



DA Stage Access Assessment Report

The Landmark St Leonards



Project: The Landmark St Leonards

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Client: New Hope Evergreen

Client Contact: Alistair Cook

Email: Alistair.Cook@newhopegroup.com

BCA Logic Contact: Cameron Clark

Direct:

Email: Cameron.clark@jensenhughes.com

(02) 8484 4095

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		Prepared by	Verified by	
		Cameron Clark	Hayden David	
		Registered Building Surveyor – Unrestricted No. BDC 3400	Registered Building Surveyor - Restricted, No. BDC 2890	
		Manager, Building Regulations Building Regulations Consul		
		Access Institute Qualified Access Consultant		
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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.

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1 BASIS OF ASSESSMENT

1.1. Location

The building development, the subject of this report, is The Landmark St Leonards, at Sites (Areas) 1, 2 & 4 located 4-8 Marshall Avenue, 1-5 Canberra Avenue and 2-8 Holdsworth Avenue St Leonards. The building incorporates five (5) storeys of basement carparking with residential sole-occupancy units located in the storeys above. Common resident's facilities are also proposed including lobby spaces, swimming pool(s) and gym, open rooftop terrace spaces and central park spaces between the three (3) residential towers. The residential towers form a single building via the common basement carparking below.



1.2. Purpose

The purpose of this report is to assess the proposed building against the relevant Access Code and its 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 (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) relating to the Livable Housing Design Guidelines (LHDG);
- > Building Code of Australia 2019 Volume One Amendment 1 Part D3 and Clauses E3.6, F2.4 and F2.9 as applicable;
- > Lane Cove Development Control Plan 2010 (the DCP);
- > Adaptable Housing Code AS4299-1995 (AS4299) where/as required by the 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 relevant Access Code as outlined in 1.2 above. It is not an assessment of the proposal against all provisions of the BCA2019 (this assessment has been completed under separate BCA Assessment Report cover).



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 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 a degree of surety is provided for those responsible for the design of the building);
- > BCA2019 Sections B, C, D (except Part D3), E (except Clause E3.6), F (except Clauses F2.4 and F2.9), G, H, I, J,
- > Demolition Standards not referred to by the BCA2019;
- > Work Health and Safety Act and 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 Access Code 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 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. 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.

1.6. Design Documentation

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



1.7. Definitions

Accessible

Having features to enable use by people with a disability.

<u>Accessway</u>

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

Luminance Contrast

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

Ramp

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

Tactile Indicators

Tactile Ground Surface Indicators (TGSIs)

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

Adaptable

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

Visitable

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



2 BUILDING DESCRIPTION

For the purposes of the Building Code of Australia (BCA) the development may be described as follows.

2.1. Rise in Storeys (Clause C1.2)

The building has a rise in storeys of twenty (20) based on the section drawings provided.

2.2. Classification (Clause A6.0)

The building has been classified as follows.

Table 1. Building Classification

Class	Level	Description
Class 7a	Basement 4, 3, 2 & Part Basement 1 & Level 0	Carparking
Class 7b	Part Basement 1	Storage
Class 2	Part Level 0, Level 1 – Tower 1 Roof	Residential

2.3. Effective Height (Clause A1.0)

The building has an *effective height* of approximately 63.95m (T1 Roof RL125.7 – Basement 1 RL61.75), therefore more than 12m and more than 25m.



3 COMPLIANCE STATEMENT & MATTERS FOR FURTHER CONSIDERATION

3.1. General

The architectural design documentation as referred to in this report has been assessed against the applicable provisions relating to access for people with a disability, and it is considered that such a design is capable of complying with the relevant Access Code, subject to those items identified in this report (particularly those items identified under Part 3.7 below) being satisfactorily addressed.

Note: It is also important that the Annexure B is 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.

