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# ACCESS & ADAPTABILITY ASSESSMENT REPORT

MIXED USE DEVELOPMENT

56-60 Burns Bay Road LANE COVE

DEVELOPMENT APPLICATION (DA)

a+ design group

June 2018

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## 1. INTRODUCTION

This Access and Adaptability Assessment Report has been prepared by Access Mobility Solutions to accompany the Amended Development Application lodgement with Lane Cove Council for the Proposed Mixed-Use Development at N° 54-60 Burns Bay Road Lane Cove.

## 2. SUBJECT DEVELOPMENT IN BRIEF

The subject site is N° 56-60 Burns Bay Road Lane Cove NSW 2066.

Architectural Documents used for this Amended Development Application Review Assessment process were prepared by a+ design group.

The development application is for the demolition of existing commercial buildings and the construction of a new mixed-use building with basement car parking. The development consists of a commercial/supermarket tenancy, three (3) retail tenancy, a community space, and two (2) residential apartment buildings. Residential building 'A' facing Burns Bay Road while residential building 'B' will be facing Sera Street – 20% of total units in the development are adaptable to comply with AS4299 Class C. The proposed development will also provide 80% visitable units.

The development contains twenty-one (21) residential units, comprising of eleven (11) one (1) bed, eight (8) two (2) bed and two (2) three (3) bed apartments.

There are five (5) adaptable apartments being Units A105, A108, A205, and A208 that are two (2) bed while Unit A201 is a three (3) bed apartments in accordance with AS4299.

The proposed principal public pedestrian entrance to the building will be via Burns Bay Road. The three (3) Retail Tenancies, Community Space Lobby, Residential Building 'A' Lobby all have direct access from the footpath on Burns Bay Road. The proposed public entrance to Building 'B' will be from Sera Street and comprise commercial/supermarket tenancies and residential apartments.

The supermarket lobby incorporates three (3) passenger lift and escalators that will provide access to the ground floor level – Sera Street where the supermarket premises is located in the development, the passenger lift will also provide access to the basement carpark levels 1 & 2.

The Community Space lobby will incorporate, one (1) passenger lift and egress stairs to the community space on level 1 as well as car park level 1. The Community Space fit-out will be under a separate Development Application.

The Residential 'A' lobby incorporates the residential letterboxes as well as two (2) passenger lifts that will access all residential level of building 'A' and car park levels.

The path of travel to Residential Building 'B' entrance lobby will be from Sera Street. The Lobby will consist of the residential letterboxes and (2) passenger lifts that will access all residential levels of building 'B' as well as the car park levels.

The basement car park will be accessible from Sera Street over three (3) levels of the development and will provide a total of one hundred & twenty seven (127) car parking spaces + one (1) car wash bay, twenty seven (27) residential parking spaces + six (6) residential visitor parking spaces, five (5) retail + eleven (11) public parking bays, and ten (10) community space parking, bicycle parking, motorcycle parking, collection point/loading dock and residential/commercial storage facilities.

There are twelve (12) designated accessible car spaces, one (1) car space each for all five (5) adaptable units as well as one (1) designated accessible residential visitors parking bay, four (4) designated accessible parking bays for the supermarket/commercial, and one (1) designated accessible parking bay each for the retail and community space to comply with AS2890.

The communal open space for Building 'A' and 'B' is located on level 1, the communal area will be accessed by the all the residential apartments via the lifts, pathways and walkways to comply with AS1428.1. The communal area on level 1 will have access to an accessible unisex toilet located in residential building 'A'.

Five (5) individual storage enclosures for the adaptable units are located on basement level 2 of the development and will provide the appropriate access pathways from the adaptable units and lifts. The garbage chute and recycle rooms on each level is provided and will have the required circulation area.



Also located on basement level 2 is the residential storage area, carpark exhaust fan room, and plant rooms which will be exempt under D3.4 Exemptions of the BCA and will not be accessible to people with a disability (PWD), car part exhaust fan room on basement 3 will also be exempt under D3.4. The carwash bay is also located on basement 3.

Basement 1 will have the AC units, as well as the retail grease arrestor, supermarket grease arrestor, OSD tank, main switch room, car park exhaust, main communication room and substations, these areas will be exempt under D3.4 Exemptions of the BCA. The maintenance WC is also located on Basement 1 and will double as an accessible bathroom.

The Ground Level\_Sera Street loading bay entry will have a loading zone, supermarket garbage room, retail garbage room, community space garbage room, residential bulky rooms, residential garbage rooms + linear compactors, the two (2) residential garbage chute rooms that will only be accessed by the buildings manager/caretaker and will not be accessible to the general public. The supermarket switch room, comms room, car fun supply room, and residential meter room will be exempt under D3.4 Exemptions of the BCA.

## 3. DISABILITY DISCRIMINATION ACT 1992 (DDA)

The Federal Disability Discrimination Act 1992 (DDA) provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.

Disability discrimination happens when people with a disability are treated less fairly than people without a disability. Disability discrimination also occurs when people are treated less fairly because they are relatives, friends, carers, co-workers or associates of a person with a disability.

A significant element of compliance to the DDA is the use of the Premises Standards 2010 and the Australian Standards 1428 series (AS1428) design for access and mobility. The Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards) set performance requirements and provide references to technical specifications to ensure dignified access to, and use of, buildings for people with a disability. They clarify the general non-discrimination provisions of the Disability Discrimination Act 1992 in relation to the design construction and management of buildings. The AS1428 series details technical requirements related to design for access and mobility.

Complying with the Premises Standards satisfies the Disability Discrimination Act non-discrimination requirement for the matters covered by the Standards. If a person acts in accordance with the requirements of the Premises Standards, a successful complaint cannot be made in relation to that action under the Disability Discrimination Act. However, compliance with these elements do not necessarily mean compliance with the DDA if the elements of equality, independence and functionality remain compromised within an environment.

## 4. DISABILITY (ACCESS TO PREMISES – BUILDINGS) STANDARDS 2010

The Commonwealth Disability (Access to Premises – Buildings) Standards (The Premises Standards) commenced on 1 May 2011.

The Premises Standards set out administrative provisions and an Access Code detailing technical requirements. The Access Code is mirrored in the Building Code of Australia (BCA), to ensure consistency with the BCA, and sets out performance requirements and detailed deemed-to-satisfy provisions.

The purpose of the Premises Standards (and corresponding changes to the Building Code of Australia) is:

- to ensure that dignified, equitable, cost-effective and reasonably achievable access to buildings, and facilities and services within buildings, is provided for people with disability, and
- to give certainty to building certifiers, developers and managers that if the Standards are complied with they cannot be subject to a successful complaint under the DDA in relation to those maters covered by the Premises Standards.



