply where the average slope of the ground where the path would feature is steeper than 1:14.		
	(c) The path of travel referred to in (a) should have a minimum clear width of 1000mm and have;		
	(i) No steps;		
	(ii) An even, firm, slip resistant surface;		
	(iii) A crossfall of not more than 1:40;	Access to the SOU entrances is to comply with AS1428.1-2009 which will also satisfy the requirements of the LHDG. Where details are provided, walkways provided for paths of travel to SOUs are not less than 1000mm in width and not more than 1:14 in gradient. To be further assessed with design development where compliance is readily achievable.	
	(iv) A maximum pathway slope of 1:14		
	Where ramps are required they should have landings provided at no greater than 9m for a 1:14 ramp and no greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length.	LHDG. Where details are provided, walkways provided for paths of travel to SOUs are not less than 1000mm in width and not more than 1:14 in gradient. To be further assessed with design development where compliance is	CRA – Refer Annexure E
	(d) 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:	readily achievable.	
	(i) Minimum dimensions of at least 3200 mm (width) x 5400mm (length);		
	(ii) An even, firm and slip resistant surface; and		
	(iii) A level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen).		
	(e) 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:		
	(i) A maximum gradient of 1:10		



Item	Design Element	Comment	Compliance
	(ii) A minimum clear width of 1000mm (please note: width should reflect the pathway width)		
	(iii) A maximum length of 1900 mm		
	(f) Where a ramp is part of the pathway, level landings no less than 1200mm in length, exclusive of the swing of the door or gate than opens onto them, must be provided at the head and foot of the ramp.		
	<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.		
2.	Dwelling (SOU) Entrance		
	Silver Level		
	(a) The dwelling should provide an entrance door with –		
	(i) A minimum clear opening width of 820mm (see Figure 2(a));		
	<ul> <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> </ul>		
	(iii) Reasonable shelter from the weather.	The livable unit entrance doors have a clear opening width of at least 820mm and what appears to be a level	
	(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.	transition from the internal residential lobbies which provide shelter from the weather over the 1200mm x 1200mm landing area at the entrance door.	Complies
	(c) Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided (see Figure 1(b)).		
	(d) The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1.		
3.	Internal Doors and Corridors		
	Silver Level	The doorways to access the rooms as per this clause are provided with more than 820mm as required. Internal corridors to all areas in livable units are more than	Complies



Item	Design Element	Comment	Compliance
	(a) Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide:	1000mm in width and comply. Thresholds and transitions appear to be level.	
	(i) A minimum clear opening width of 820mm (see Figure 2(a)); and		
	<ul> <li>(ii) A level transition and threshold (maximum vertical tolerance of 5mm between abutting surfacers if allowable provided the lip is rounded or bevelled).</li> </ul>		
	(b) Internal corridors/passageways to the doorways referred to in (a) should provide a minimum clear width of 1000mm		
	* Corridor widths should be measured as described in Clause 6.3 of AS 1428.1 – 2009		
4.	Toilet		
	Silver Level		
	(a) Dwellings should have a toilet on the ground (or entry) level that provides:	At least one (1) toilet provided to the units is to be located in the corner of the room to allow the installation	
	(i) A minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and	of grabrails at a later date. Currently the circulation space in front of the toilet meets the 1200mm clear	CRA – Refer
	(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).	length and 900mm width as required. Where at least one (1) toilet is relocated to the corner of the sanitary facility, compliance can be achieved. A solid wall is to be	Annexure E
	(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.	provided between the toilet and shower for grabrails to be installed at a later date.	
5.	Shower		
	Silver Level		
	(a) One bathroom should feature a slip resistant, hobless shower recess. Shower screens are permitted provided they can be easily removed at a later date.	Each of the livable units are provided with a shower in the corner of the room. Compliance with the hob, shower screens and wall reinforcement is readily achievable.	CRA – Refer Annexure E
	(b) The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date.	Details to be provided at CC stage.	



Item	Design Element	Comment	Compliance
	For hobless specification please see Australian Standard AS3740-3.6.		
	Reinforcement guidelines for walls in bathrooms and toilets are found in element 6.		
6.	Reinforcement of bathroom & toilet walls	'	
	Silver Level		
	(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.		
	(b) The walls around the toilet are to be reinforced by installing:		CRA – Refer
	(i) Noggings with a thickness of at least 25mm in accordance with Figure 6(a); or		
	(ii) Sheeting with a thickness of at least 12mm in accordance with Figure 6(b).	Compliance with the wall reinforcement is readily	
	(c) The walls around the bath are to be reinforced by installing:		
	(i) Noggins with a thickness of at least 25mm in accordance with Figure 7(a); or	achievable. Details to be provided at CC stage.	Annexure E
	(ii) Sheeting with a thickness of at least 12mm in accordance with Figure 7(b).		
	(d) The walls around the hobless shower recess are to be reinforced by installing:		
	(i) Noggins with a thickness of at least 25mm in accordance with Figure 8(a); or		
	(ii) Sheeting with a thickness of at least 12mm in accordance with Figure 8(b).		
7.	Internal stairways		
	Not applicable.	There are no stairways within the SOUs.	N/A