N/A	Not Applicable. The provision is not applicable to the proposed design.		
Complies	The relevant provisions have been satisfied by the proposed design.		
CRA	'Compliance Readily Achievable'. It is considered that there is not enough information included in the documentation to accurately determine strict or full compliance with the individual provision requirements. However, with further design development, compliance can readily be achievable.		
FI	'Further Information' is necessary to determine the compliance potential of the building design.		
PS	'Performance Solution' with respect to this provision is necessary to satisfy the relevant Performance Requirements.		
DNC	'Does Not Comply'.		
Noted	Provision simply provides a statement not requiring specific design comment or confirmation.		

3.2. Dimensions and Tolerances

The 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 matters such as access for people with disabilities, stair and corridor widths and balustrade heights.

3.3. 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.	Nil.



3.4. Council's Development Control Plan Requirements (DCP)

Part F of Lane Cove DCP 2010 provides Council's planning controls on the provision of Accessibility / Adaptability / Universal Design.

The relevant controls (other than those which mirror the already established requirements of the BCA and Premises Standards) are summarised in Table 3 with comments regarding whether each control is satisfied.

Table 3. Controls for Accessibility

Item No	Control	Comment	Compliance	
3.5	Adaptable and Visitable Housing (residential flats and dual occupancies)			
1.	Adaptable housing to comply with AS4299, including the essential features in Appendix A for Class C housing (essential items only).	As per the summary breakdowns provided by the architect, 21% of sole-occupancy units are to be adaptable housing units and they are distributed throughout the 1 bed, 2 bed and 3 bed unit offerings. The design of such units has been assessed and those items identified under Part 3.7 of this report shall be satisfactorily addressed to ensure that compliance with AS4299-1995 can be achieved.	FI – Refer Part 3.7	
2.	Adaptable housing to be equitably distributed throughout all types and sizes of dwelling units.	See above.	Complies	
3.	Adaptable housing to be provided at the rate of 20% of all dwellings in a Class 2 development.	See above.	Complies	
4.	Dual occupancies (attached) are to be visitable (where topography permits – 1:10 fall or less steep).	Not applicable. The development does not include dual occupancies.	N/A	
5.	Dwellings are to be visitable at the rate of 80% in developments requiring adaptable housing.	As per the summary breakdowns provided by the architect, 81% of sole-occupancy units are to be visitable housing units. Unit layouts are to be provided for all visitable sole-occupancy units demonstrating that they have wheelchair accessible entrances (850mm wide doorways with lobbyside door circulation space complying with AS1428.1-2009) with 1m wide corridors/hallways and 820mm doorways for the path of travel leading to, and connecting, the living area and a visitable toilet achieving the required clearances, consistent with	FI – Refer Part 3.7	



Item No	Control	Comment	Compliance
		AS4299-1995's definition of/requirements for visitable units.	
6.	Single Class 1a dwellings are not applicable to this part.	The development does not include single Class 1a dwellings.	N/A

3.5. 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 4. Residential Sole Occupancy Units

Unit Type	SOU's	
Adaptable SOU's	As per the summary breakdowns provided by the architect, 21% of sole-occupancy units are to be adaptable housing units and they are distributed throughout the 1 bed, 2 bed and 3 bed unit offerings.	
Livable SOU's	As per the summary breakdowns provided by the architect, 21% of sole-occupar units are to be livable housing units. It is assumed that the adaptable SOU's also to perform as livable housing units.	
Visitable SOU's	As per the summary breakdowns provided by the architect, 81% of sole-occupancy units are to be visitable housing units.	

3.6. Areas Required to be Accessible

The following areas of the building are required to be accessible pursuant to BCA Table D3.1:

Table 5. Areas Required to be Accessible

Class	Description		
Class 7a	To and within any levels containing accessible carparking.		
Class 7b	To and within all areas normally used by the occupants.		
	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.		
Class 2	To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual ship, eating area, or the like.		
Oldos Z	Where a ramp complying with AS 1428.1 or a passenger lift is installed-		
	(a) to the entrance doorway of each sole-occupancy unit; and		
	(b) to and within rooms or spaces for use in common by the residents,		
	located on the levels served by the lift or ramp.		