## 5. ARCHITECTURAL ASSESSMENT DOCUMENTS PREPARED BY

#### a+ design group

February 2016

Drawing No.	Drawing Description	Issue	Dated
A1.02	Development Statistics	2	16.04.19
A1.03	Compliance Summary Table	2	16.04.19
A2.03	Site Analysis/Site Plan	2	16.04.19
A2.05	Access and Connection Plan	2	16.04.19
A3.01	Basement 3	2	16.04.19
A3.02	Basement 2	2	16.04.19
A3.03	Basement 1	2	16.04.19
A3.04	Ground Level _ Sera Street	2	16.04.19
A3.05	Level 1	2	16.04.19
A3.06	Level 2	2	16.04.19
A3.07	Level 3_Burns Bay Road	2	16.04.19
A3.08	Level 4	2	16.04.19
A3.09	Roof Plan	2	16.04.19
A6.01	Pre/Post Adaptation – Type 1	2	16.04.19
A6.02	Pre/Post Adaptation – Type 2	2	16.04.19

## 6. SURVEY PREPARED BY

## geosurv

consulting surveyors, planners & engineers PLAN REF: 160265\_C8[DT]

SHEET	DRAWING TITLE	DATE OF SURVEY	DATE OF PLAN
1 OF 4	Detailed Survey	7/06/2016	31/01/2018
2 OF 4	Detailed Survey	7/06/2016	31/01/2018
3 OF 4	Detailed Survey	7/06/2016	31/01/2018
4 OF 4	Detailed Survey	7/06/2016	31/01/2018



## 7. LANDSCAPE PLAN PREPARED BY

#### SITEDESIGN+STUDIOS

Drawing No. 1128

Drawing Number	Drawing Title	Issue	Date
L-01	GROUND LEVEL LANDSCAPE PLAN	E	26/4/19
L-02	LEVEL 1 LANDSCAPE PLAN	Е	26/4/19
L-03	LEVEL 2 LANDSCAPE PLAN	Е	26/4/19
L-04	LEVEL 3 & 4 LANDSCAPE PLAN	Е	26/4/19

## 8. LIMITATIONS AND EXCLUSIONS

This Access & Adaptability Assessment Report is limited to the accessibility provisions of the proposed mixed-use developments common areas. Detailed design such as the doorway dimensions, circulation, corridors/walkways, furniture fitouts, passenger lift requirement, slip resistant floor finishes, door schedules, door hardware and controls, glazing, luminance contrast, stair nosings, tactile ground surface indicators (TGSI"s), handrails, signage, accessible bathroom circulation and any other provisions under AS1428.1 series shall be assessed at construction certification stage.

Details in regards to access for people with disabilities have been assessed against the provisions of the Building Code of Australia. Where assessment against A\$1428.1 where not directly referenced in the BCA is outside the Scope of this Report.

The Report also does not address issues in relation to the following:

Local Government Act and Regulations.

Occupational Health and Safety Act and Regulations.

WorkCover Authority requirements

Requirements of any standards that are not identified within this report

Any parts of the BCA not directly referenced within this report

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## 9. LEVEL 3\_BURNS BAY ROAD

## 10. GROUND LEVEL\_SERA STREET



NOT TO SCALE



## 11. RELEVANT LEGISLATION & REGULATION ASSESSMENT MATERIAL

Disability Standards 2010 (Access to Premises) - Premises Standards

Building Code of Australia 2016 (BCA)

Australian Standards AS1428.1 2001-2009 Design for access and mobility Part 1: General requirements for access – New Building work

Australian Standards AS 1428.2 – 1992 Design for access and mobility Part 2: Enhanced and additional requirements – Buildings and facilities

Australian Standard AS1428.4.1 Design for access and mobility Part 4.1: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators

Australian Standards AS/NZS2890.6:2009 Parking facilities Part 6: Off-street parking for people with disabilities

Australian Standard1735.12-1999 Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities

Australian Standard AS4586:2004 Slip resistance classification of pedestrian surfaces materials

Australian Standards AS4299 - 1995 Adaptable Housing

State Environmental Planning Policy (SEPP) No 65 - Design Quality of Residential Flat Development

Apartment Design Guide

Lane Cove Development Control Plan Part D – Commercial Development and Mixed Use Clause 5.7 Provision B Part F – Access and Mobility Adopted on 22 February 2010 Amendment – 24 February 2016 Part F – Traffic, Transport and Parking R2 Parking

2.8 Disabled parking provision Table 1 Car parking rates



## 12. LANE COVE DEVELOPMENT CONTROL PLAN – PART D, F & R

#### **D.1 General Provisions**

#### 1.11 Access and Mobility

#### **Provisions**

a) Any new development must comply with Australian Standards AS1428 Design for Access and Mobility, AS4299 Adaptable Housing, AS 2890 Parking Facilities and AS 1735 Lifts, Escalators and Moving Walks and with the Part F of this DCP – Access and Mobility.

#### 1.12 Toilet Facilities

#### **Provisions**

a) Accessible and well sign-posted toilet facilities complying with AS1428 shall be provided in all developments containing 10 or more shops or more than 500m<sup>2</sup> of retail floor space. These facilities shall have the same minimum opening and closing hours specified for arcades.

#### 5.7 Residential Component within Mixed Use

#### Provision

The provisions for Residential Flat Buildings in the Part C Residential Development section of this DCP and the Residential Flat Design Code associated with State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development (SEPP 65), and the additional following provisions shall apply to the residential component within mixed-use developments.

- a) Studio apartments are to have a minimum size of 40sqm. This area is exclusive of common circulation areas such as lift lobbies, corridors, etc. and balconies and terraces.
- b) Provide a minimum 10% of dwellings as adaptable housing if the total number of dwellings exceeds 9, integrate the affordable and adaptable housing components, do not isolate them or use a different standard of materials and finishes.
- c) Design common corridors with a minimum width of 2m to be accessible and facilitate movement.
- d) Minimise the amount of glazed area on the eastern and western elevations and incorporate shading devices.

#### SUMMARY:

There is a discrepancy in Lane Cove Development Control Plan Part D 5.7 Provision b) requesting 10% adaptable housing and Part F 3.5 Provision 5 requesting 20% adaptable housing.

The proposed Mixed-Use Development will provide 20% adaptable housing with 80% visitable as stated in Part F 3.5 Provision 5 & 6 of Lane Cove Council's Development Control Plan.

The proposed amended Mixed-Use Development will have twenty-one (21) units in the overall development with five (5) of these units to be adaptable, which is the required 20%, while 80% of the units will be visitable.



#### PART F – ACCESS AND MOBILITY

#### 3.5 Adaptable and Visitable Housing (residential flats and dual occupancies)

Adaptable housing is to comply with AS4299, and is a dwelling unit designed in such a way that it can be modified easily in the future to become accessible to both occupants and visitors with disabilities or progressive frailties. Adaptable housing requires siting consideration – including access within the site, building location, landscaping, security, carparking, letterboxes and signage.

Adaptable housing requires design consideration – including floor levels, entrances, doorways, circulation space, sanitary facilities, kitchens, bedrooms, living areas, laundries, floors, lighting, fixtures and fittings.

To obtain approval of an adaptable housing unit, detailed plans and description of the pre-adaptation and post-adaptation unit are to be provided.

Visitable housing is an important part of maintaining a connected community in which people are able to go to see family members and friends at home. Groups who benefit from visitable housing include families with strollers or prams for young children, older and frail aged people and persons with disability. Visitable housing is to provide a continuous path of accessible travel from the property frontage or carparking area to the living area and to a toilet that is either accessible or visitable and common areas within the building.