Ref: 112254-Access-r3

# ANNEXURE D ADAPTABLE HOUSING



# Annexure D - Adaptable Housing

Table 8. Class C

Item	Room/Item	Clause	Comment	Compliance		
Drawing	awings					
1.	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages	2.3	Pre and post adaption plans to be provided at construction stage.	CRA – Refer Annexure E		
Siting						
3.	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1	3.3.2	No street parking will be provided.  An accessway (walkways and ramps) from the street frontage will be provided.  Access will be provided from the basement carpark to all SOU's via a shared lift. The adaptable units are provided with residential lifts adjacent to the carparking spaces.	CRA – Refer Annexure E		
Letterbo	oxes in Estate Developments					
11.	Letterboxes to be on hard standing area connected to accessible pathway.	3.8	Letterboxes for the residential units are provided adjacent to the street entry.	CRA – Refer Annexure E		
Private (	Car Accomodation					
14.	Carparking space or garage min area 6.0x3.8m	3.7.2	No garages provided within this development. One (1) adaptable car space is provided within basement car park.  The sizing of the spaces for the adaptable unit is suitable with AS2890.6 as per DCP requirement (2400x5400mm).  Care is to be taken to ensure that a clear height of 2.5m over the carparking space and 2.2m leading to it will be achieved. This is to be clarified at the CC stage of the development.	CRA – Refer Annexure E		
Accessi	ble Entry					
20.	Accessible entry	4.3.1	The entry door to the adaptable units provide more than the minimum clear opening of 850mm, however will need to	CRA – Refer Annexure E		



Item	Room/Item	Clause	Comment	Compliance
			provide 530mm latch side to comply with door circulation spaces under AS1428.1.	
21.	Accessible entry to be level (i.e. max. 1:40 slope)	4.3.2	Entry to each unit appears to be level, ensure gradient at entrance is not less than 1:40.	CRA – Refer Annexure E
23.	Threshold to be low-level	4.3.2	Public corridors assumed to be flat. To be further assessed with design development.	CRA – Refer Annexure E
24.	Landing to enable wheelchair manoeuvrability	4.3.2	The SOU's entry doors are internal to the building.	CRA – Refer Annexure E
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 under AS1428.1.	CRA – Refer Annexure E
27.	Door lever handles and hardware to AS1428.1	4.3.4	Door handles are to comply with AS1428.1-2009 at construction stage.	CRA – Refer Annexure E
nterior:	General			
32.	Internal doors to have 820mm min. clearance	4.3.3	Internal doors are required to have a minimum clear opening of 820mm and provisioning to be increased to 850mm at post-adaptation stage.  Currently the door to bedroom 1 in SOU K.10 provides 704mm width to be increased to 820mm for compliance.	CRA – Refer Annexure E
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. All internal corridors provide more than 1000mm width.	Complies
34.	Provision for compliance with AS1428.1 for door approaches	4.3.7	Circulation spaces at doorways within the unit are to comply with AS1428.1-2009.	CRA – Refer Annexure E
iving R	coom & Dining Room			



Item	Room/Item	Clause	Comment	Compliance
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.  Furniture is not shown, however it is assumed that encroaching furniture over the circulation space can be easily changed/removed as it is not fixed.	CRA – Refer Annexure E
38.	Telephone adjacent to GPO	4.7.4	Telephone outlet adjacent to GPO in living/dining area to be indicated on post adaption plan.	CRA – Refer Annexure E
41.	Potential illumination level min. 300Lux	4.1.0	Lighting to comply at construction stage.	CRA – Refer Annexure E
Kitchen				
42.	Minimum width 2.7m (1550mm clear between benches)	4.5.2	1550mm min. clearance is provided in front of sink and appliances.	CRA – Refer Annexure E
43.	Provision for circulation at doors to comply with AS1428.1	4.5.1	There are no kitchen doors proposed.	CRA – Refer Annexure E
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.	CRA – Refer Annexure E
45.	Refrigerator adjacent to work surface	4.5.5	To be updated post adaption, with no works required at this stage.	CRA – Refer Annexure E
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.	CRA – Refer Annexure E
47.	Kitchen sink bowl max. 150mm deep	4.5.6	To be updated post adaption, with no works required at this stage.	CRA – Refer Annexure E
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.	CRA – Refer Annexure E