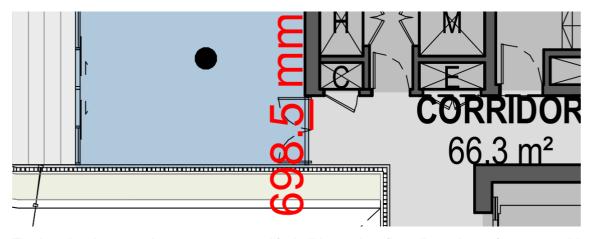


3.7. Matters for Further Consideration

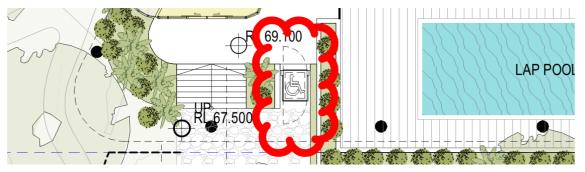
Assessment of the Architectural design documentation against the Access Code applicable to the development has revealed the following areas where compliance with the BCA may require further consideration and/or may involve assessment as Performance-based *Performance Solutions*.

Any *Performance Solutions* will be required to clearly indicate methodologies for achieving compliance with the relevant *Performance Requirements*.

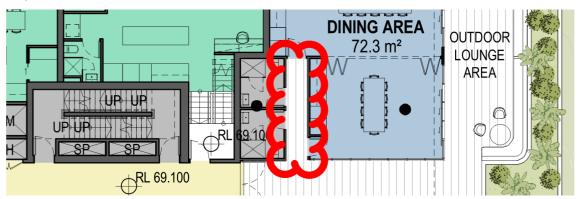
 The Tower 2 Gym doorways shall be provided with a single operable leaf with a clear opening width of not less than 850mm and door circulation space satisfying AS1428.1-2009, or alternatively both door leaves shall be automatic opening with accessible push button hardware complying with AS1428.1-2009.



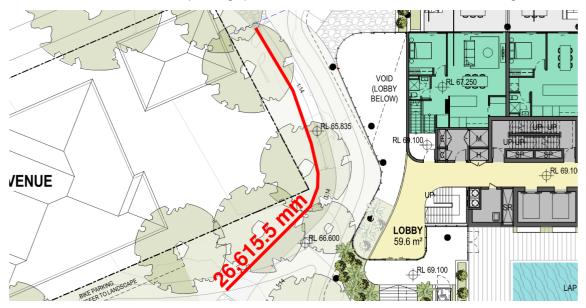
2. The low-rise, low-speed constant pressure lift shall have clear floor dimensions of 1100mm wide and 1400mm deep, and shall be provided with door latch circulation space complying with AS1428.1-2009 or alternatively the lift doors shall be automatic opening with accessible push button hardware complying with AS1428.1-2009.



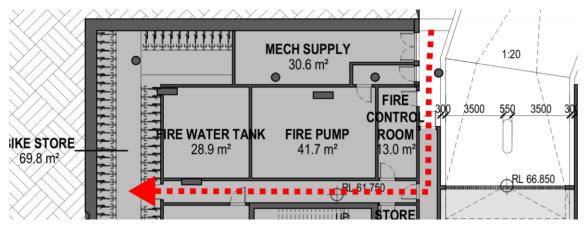
Circulation spaces for persons with disabilities to access Tower 1's Level 1 common dining area shall be provided in accordance with BCA D3.1, D3.3 and AS1428.1-2009.



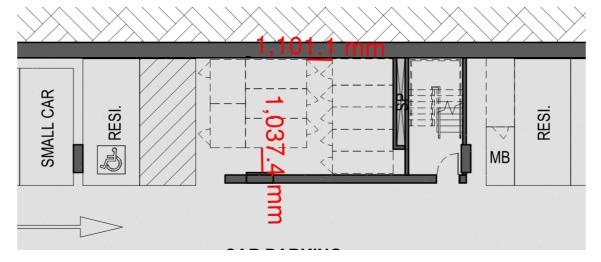
4. A central 1800mm wide x 2000mm deep wheelchair passing space shall be provided to the external series of 1:14 ramps from the Canberra Ave entrance in accordance with BCA D3.3 and Figure 3 of AS1428.1-2009 to ensure that passing spaces are at not more than 20m intervals along the accessway.