#### **Provisions**

- 1. Adaptable housing to comply with AS4299, including the essential features in Appendix A for Class C housing (essential items only).
- 2. Adaptable housing to be equitably distributed throughout all types and sizes of dwelling units.
- 3. Adaptable housing to be provided at the rate of 20% of all dwellings in a Class 2 development.
- 4. Dual occupancies (attached) are to be visitable (where topography permits 1:10 fall or less steep).
- 5. Dwellings are to be visitable at the rate of 80% in developments requiring adaptable housing.
- 6. Single Class 1a dwellings are not applicable to this part.

#### 3.8 Access to, and within, buildings

The BCA and Premises Standard require access for Class 1b - 10b buildings, inclusive.

These access provisions require compliance with the BCA and the PS as prescribed primarily within BCA Clause D3.1 Table D3.1.

#### **Provisions**

- 1. Access is to be provided in accordance with BCA Clause D3.1 and in accordance with Table 1 below.
- 2. Access is to comply with the relevant Provisions of the BCA, and associated referenced Australian Standards. Demonstration is required in the form of an access report prepared by a suitably qualified access consultant as part of the DA documentation.
- 3. Buildings of a public nature are to have features in accordance with AS1428.2, when applicable, as follows:
  - a. Tables, counters and worktops for use by public.
  - b. Seating in pedestrian areas.
  - c. Drinking fountains and water coolers.
  - d. Gateways and checkouts.

### SUMMARY:

The proposed amended Mixed-Use Development will have twenty-one (21) units in the overall development with five (5) of these units to be adaptable, which is the required 20%, while 80% of the units will be visitable.



### PART R - TRAFFIC, TRANSPORT AND PARKING

#### 2.8 Disabled parking provision

Provisions

- a) For disabled car parking rates refer to Table 1 and Table 2
- b) Disabled parking spaces must be built in accordance with AS/NZS 2890.6:2009 Parking facilities—Off-street parking or people with disabilities.

#### Table 1 – Car parking rates

Where parking rates are not provided here, applicants must provide analysis for the proposed parking rates using examples of developments that are similar in terms of land-use, size, location and available transport options. Calculations are to be rounded up to the nearest whole number.

Table 1 – Car parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Residential & Mixed-Use Development (Residential component)		
Attached Dwellings and Multi- Dwelling Housing	<ul> <li>0.5 spaces per studio</li> <li>1 space per 1-bedroom unit</li> <li>1.5 spaces per 2-bedroom unit</li> <li>2 spaces per 3+ bedroom unit</li> <li>1 disabled space for each</li> <li>adaptable housing unit</li> </ul>	1 space per 4 units 1 disabled space per 50 visitor spaces (minimum 1 disabled space)
Residential flat buildings	<ul> <li>0.5 spaces per studio</li> <li>1 space per 1-bedroom unit</li> <li>1.5 spaces per 2-bedroom unit</li> <li>2 spaces per 3+ bedroom unit</li> <li>1 disabled space for each adaptable housing unit</li> </ul>	1 space per 4 units 1 disabled space per 50 visitor spaces (minimum 1 disabled space)
Commercial & Mixed-Use Development (Commercial component)		
Office premises or business premises	1 space per 60m <sup>2</sup> gross floor area (GFA) + 1 disabled space per 10 car spaces (minimum 1 disabled space)	N/A
Bulky goods premises	1 space per 2 employees	<ol> <li>per 77m<sup>2</sup> factory space</li> <li>per 300m<sup>2</sup> warehouse space</li> <li>per 100m<sup>2</sup> showroom space</li> <li>disabled space per 50 car spaces (minimum 1 disabled space)</li> </ol>
Shop	1 space per 40m <sup>2</sup> 1 disabled space per 20 car spaces (minimum 1 disabled space)	



Restaurant or cafe	1 space per 40m <sup>2</sup>
	1 disabled space per 20 car spaces (minimum 1 disabled space)
Entertainment facility e.g. Cinema, Theatre	Provide analysis for proposed parking rates i.e. A comparison of existing developments with similar characteristics in the locality
	1 disabled space per 20 car spaces (minimum 1 disabled space)

#### **SUMMARY:**

The Proposed Amended Mixed-Use Developments basement carpark is over three (3) levels, which will be accessed from Sera Street and provide one hundred and twenty-seven (127) car parking spaces.

The basement carpark will consist of twenty-seven (27) residential parking space with five (5) designated accessible parking bays, one (1) each for all the adaptable units to comply with AS2890.6. There are six (6) car parking space for residential visitors including one (1) designated accessible parking bay to comply with AS2890.6.

The supermarket portion of the proposed mixed-use development will provide sixty-eight (68) car parking spaces including four (4) designated accessible car parking bays to comply with AS2890.6.

The proposed retail tenancies will have five (5) car parking spaces including one (1) designated accessible car parking bay while the community space will have a total of eleven (11) car parking spaces including one (1) designated accessible car parking bay while there will be ten (10) car parking spaces for the public to comply with AS2890.6

Also located in the proposed basement car park are one (1) car wash bay, a loading dock, bicycle parking and motorcycle parking.

## 13. AS4299 VISITABLE HOUSING DEFINITION

#### AS4299-1995 Adaptable housing:

**1.4.11 Visitable housing unit** – 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.

**1.4.12** Visitable toilet – a toilet which has a space of minimum 1250mm in front of the toilet x 900mm wide clear of door swings and fixtures.



## 14. 4Q UNIVERSAL DESIGN – APARTMENT DESIGN GUIDE

Universal design is an international design philosophy that enables people to continue living in the same home by ensuring that apartments are able to change with the needs of the occupants. Universally designed apartments are safer and easier to enter, move around and live in. They benefit all members of the community, from young families to older people, their visitors, as well as those with permanent or temporary disabilities.

Incorporating universal design principles in apartment design is a step towards producing a robust, flexible housing stock. It ensures that simple and practical design features are incorporated into new buildings that would be difficult and costly to retrofit at a later date.

Universal design is different to adaptable housing which is governed by Australian Standard AS 4299-1995 Adaptable Housing and is specifically designed to allow for the future adaptation of a dwelling to accommodate the occupant's needs.

In addition, flexible apartment design is also desirable to allow buildings to accommodate a diverse range of lifestyle needs such as different household structures, live/work housing arrangements and future changes in use.

#### **Objective 4Q-1**

Universal design features are included in apartment design to promote flexible housing for all community members

#### Design guidance

Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features

#### **Objective 4Q-2**

A variety of apartments with adaptable designs are provided

#### Design guidance

Adaptable housing should be provided in accordance with the relevant council policy

Design solutions for adaptable apartments include:

- convenient access to communal and public areas
- high level of solar access
- minimal structural change and residential amenity loss when adapted
- larger car parking spaces for accessibility
- parking titled separately from apartments or shared car parking arrangements

#### **Objective 4Q-3**

Apartment layouts are flexible and accommodate a range of lifestyle needs

#### Design guidance

Apartment design incorporates flexible design solutions which may include:

- rooms with multiple functions
- dual master bedroom apartments with separate bathrooms
- larger apartments with various living space options
- open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom

#### **SUMMARY:**

The Amended Development Application Documentation prepared by a+ design group will demonstrate how the objectives and controls have been addressed, as outlined in the State Environmental Planning Policy (SEPP) No 65 - Design Quality of Residential Flat Development & Apartment Design Guide.



## 15. BUILDING CODE OF AUSTRALIA (BCA)

The BCA provides Performance Based and Deemed-to-Satisfy provisions and criteria. The BCA performance requirements are based on the provision, of a reasonable level of, Safe, Equitable and Dignified access to services and facilities.