Item	Room/Item	Clause	Comment	Compliance			
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.	CRA – Refer Annexure E			
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.	CRA – Refer Annexure E			
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.	CRA – Refer Annexure E			
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.	CRA – Refer Annexure E			
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.	CRA – Refer Annexure E			
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.	CRA – Refer Annexure E			
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.	CRA – Refer Annexure E			
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.	CRA – Refer Annexure E			
Main Be	Main Bedroom						
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 2 in SOUs K.04 and K.08 and bedroom 1 in SOU K.10 are capable of catering a queen size bed with a turning bay at base overlapping with circulation space at doorway, and clearances around the bed of 1000mm min.  Note: Queen size bed is 1520mm W x 2030mm L.	Complies			



Item	Room/Item	Clause	Comment	Compliance
			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.  AS4299:1995 (AS1428.2:1992)  LHDG 2015	
Bathroo	om			
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.	Complies
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 – Refer Annexure E
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 – Refer Annexure E



Item	Room/Item	Clause	Comment	Compliance
78.	Shower area waterproofed to AS3740 with floor to fall to waste	4.4.4(f)	Entire bathroom to comply with AS3740.	CRA – Refer Annexure E
79.	Recessed soap holder	4.4.4(f)	Soap holder to be recessed.	CRA – Refer Annexure E
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.	CRA – Refer Annexure E
82.	Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall – strengthening provision)	4.4.4(h)	Provisioning to be provided.  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 – Refer Annexure E
83.	Provision for grabrail in shower (Refer to Figure 4.7) to comply with AS1428.1	4.4.4(h)	Provisioning to be provided.	CRA – Refer Annexure E
86.	Tap sets to be capstan or lever handles with single outlet	4.4.4(c)	Taps may be updated post adaption, with no works required at this stage.	CRA – Refer Annexure E
88.	Provision for washbasin with clearances to comply with AS1428.1	4.4.4(g)	Taps may be updated post adaption, with no works required at this stage.	CRA – Refer Annexure E
90.	Double GPO beside mirror	4.4.4(d)	Double GPO to be provided beside mirror.	CRA – Refer Annexure E
Toilet				
92.	Provision of either "visitable toilet" or accessible toilet	4.4.3	The adaptable unit is 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).  To be indicated on the pre-adaption plans.	CRA – Refer Annexure E



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.	CRA – Refer Annexure E
			To be shown in the post-adaptation plans.	
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.  To be shown in the post-adaptation plans.	CRA – Refer Annexure E
95.	Provision for grab rail zone (Refer Figure 4.6)	4.4.4(h)	Provisioning to be provided. To be shown in the post-adaptation plans.	CRA – Refer Annexure E
96.	Slip resistant floor surf ace (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 – Refer Annexure E
Laundry	, !			
98.	Circulation at doors to comply with AS 1428.1	4.8	Direct access provided to laundry area, no doors required.	CRA – Refer Annexure E
99.	Provision for adequate circulation space in front of or beside appliances (min. 1550x1550mm)	4.8	1550mm circulation space provided in front of proposed laundry area.	CRA – Refer Annexure E
100.	Provision for automatic washing machine	4.8(e)	Provision readily achievable.	CRA – Refer Annexure E
102.	Where clothes line is provided, an accessible path of travel to this	4.8(a)	No clothes line proposed for the adaptable units.	CRA – Refer Annexure E
105.	Double GPO	4.8(g)	To be further assessed with design development.	CRA – Refer Annexure E
108.	Slip-resistant floor surface	4.9.1	To be further assessed with design development.	CRA – Refer Annexure E



Item	Room/Item	Clause	Comment	Compliance		
Door Lo	Door Locks					
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 to be provided.	CRA – Refer Annexure E		





### **Annexure E - 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

- 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.
- All doorways will have a minimum luminance contrast of 30% in accordance with Clause 13.1 of AS1428.1-2009.
- Fixtures and fittings in accessible sanitary facilities will be provided and installed in accordance Clause 15 of AS1428.1-2009.
- 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 to comply with Clause 8 of AS1428.1-2009.
- 19. The passenger lifts will comply with BCA2019 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.
- 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. 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.
- 49. Toilet to be on entry level (ground floor).
- If WC is located in a separate room. WC pan circulation space to be 900x1200mm front if WC (door not to encroach) (Fig 3a).
- 51. 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).
- 52. Bathroom to have slip resistant and hobless shower recess (portable shower screens allowed)
- 53. Shower recess located in a room corner to enable the installation of grabrails.
- 54. Walls to be constructed of solid masonry or concrete, otherwise to be reinforced (1100N min. withstand in all directions).
- 55. For WC, the reinforcement to be 25mm thick noggings (Fig 6a), or 12mm thick sheeting (Fig 6b)
- 56. For baths, reinforcement to be 25mm thick noggings (Fig 7a), or 12mm thick sheeting (Fig 7b)
- 57. For showers, reinforcement to be 25mm thick noggings (Fig 8a), or 12mm thick sheeting (Fig 8b)
- 58. A continuous stairway handrail where there is a rise of more than 1m.