5. Access for people with a disability shall be provided to the Basement 1 bike store in accordance with BCA D3.1, D3.3 and AS1428.1-2009.

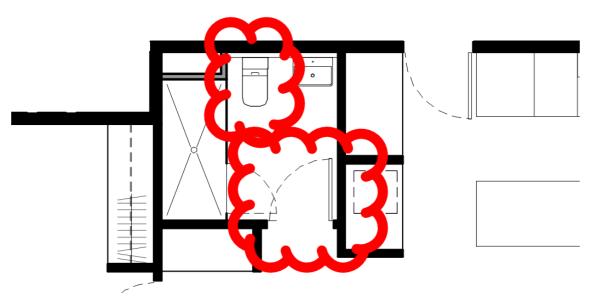


6. Circulation spaces in accordance with AS1428.1-2009 shall be provided throughout all common storage areas within the basement storeys as required by BCA D3.1 and D3.3.

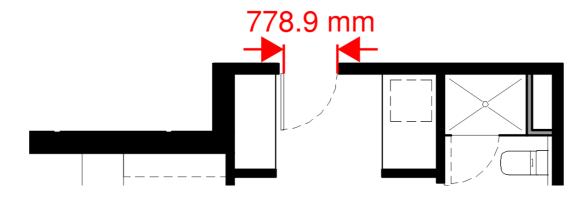


- 7. Unit layouts are to be provided for all visitable sole-occupancy units required by the Lane Cove DCP demonstrating that they have wheelchair accessible entrances (850mm wide doorways with lobby-side door circulation space complying with AS1428.1-2009) with 1m wide corridors/hallways and 820mm doorways for the path of travel leading to, and connecting, the living area and a visitable toilet, consistent with AS4299-1995's definition of/requirements for visitable units.
- 8. Pre-adaption, the toilets within the visitable, livable and adaptable sole-occupancy units shall be located in the corner of the rooms in accordance with AS4299-1995 and the LHDG. In the below example, it should be swapped with the washbasin. This issue occurs in various sole-occupancy units.

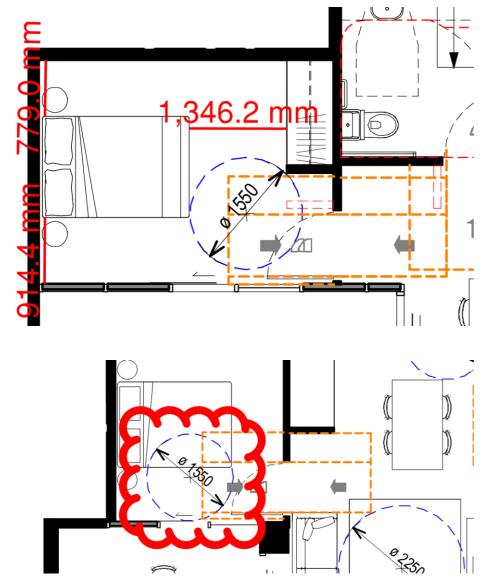
Additionally, the doorway shall be swung outwards (or swing both directions) to ensure that the door swing does not encroach into the 1250mm deep x 900mm wide clearance required forward of the closet pan. The doorway encroachment issue occurs in several sole-occupancy units. The closet pan clear space must be clear of the door swing.



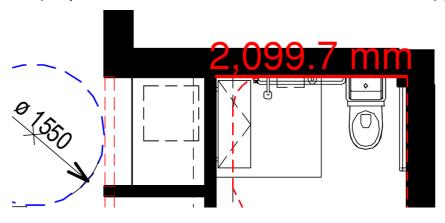
9. Pre-adaption, the sole-occupancy unit entry doors shall have a clear opening width not less than 850mm in accordance with AS4299-1995. This issue occurs in the 2 Bed Type 1 sole-occupancy unit only.