The BCA details minimum construction requirements, however any construction in excess of these requirements is encouraged and considered good practice.

The Deemed-to-Satisfy provisions of BCA that are accessibility related are primarily located in:

Part D3 Access for People with Disabilities

Part E3 Lift Installations

Part F2 Sanitary and Other Facilities

The Performance Requirements of the BCA that are accessibility related are primarily located in:

Performance Requirement DP1 and DP2

Performance Requirement EP3.4

Performance Requirement FP2.1

Australian Standard AS1428.1 is called up into the BCA. These access provisions require compliance with the relevant parts of AS1428.2, in addition to the listed Australian Standards.

## 16. BUILDING CODE OF AUSTRALIA 2016 (BCA) VOLUME ONE

#### PART D3 ACCESS FOR PEOPLE WITH A DISABILITY

## 16.1 D3.1 General building access requirements

Buildings and parts of buildings must be accessible as required by **Table D3.1**, unless exempted by **D3.4**.

## Table D3.1 REQUIREMENTS FOR ACCESS FOR PEOPLE WITH A DISABILITY

Class of building	Access requirements
Class 2	
Common Areas	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.
	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, <i>swimming pool</i> , common laundry, games room, individual shop, eating area, or the like.
	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.



Class 6	To and within all areas normally used by occupants.
Class 9b	
An assembly building not being a school or an early childhood centre	To and within all areas normally used by occupants. To wheelchair seating spaces provided in accordance with <b>D3.9</b> . To and within all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces.
Class 7a	To and within any level containing accessible carparking spaces.

## 16.2 D3.2 Access to buildings

- (a) An accessway must be provided to a building required to be accessible—
  - (i) from the main points of a pedestrian entry at the allotment boundary; and
  - (ii) from another accessible building connected by a pedestrian link; and
  - (iii) from any required accessible carparking space on the allotment.
- (b) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and—
  - (i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and
  - (ii) in a building with a total floor area more than 500m<sup>2</sup>, a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance,

except for pedestrian entrances serving only areas exempted by D3.4.

- (c) Where a pedestrian entrance required to be accessible has multiple doorways-
  - (i) if the pedestrian entrance consists of not more than 3 doorways not less than 1 of those doorways must be accessible; and
  - (ii) if a pedestrian entrance consists of more than 3 doorways not less than 50% of those doorways must be accessible.
- (d) For the purposes of (c)—
  - (i) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where—
    - (A) all doorways serve the same part or parts of the building; and
    - (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
  - (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).
- (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 850mm in accordance with AS1428.1.





## 16.3 D3.3 Parts of building to be accessible

In a building required to be accessible—

- (a) every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with-
  - (i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and
  - (ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and
  - (iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and
- (b) every passenger lift must comply with **E3.6**; and
- (c) accessways must have-
  - (i) passing spaces complying with AS1428.1 at maximum 20m intervals on those parts of an accessway where a direct line of sight is not available; and
  - (ii) turning spaces complying with AS 1428.1—
    - (A) within 2m of the end of accessways where it is not possible to continue travelling along the accessway; and
    - (B) at maximum 20m intervals along the accessway; and
- (d) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and
- (e) a passing space may serve as a turning space; and
- (g) clause 7.4.1(a) of AS1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4mm'; and
- (h) the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4mm and 15mm respectively.

## 16.4 D3.4 Exemptions

The following areas are not required to be accessible:

- (a) An area where access would be inappropriate because of the particular purpose for which the area is used.
- (b) An area that would pose a health or safety risk for people with a disability.
- (c) Any path of travel providing access only to an area exempted by (a) or (b).



## 16.5 D3.5 Carparking spaces for people with a disability

(IN PART)

Accessible carparking spaces-

- (a) subject to (b), must be provided in accordance with Table D3.5 in—
  - (i) a Class 7a building required to be accessible; and
  - (ii) a carparking area on the same allotment as a building required to be accessible; and
- (b) need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public; and
- (c) must comply with AS/NZS 2890.6; and

#### Table D3.5 CARPARKING SPACES FOR PEOPLE WITH A DISABILITY

Class of building to which the carpark or carparking area is associated	Number of accessible carparking spaces required
Class 5, 7, 8 or 9c	1 space for every 100 carparking spaces or part thereof.
Class 6	
<ul><li>(a) Up to 1000 carparking spaces; and</li><li>(b) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces.</li></ul>	<ol> <li>space for every 50 carparking spaces or part thereof.</li> <li>space</li> </ol>
Class 9b	
(b) Other assembly building—	
(i) up to 1000 carparking spaces; and	
<ul> <li>(ii) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces.</li> </ul>	<ol> <li>space for every 50 carparking spaces or part thereof.</li> <li>space.</li> </ol>

## 16.6 D3.6 Signage

In a building required to be accessible—

- (a) braille and tactile signage complying with Specification D3.6 must—
  - (i) incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each—
    - (A) sanitary facility, except a sanitary facility within a sole-occupancy unit in a Class 1b or Class 3 building; and
    - (B) space with a hearing augmentation system; and
  - (ii) identify each door required by E4.5 to be provided with an exit sign and state—
    - (A) "Exit"; and
    - (B) "Level"; and either
      - (aa) the floor level number; or
      - (bb) a floor level descriptor; or
      - (cc) a combination of **(aa)** and **(bb)**; and



- (b) signage including the international symbol for deafness in accordance with AS 1428.1 must be provided within a room containing a hearing augmentation system identifying—
  - (i) the type of hearing augmentation; and
  - (ii) the area covered within the room; and
  - (iii) if receivers are being used and where the receivers can be obtained; and
- (c) signage in accordance with AS1428.1 must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use;
- (d) signage to identify an ambulant accessible sanitary facility in accordance with AS1428.1 must be located on the door of the facility;
- (e) where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access, in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance; and
- (f) where a bank of sanitary 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 placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.

## 16.7 D3.7 Hearing augmentation

- (a) A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—
  - (i) in a room in a Class 9b building; or
  - (ii) in an auditorium, conference room, meeting room or room for judicatory purposes; or
  - (iii) at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.
- (b) If a hearing augmentation system required by (a) is—
  - (i) an induction loop, it must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or
  - (ii) a system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than—
    - (A) if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and
    - (B) if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons; and
    - (C) if the room or space accommodates more than 1000 persons but not more than 2000 persons, 35 receivers plus 1 receiver for every 50 persons or part thereof in excess of 1000 persons; and
- (D) if the room or space accommodates more than 2000 persons, 55 receivers plus 1 receiver for every 100 persons or part thereof in excess of 2000 persons.
- (c) The number of persons accommodated in the room or space served by an inbuilt amplification system must be calculated according to **D1.13**.
- (d) Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.



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## **16.8 D3.8 Tactile indicators** (IN PART)

- (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—
  - (i) a stairway, other than a fire-isolated stairway; and
  - (ii) an escalator; and
  - (iii) a passenger conveyor or moving walk; and
  - (iv) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and
  - (v) in the absence of a suitable barrier—
    - (A) an overhead obstruction less than 2 m above floor level, other than a doorway; and
    - (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) Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1.

## 16.9 D3.9 Wheelchair seating spaces in Class 9b assembly buildings (NOT APPLICABLE)

Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS1428.1 must be provided in accordance with the following:

- (a) The number and grouping of wheelchair seating spaces must be in accordance with Table D3.9.
- (b) In a cinema—
  - (i) with not more than 300 seats wheelchair seating spaces must not be located in the front row of seats; and
  - (ii) with more than 300 seats not less than 75% of required wheelchair seating spaces must be located in rows other than the front row of seats; and
  - (iii) the location of wheelchair seating is to be representative of the range of seating provided.

#### Table D3.9 WHEELCHAIR SEATING SPACES IN CLASS 9b ASSEMBLY BUILDINGS

Number of fixed seats in a room or space	Number of wheelchair seating spaces	Grouping and location
151 to 800	3 spaces; plus 1 additional space for each additional 50 seats or part thereof in excess of 150 seats	Not less than 1 single space; and not less than 1 group of 2 spaces; and not more than 5 spaces in any other group.

## 16.10 D3.10 Swimming pools (NOT APPLICABLE)

## 16.11 D3.11 Ramps

On an accessway —

- (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and
- (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.



## 16.12 D3.12 Glazing on an 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 A\$1428.1

## 17. PART E3 LIFT INSTALLATIONS

An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with **Specification E3.1**.

## 17.1 E3.2 Stretcher facility in lifts

- (a) A stretcher facility in accordance with (b) must be provided—
  - (i) in at least one emergency lift required by **E3.4**; or
  - (ii) where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12 m, in at least one of those lifts to serve each floor served by the lifts.
- (b) A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600mm wide x 2000mm long x 1400mm high above the floor level.

## 17.2 E3.3 Warning against use of lifts in fire

A warning sign must—

- (a) be displayed where it can be readily seen—
  - (i) near every call button for a passenger lift or group of lifts throughout a building; except
  - (ii) a small lift such as a dumb-waiter or the like that is for the transport of goods only; and
- (b) comply with the details and dimensions of Figure E3.3 and consist of—
  - (i) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or
  - (ii) letters incised or inlaid directly into the surface of the material forming the wall.

Figur	re E3.3
WAR	NING SIGN FOR PASSENGER LIFTS
OR	DO NOT USE LIFTS
UK	Do not use lifts if there is a fire



## 17.3 E3.4 Emergency lifts (IN PART)

- (a) At least one emergency lift complying with (d) must be installed in-
  - (i) a building which has an effective height of more than 25 m;
- (b) An emergency lift may be combined with a passenger lift and must serve those storeys served by the passenger lift so that all storeys of the building served by passenger lifts are served by at least one emergency lift.
- (c) Where two or more passenger lifts are installed and serve the same storeys, excluding a lift that is within an *atrium* and not contained wholly within a *shaft*
  - (i) at least two emergency lifts must be provided to serve those storeys; and
  - (ii) if located within different shafts, at least one emergency lift must be provided in each shaft.
- (d) An emergency lift must—
  - (i) be contained within a fire-resisting shaft in accordance with the requirements of C2.10; and
  - (iii) if the building has an effective height of more than 75 m, have a rating of at least—
    - (A) 600 kg if not provided with a stretcher facility; or
    - (B) 900 kg if provided with a stretcher facility.

## 17.4 E3.5 Landings

Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Section D.

## 17.5 E3.6 Passenger lifts

In an accessible building, every passenger lift must-

- (a) be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and
- (b) have accessible features in accordance with Table E3.6b; and
- (c) not rely on a constant pressure device for its operation if the lift car is fully enclosed.

## Table E3.6a LIMITATIONS ON USE OF TYPES OF PASSENGER LIFTS (IN PART)

Lift type	Limitations on use
Electric passenger lift	No limitation.
Electrohydraulic passenger lift	No limitation.

## Table E3.6b APPLICATION OF FEATURES TO PASSENGER LIFTS

#### (IN PART)

Feature	Application
Handrail complying with the provisions for a mandatory handrail in AS1735.12	All lifts except— (a) a stairway platform lift; and (b) a low-rise platform lift.



Lift floor dimension of not less than 1400mm wide x 1600mm deep	All lifts which travel more than 12 m.
Minimum clear door opening complying with A\$1735.12	All lifts except a stairway platform lift.
Passenger protection system complying with A\$1735.12	All lifts with a power operated door.
Lift landing doors at the upper landing	All lifts except a stairway platform lift.
Lift car and landing control buttons complying with AS 1735.12	All lifts except— (a) a stairway platform lift; and (b) a low-rise platform lift.
Lighting in accordance with AS 1735.12	All enclosed lift cars.
<ul> <li>(a) Automatic audible information within the lift car to identify the level each time the car stops; and</li> <li>(b) audible and visual indication at each lift landing to indicate the arrival of the lift car; and</li> <li>(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 500Hz</li> </ul>	All lifts serving more than 2 levels.
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	All lifts except a stairway platform lift.

#### Summary

The proposed plans indicate that the mixed-use building (residential portion) will have four (4) passenger lifts, which will also be used as an emergency lift. Residential lift 1 & 2 will have a lift shaft size of 2450mmX2250mm while residential lift 3 & 4 will be 2450mmX2650mm. The lifts will access all levels of the mixed-use development.

The community space portion of the development will provide one (1) passenger lift and have a lift shaft size of 2450mmX2590mm also provided is a community BOH lift with the lift shaft size of 3000mmX3000mm.

The supermarket in the development will provide two (2) passenger lifts, while one (1) public passenger lift has been provided to deliver access from Burns Bay Road level and Sera Street level.

The lifts will need to be detailed with requirements and features in the construction certificate stage to comply with Part E3.6 and AS1735.12 Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities.

A compliance certificate will be required by the lift manufacture to indicate the lift and lift installation complies with the BCA and Australian Standards requirements.



## 18. F2.3 Facilities in Class 3 to 9 buildings (IN PART)

- (a) Except where permitted by (b), (c), (f), F2.4(a) and F2.4(b), separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Table F2.3.
- (b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.
- (c) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy.
- (d) Employees and the public may share the same facilities in a Class 6 and 9b building (other than a school or early childhood centre) provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public.
- (e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.

## 19. F2.4 Accessible sanitary facilities

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
- (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
- (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
- (e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with **Table F2.4(a)** and **Table F2.4(b)** must comply with the requirements of AS 1428.1; and
- (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
- (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.

#### Table F2.4(a) ACCESSIBLE UNISEX SANITARY COMPARTMENTS

Class of building	Minimum accessible unisex sanitary compartments to be provided		
Class 5, 6, 7, 8 or 9 — except for within a ward area of a Class 9a health-care building	Where <b>F2.3</b> requires closet pans— (a) 1 on every storey containing sanitary compartments;		

#### SUMMARY:

The proposed Mixed-Use Development will provide one (1) Accessible Unisex Compartments off the communal open spaces on Level 1 located in residential building 'A'.



## 20. ADAPTABLE HOUSING

Adaptable housing is housing that is designed with basic accessible features which can easily be complemented with further features to meet an individual's needs over time. The dwelling can be easily adapted, if required, to cater for the changing needs and capabilities of older persons or of persons with a disability, and then be readapted to a conventional unit should that occupant vacate the unit.