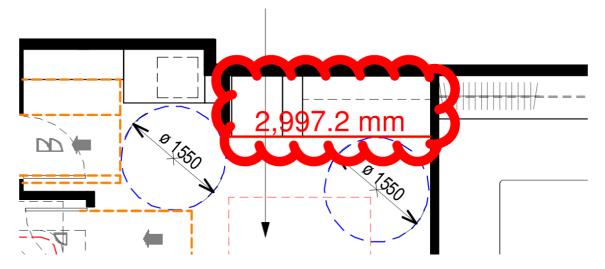
10. Post-adaption, the bedrooms shall have 1540mm clear for the entirety of one side or at the foot of the bed, and 1m clear for all other sides of a queen size bed in accordance with AS4299-1995 and Clauses 24.3 and 6.2 of AS1428.2-1992. This bedroom clearance issue occurs in all sole-occupancy units.



11. Post-adaption, an accessible bathroom shall be provided complying with AS1428.1-2009. In the below example, the bathroom is too narrow and should be no less than 2350mm wide to ensure that all shower and closet pan circulation spaces can be achieved clear of fixtures. This issue occurs in various sole-occupancy units where the bathrooms are too narrow to be able to comply with AS1428.1-2009.



12. Post-adaption, the kitchen is required to be of a sufficient size to accommodate the kitchen sink, cooktop, oven and fridge adjacent to 800mm wide work surfaces in accordance with AS4299-1995. A kitchen of the below size and layout as an example is too small to be able to comply, and this issue occurs in several sole-occupancy units. Detailed kitchen layouts shall be provided for assessment showing the locations of the kitchen sink, cooktop, oven, fridge and the like adjacent to the required 800mm wide surface(s).



ANNEXURE A – DESIGN DOCUMENTATION

This report has been based on the following design documentation.

Table 6. Architectural Plans

Architectural Plans Prepared by rothelowman			
Drawing Number	Revision	Date	Title
TP00.00	Α	29.06.22	Cover Page
TP00.01	Α	29.06.22	Site Plan
TP00.02	Α	29.06.22	Demolition Plan
TP01.00	А	29.06.22	Basement 4
TP01.01	А	29.06.22	Basement 3
TP01.02	А	29.06.22	Basement 2
TP01.03	А	29.06.22	Basement 1
TP01.04	А	29.06.22	Level 0
TP01.05	А	29.06.22	Level 1
TP01.11	А	29.06.22	Level 2
TP01.12	А	29.06.22	Level 3
TP01.13	А	29.06.22	Level 4
TP01.14	А	29.06.22	Level 5
TP01.15	А	29.06.22	Level 6
TP01.16	А	29.06.22	Level 7
TP01.17	А	29.06.22	Level 8
TP01.18	А	29.06.22	Level 9
TP01.19	А	29.06.22	Level 10
TP01.20	А	29.06.22	Level 11
TP01.21	А	29.06.22	Level 12
TP01.22	А	29.06.22	Level 13
TP01.23	А	29.06.22	Level 14
TP01.24	А	29.06.22	Level 15
TP01.25	A	29.06.22	Level 16
TP01.26	A	29.06.22	Level 17
TP01.27	А	29.06.22	Level 18
TP01.28	А	29.06.22	Level 19
TP01.29	A	29.06.22	Roof Plan
TP02.01	А	29.06.22	North Elevation
TP02.02	A	29.06.22	South Elevation – Building 4
TP02.03	А	29.06.22	South Elevation – Building 1 & 2
TP02.04	A	29.06.22	East Elevation – Building 1
TP02.05	А	29.06.22	East Elevation – Building 2 & 4
TP02.06	А	29.06.22	West Elevation – Building 2 & 4
TP02.07	A	29.06.22	West Elevation – Building 1
TP03.01	A	29.06.22	Section A1
TP03.02	A	29.06.22	Section A2
TP03.03	А	29.06.22	Section B
TP03.04	А	29.06.22	Section C