#### **Definitions**

"Management housing" is housing in accordance with Class C - Adaptable Housing Features as set out in Australian Standard AS4299 and must contain a bedroom, kitchen, dining area and bathroom on the ground floor, lift access is provided.

"Visitable housing unit" is to be visitable by people who use wheelchairs, in that there must be at least one wheelchair accessible entry and path of travel to the living area and to a toilet that is either accessible (A toilet complying with the space requirements described in AS1428.1) or visitable (A toilet which has a space of minimum 1.25m in front of the toilet is either accessible or visitable).

AS4299 contains the technical requirements to achieve a visitable dwelling.

"Accessible housing" is designed to allow a wheelchair user to enter, move about and use all rooms and facilities in a dwelling unaided.

Typical accessible features include wider doors, sufficient clear floor space for a wheelchair, entrance free of steps and stairs, audible and visual signals, lowered kitchen counters, grab bars in the toilet and bathroom, knee spaces under sinks and counters, and shower screens that can be removed to allow hobless entry and with appropriate waterproofing.

Features are provided up front, permanently fixed in place, and noticeable. As a result, many persons that do not require such features view them as clinical in appearance and not marketable to the wider population.

AS1428 Part 1 and Part 2 and AS4299 contain the technical requirements for accessible housing.

"Adaptable housing" is designed with the basic accessible features which can easily be complemented with further features to meet needs over time.

Adaptable house features can be invisible incorporated into plans for all types of housing. The only difference is that the dwelling can be easily adapted, if required, to cater for the changing needs and capabilities of an older or "disabled" occupant, and then be readapted to a conventional configuration if the person moves out. Adaptable design mean readily adjusted. Adaptable features are those that can be adjusted in a short time without involving structural or major material changes.

Typical adaptable features that are aimed at all users and available upon completion of the dwelling include level and wider doorways and corridors, slip resistant floor surface, reachable power points, lever door handles and lever taps. Features that may be utilised at a later stage include kitchen counters that may be adjusted in height or replaced, strengthened walls onto which grab rails may be fixed, and the provision of a hobless shower.

AS4299 contains the technical requirements for adaptable housing. Appendix A of AS4299: Adaptable housing provides a schedule of features for adaptable housing.

Part 2.1 of this Volume outlines the general requirements and provisions for adaptability and accessibility, while development specific controls are provided in Volume A.



## 21. ADAPTABLE APARTMENT - TYPE 1

UNIT A201.



## 22. ADAPTABLE APARTMENT – TYPE 2

UNIT A105, A108, 205 & 208.



NOT TO SCALE



## 23. ACCESS AND ADAPTABILITY ASSESSMENT

#### Clause No

AS4299	SITE ACCESS & ACCESS WITHIN THE SITE			
Clause 3.3	The proposed mixed-use development will have the principal public pedestrian entrance via the Burns Bay Road while the Residential building 'B' will have its public pedestrian entrance via the Sera Street.			
AS1428.1 – 2009 Clause 6	The pedestrian pathway from Burns Bay Road allotment boundary will have a level floor lead directly to the supermarket lobby, retail tenancies, community space lobby and residential 'A' lobby entrance. The door entry to the supermarket lobby, retail tenancies, community space lobby will need to provide 850mm clear opening through a single active door with lever handles and a minimum 510mm latch side clearance to comply with AS1428.1, the floor levels between the internal and external parts of the entry into the building will be the same.			
AS1428.2- 2009 Clause 7	The pedestrian pathway from Sera Street allotment boundary to residential building 'B' entry will be directly from Sera Street.			
D3.1 General The main entry lobby will be the same.				
building access	An accessible path of travel has been provided from the street, letterboxes, and accessible car spaces and also to all common facilities to comply with AS1428.1:2009.			
	Details at construction certificate stage will need to show the correct levels, gradient and widths to allow for the appropriate passing and turning areas and have the required access to provide the appropriate doorway circulation space in accordance with AS1428.1 and comply with Table D3.1 as well as satisfy Part D3.3 of the Building Code of Australia.			
	Note: Retail, Community space and Commercial portions of the development will require separate Development Applications for internal fit outs. Internal disability access and requirements has not been addressed in this report.			
AS4299	COMMON OUTDOORS OPEN SPACE			
Clause 3.5 AS1428.1- 2009	The communal open spaces are located on level 1 of the development and will be accessed by the entire residential apartments in building 'A' & 'B' via the lifts, pathways and walkways to comply with A\$1428.1. The communal open spaces will have the required access from the front door of all the adaptable units and building entry lobby doors via accessible walkways and lifts to comply with A\$1428.1.			
BCA Table D3.1	The access pathway, lifts and passageway leading to the common outdoor open spaces will provide appropriate access and complies with A\$1428.1			
	Any doorways leading to the common open space will provide 850mm clear opening through a single active door with lever handles and a minimum 510mm latch side clearance to comply with A\$1428.1			
	The pathways leading to the common outdoor open space will vary in width from the minimum requirement of a walkway. The combination of accessible pathway and access to common open space area of the building will provide suitable access in a method that comply with the BCA Table D3.1 and A\$1428.1			
	A maximum fall of 1:40 to floor wastes will also apply to the terraces to comply with AS1428.1 this will be detailed at construction certificate.			



#### AS1428.1 COMMON EGRESS STAIRS

Clause 11 The egress stairs to the development will need to be detailed at construction certificate stage in accordance with Part D3.3(a)(iii) of the Building Code of Australia Volume 1 and also in accordance with AS1428.1 - Clause 11 i.e. continuous handrails, handrail extensions, stair setback at mid-landing, luminous contrast strip nosing and ground surface tactile indicators (TGSI's)

All ramps and stairs which are fire-isolated must comply with AS1428.1

#### AS1428.1- ACCESSIBLE UNISEX SANITARY FACILITY

2009 Clause

Accessible

F2.4

The proposed mixed-use development will provide one (1) accessible unisex compartment off the communal open spaces on Level 1 and is located in residential building 'A'. The size of the compartment is 2450mmX2335mm, a layout of these sanitary facility will need to be provided at construction certificate stage and show the positions of the sanitary amenities being the WC and Washbasin comply with AS1428.1

sanitary A detailed layout of these sanitary facility will be required at construction certificate stage comply with A\$1428.1

#### A\$1735.12 LIFT ACCESS

The proposed plans indicate that the mixed-use building (residential portion) will have four (4) passenger lifts, which will also be used as an emergency lift. Residential lift 1 & 2 will have a lift shaft size of 2450mmX2250mm while residential lift 3 & 4 will be 2450mmX2650mm. The lifts will access all levels of the mixed-use development.

BCA Part E3.6 Table E3.6a, E3.6b

The community space portion of the development will provide one (1) passenger lift and have a lift shaft size of 2450mmX2590mm also provided is a community BOH lift with the lift shaft size of 3000mmX3000mm.

The supermarket in the development will provide two (2) passenger lifts, while one (1) public passenger lift has been provided to deliver access from Burns Bay Road level and Sera Street level.

All lifts will be need to be detailed to comply with Part E3.6 and AS1735.12 Lifts for people with disabilities that travel more than 12 metres.

A compliance certificate will be required by the lift manufacture to indicate lift and lift installation complies with the BCA and Australian standards requirements.

## AS4299 CARPARKING

Clause 3.7	The proposed mixed-use developments basement car park will be accessible from Sera Street over three (3) levels and will provide a total of one hundred & twenty-seven (127) car parking spaces + one (1) car wash bay, twenty-seven (27) residential parking spaces + six (6) residential visitor spaces, sixty-eight (68) supermarket, five (5) retail, ten (10) community spaces, eleven (11) car parking spaces for the public, bicycle parking, motorcycle parking, collection point/loading dock and residential/commercial storage facilities.
AS2890.6	There are twelve (12) designated accessible car spaces, all five (5) adaptable units will have one (1) designated accessible space each being a minimum of 4800mm wide comprising 2400mm+2400mm shared area so to enable access to comply with AS/NZS 2890.6.
Lane Cove DCP	There is one (1) designated accessible residential visitors parking bay, four (4) designated accessible parking bays for the supermarket + one (1) designated accessible parking bay each for the retail, and community space to comply with AS2890.6 Off street parking for people with disabilities.
Part R	All designated accessible parking bays shall have a 2500mm clearance over the parking space while the finished floor level will not exceed 2.5% or 1:40 gradient.
	There will also need to be a 2200mm min. ceiling clearance from the entry of the car park to the designated accessible parking bays in accordance with AS/NZS2890.6:2009



AS4299	OUTDOOR PRIVATE OPEN SPACE
Clause 3.5 (b)	The adaptable unit layout will provide private open space area in the form of a balcony and will have easy access via sliding door from the unit's living/open plan area.
AS1428.1- 2009	The size of Type '1' balcony will allow adequate accessible private open space and provide a 2250mm diameter circulation space.
	Type '2' balcony will allow for adequate accessible private open space with a 2070mmX1540mm circulation space to allow for a wheelchair user to make a 90° and 180° turn as set out in AS1428.1:2009.
	All balcony levels to all the adaptable units will have a 10mm step down.
	The threshold ramps, levels and balcony surface fall of 1:40 to comply with A\$1428.1.
AS4299	LETTERBOXES
Clause 3.8	The letterboxes for residential buildings 'A' are located within the residential lobby off Burns Bay Road while the letterboxes for residential building 'B' is located within the residential lobby off Sera Street.
AS1428.2-	The construction certificate drawings indicate that the letterboxes shall provide at least 1550mmX1550mm circulation area and access to comply with AS4299 and AS1428.2
1992 Clause 31	Details of the letterboxes are to be confirmed during construction certificate or working drawing stage
BCA Vol. 1 Part D3	ACCESSIBLE ENTRANCE TO ADAPTABLE UNITS
Clause D3.1	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.
AS4299 Clause 4.3.1 and 4.3.2 The adaptable units all show an entry area that will deliver the required 1550mmX1550r minimum circulation to the entrance of the unit and will also need to provide for a 920mm d for 850mm doorway clearance) to comply with AS14281 and AS4299	
AS1428.1- 2009 Clause 13	Internal circulation space at the entry doors to these units complies with AS1428.1 having the required 1550mmX1550mm minimum circulation area.
AS4299	DOORS AND DOOR HARDWARE
Clause 4.3.3 and 4.3.4	The construction certificate plans for the pre and post adaptable unit layout will need to show
AS1428.1- 2009	door dimensions or clear openings and lever type handles are to be provided and located at 900-1100mm above finished floor level, these details should be provided at construction certificate or working drawing stage to confirm compliance.
Clause 13.5	All doors in the common areas throughout the building will need to be 920mm (or have 850mm
Premises Standard 2013	clear doorway openings) as required by the Premises Standard 2013 – Access must be provided to the entrance doorway of sole-occupancy units and to and within rooms or spaces for common areas by residence.
AS4299	INTERNAL: GENERAL
Clause 4.3.7 AS1428.1- 2009 Clause 13	The post adaptable apartments are open plan design and have the appropriate circulation space of 1550mmX1550mm and minimum door width requirements outlined in AS1428.1 to the adaptable bedroom, bathroom, laundry cupboard and balconies.
	A threshold ramp for wheelchair access maybe required to all wet great if filed floor great is not

A threshold ramp for wheelchair access maybe required to all wet areas if tiled floor area is not set down.



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AS4299 Clause 4.4	BATHROOM
and 4.4.4 A\$1428.1- 2009	The size of the overall Type '1' adaptable bathrooms will be 2700mmX2350mm and also allow 2000mm for the shower and WC, while the accessible bathroom in type '2' known as the ensuite is 4220X1970 these dimensions need to be clear / finished construction dimensions while the positions of the sanitary amenities being the WC, Washbasin and Shower shall comply with AS1428.1 and AS4299.
Clause 15.3.2-15.6	The bathrooms within the adaptable units shall provide pre-installed and blocked off plumbing for post adaptation of shower, toilet pan, basin and floor waste (where required) with suitable set-outs and clearances to allow for relocation of fixtures in post-adaption locations to comply with AS1428.1. The movement of bathroom fittings shall not affect the waterproofing of the bathroom within the adaptable units.
	Provisions for plumbing modifications and bathroom fittings are made in the post adaptation layout to comply with AS1428.1. Masonry or reinforced wall shall allow for easy installation of any future grabrails.
	<b>NOTE:</b> A letter from the builder/developer will need to be required at Occupation Certificate (OC) to confirm that this has been achieved for post adaptation stage.
AS4299 Clause 4.5	KITCHEN
	The kitchens in the post-adaptable apartments are located in the open plan living/dining area. Accessibility will be achieved at post adaptation stage in Type '1' & '2' kitchens with the required 1550mm between benches to comply with the requirements outlined in A\$4299 & A\$1428.2.
AS1428.2- 1992 Clause 22	If necessary, extra plumbing services/capped-off wastes etc. will need to be provided at pre- adaptation to allow for easy alteration. Drawings will need to identify these services at construction certificate stage.
	All kitchen appliances, adjustable shelf heights and workbench details etc. shall be specified to comply with AS4299 for adaptability.
	<b>NOTE:</b> A letter from the builder/developer will need to be required at Occupation Certificate (OC) to confirm that this has been achieved for post adaptation stage.
AS4299	BEDROOM
Clause 4.6	All adaptable bedroom layouts will accommodate a queen size bed, built-in wardrobe and have the required circulation space clear of bed and wardrobe fixtures.
	The position of the queen size bed will provide the adequate 1540mmX2070mm circulation space at either the foot or the side of the bed which complies with AS4299 and AS1428.2
	There is also adequate circulation space in the post adaption front of the robes to all the adaptable units.
AS4299	LIVING AND DINING
AS4299 Clause 4.7 and 4.7.1 Living AND DINING The pre / post adaptation plans show an open plan design to all adaptable apartment lowith a combined living/dining room that will have the adequate area to provide a 225 diameter turning area according with AS4299.	
	Detailed layout of living/dining room, windows, power outlets as well as telephone and television outlets etc. are to comply with AS4299
4.0.00	

#### AS4299 LAUNDRY Clause 4.8

The laundries to the adaptable unit Type '1' and '2' are in the form of laundry cupboards.

The laundries will need contain a washing machine, dryer, double GPO and tub.

The bi-fold doors to these laundry cupboards will provide the necessary circulation space required of 1550mmX1550mm minimum to comply with AS4299.