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Architectural Plans Prepared by rothelowman				
TP15.01	А	29.06.22	Adaptable and Visitable Compliance	
TP15.02	Α	29.06.22	Adaptable Layout Plans	
TP15.03	Α	29.06.22	Adaptable Layout Plans	
TP15.04	А	29.06.22	Adaptable Layout Plans	



ANNEXURE B - COMPLIANCE SPECIFICATION

Design Certification

The following Access matters (except as varied by any subsequent Performance Solution and including any applicable NSW variations) are to be addressed by specific Access Design Certificate to be issued by the relevant architectural, services and engineering consultants at the Construction Certificate Stage and to satisfy their obligations under the Design and Building Practitioners Act 2020 within their individual design compliance declarations.

This schedule should be forwarded to all consultants to obtain verification that these items have and will be included in the design documentation / specifications.

General

- 1. General circulation spaces will be provided in accordance with Clause 6 of AS1428.1-2009.
- 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.
- 3. Floor and ground floor surfaces on accessible paths and circulation spaces including the external areas will comply with Clause 7 of AS1428.1-2009.
- 4. Signage will comply with Clause 8 of AS1428.1-2009, BCA D3.6 and Specification D3.6.
- 5. Tactile ground surface indicators will comply with Clause 9 of AS1428.1-1009, AS1428.4.1-2009 and BCA D3.8.
- 6. Walkways, ramps and landings will comply with Clause 10 of AS1428.1-2009.
- 7. Stairways will comply with Clause 11 of AS1428.1-2009.
- 8. The fire-isolated stairs will comply with Clause 11.1(f) and (g) of AS1428.1-2009.
- 9. Handrails will comply with Clause 12 of AS1428.1-2009.
- All doorways will have a minimum luminance contrast of 30% in accordance with Clause 13.1 of AS1428.1-2009.
- 11. Doorways will have a clear opening width in accordance with Clause 13.2 of AS1428.1-2009.
- 12. Doorways will achieve the circulation spaces required by Clause 13.3 of AS1428.1-2009.
- 13. Door controls will comply with Clause 13.5 of AS1428.1-2009.
- 14. Switches and power points will comply with Clause 14 of AS1428.1-2009.
- 15. Accessible unisex sanitary facilities will comply with Clause 15 of AS1428.1-2009 and BCA F2.4.
- 16. Sanitary facilities for persons with ambulant disabilities will comply with Clause 16 of AS1428.1-2009 and BCA F2.4.
- 17. Grabrails will comply with Clause 17 of AS1428.1-2009.
- 18. Passenger lifts will comply with AS1735.12-1999 and BCA E3.6.

Adaptable Housing Units

 Pre/post adaptable unit layouts shall be provided demonstrating compliance with AS4299-1995 (AS4299) Class C essential requirements including all necessary fixtures, clearances and circulation spaces.

SEPP 65 - Livable Housing Design Guidelines (LHDG)

20. Entrance doorways shall have 820mm min. clear door width opening, level transition (5mm max. vertical tolerance).



- 21. All internal doors shall have 820mm min. clear door openings, 5mm max. vertical tolerance surface, and 1000mm min. internal corridors.
- 22. The WC pans shall have a circulation space of 900mm wide x 1200mm deep (or 1250mm deep if also an adaptable unit) forward of the WC (door not to encroach).
- 23. If WC is located within a bathroom the WC pan and circulation space shall be in the corner of the room to enable installation of grabrails (door not to encroach).
- 24. The bathroom shall have slip resistant and hobless shower recess (portable shower screens allowed)
- 25. Shower recess shall be located in the corner of the room to enable the installation of grabrails.
- 26. Walls shall be constructed of solid masonry or concrete, or otherwise shall be reinforced (1100N min. force to be withstood in all directions). For the WC's, baths and showers the reinforcement shall be 25mm thick noggings, or 12mm thick sheeting.