AS4299

Clause 4.9

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A\$1428.1- 2009	Floor surfaces in the adaptable apartments including bathrooms, kitchens, laundries and balconies shall be slip-resistant to comply with AS/NZS 3661.1:1993 All common ground and external floor surfaces shall comply with the requirements for floor surface in AS1428.1
AS4299 Clause 4.10	LIGHTING
AS1428 2-	An even degree of light particular along paths of travel shall be available throughout the

AS1428.2-1992 Clause 19 An even degree of light particular along paths of travel shall be available throughout the building. Provide a level of maintenance illuminance to comply with AS1428.1, AS1428.2 and AS1680.2

Lighting shall comply with the requirements set out in AS4299 Table 4.1

#### AS4299 SWITCHES AND POWER POINTS Clause 4.11.1

**FLOORING** 

- (a) Switches: Light switches shall be located at a height not less than 900mm nor more than 1100mm above the finished floor and in line with the door handles. Switches shall be located adjacent to door handles where practical. Two-way switching is preferred.
- AS1428.1-2009 NOTE: Rocker action, toggle or push pad switches with a recommended width of 35mm are preferred.
- Clause 14 (b) Power outlets: Except as elsewhere described, GPO's shall be located at a height of not less than 600mm, with a preferred height of 1000mm, above the finished floor and in line with door handles. GPO's shall be located not less than 500mm horizontally from internal corners.

#### AS4299 SIGNAGE Clause 3.9

AS1428.1-2009 Signage to the adaptable apartments, designated accessible parking bays, letterboxes, storage bays and common areas etc. are to be detailed at construction certificate stage or working drawing stage and to comply with BCA D3.6, AS4299, AS1428.1 and AS1428.2 Clause 17

## Clause 8

AS1428.4.1

#### AS4299 ELECTRICAL DISTRIBUTION BOARD Clause 4.11.2

The electrical distribution board should be located inside the adaptable apartments and be accessible.

#### AS4299 WINDOWS

Clause 4.11.4 Operating controls should be located in an accessible position

## AS1428.1 TACTILE GROUND INDICATORS (TGSI's)

- (i) Ensure that TGSI's are slip-resistant and have the following minimum luminance contrast values against back ground surface, compliant with AS1428.4.1:
- Integrated TGSI's (i.e. tiles) require 30% min. luminance contrast
  - Discrete TGSI's (i.e. buttons) require 45% min. luminance contrast
  - Composite TGSI's with 2 materials/colours requires 60% min. luminance contrast

## BCA 2016(ii)Ensure the exposed underside of the internal stair (in areas with less than 2m clearance) will<br/>have access impeded by suitable barrier or have warning TGSI's installed, compliant with<br/>AS1428.4.1 Figs.2.6.



#### AS4299 GARBAGE/STORE/EXEMPTION Clause 4.11.6

Five (5) individual storage enclosures for the adaptable units are located on the basement 2 level of the development and will provide the appropriate access pathways from the adaptable units and lift area to comply with AS1428.1 and AS4299.

The garbage chute and recycle rooms on each level is provided and will have the required circulation area.

The residential, community space and retail garbage rooms as well as the Bulky Waste Room are located on the ground level. Sera Street 1 level of the development will have access via the automatic roller doors and will need to provide 850mm clear opening to comply with A\$1428.1.

Also located on basement level 2 is the residential storage area, carpark exhaust fan room, and plant rooms which will be exempt under D3.4 Exemptions of the BCA and will not be accessible to people with a disability (PWD), car part exhaust fan room on basement 3 will also be exempt under D3.4. The carwash bay is also located on basement 3.

Basement 1 will have the AC units, as well as the retail grease arrestor, supermarket grease arrestor, OSD tank, main switch room, car park exhaust, main communication room and substations, these areas will be exempt under D3.4 Exemptions of the BCA. The maintenance WC is also located on Basement 1 and will double as an accessible bathroom.

The Ground Level\_Sera Street loading bay entry will have a loading zone, supermarket garbage room, retail garbage room, community space garbage room, residential bulky rooms, residential garbage rooms + linear compactors, the two (2) residential garbage chute rooms that will only be accessed by the buildings manager/caretaker and will not be accessible to the general public. The supermarket switch room, comms room, car fun supply room, and residential meter room will be exempt under Clause D3.4 of the Building Code of Australia where access would be inappropriate because of the particular purpose for which the area is used and would pose a health or safety risk for people with a disability.

BCA 2016 Clause D3.4 Exemption

Please Note: The residential garbage chute rooms located on the basement 1 level of the development will ONLY be accessed by the Caretaker/Building Manager and is not accessible to the general public.

#### D3.12 Glazing GLAZING

on an 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 A\$1428.1:2009 Clause 6.6

This will apply to the retail tenancies, community space lobby, supermarket shop front windows and residential entry lobby of the development. Windows to be detailed to comply with AS1428.1



## 24. AS4299-1995 ADAPTABLE HOUSING – APPENDIX A

### SCHEDULE OF FEATURES FOR ADAPTABLE HOUSING

## CLASSIFICATION LEVELS

Adaptable house class C All essential features incorporated.

				Essential	
ltem No.	Room/Item	Clause No.	Required feature	Certified by	
	DRAWINGS				
1	Provision of drawings showing the housing unit in tis pre-adaptation and post-adaptation stages	2.3	~		
	SITTING				
3	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with A\$1428.1	3.3.2	~		
11	Letterboxes to be on hard standing area connected to accessible pathway	3.8	~		
	PRIVATE CAR ACCOMMODATION				
14	Carparking space or garage min. area 6.0m x 3.8m	3.7.2	~		
	ACCESSIBLE ENTRY				
20	Accessible entry	4.3.1	~		
22	Accessible entry to be level (i.e. max 1:14 slope)	4.3.2	✓		
23	Threshold to be low-level	4.3.2	✓		
24	Landing to enable wheelchair maneuverability	4.3.2	~		
25	Accessible entry door to have 850 mm min. clearance	4.3.1	~		
27	Door lever handles and hardware to A\$1428.1	4.3.4	~		
	EXTERIOR: GENERAL				
32	Internal doors to have 820 mm min. clearance	4.3.3	✓		
33	Internal corridors min. width of 1000mm	4.3.7	~		
34	Provision for compliance with A\$1428.1 for door approaches	4.3.7	~		
	LIVING ROOM & DINING ROOM				
36	Provision for circulation space of min. 2250 mm diameter	4.7.1	✓		
38	Telephone adjacent to GPO	4.7.4	~		
41	Potential illumination level min. 300 lux	4.10	~		



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	KITCHEN			
42	Minimum width 2.7 m (1550 mm clear between benches)	4.5.2	~	
43	Provision for circulation at doors to comply with AS1428.1	4.5.1	~	
44	Provision for benches planned to include at least one worksurface of 800mm length, adjustable in height from 750mm to 850mm or replaceable. Refer to Figure 4.8	4.5.5	~	
45	Refrigerator adjacent to work surface	4.5.5	~	
46	Kitchen sink adjustable to heights from 750 mm to 850 mm or replaceable	4.5.6	~	
47	Kitchen sink bowl max. 150 mm deep	4.5.6	~	
48	Tap set capstan or lever handles or lever mixer	4.5.6(e)	~	
49	Tap set located within 300 mm of front of sink	4.5.6(e)	~	
51	Cooktop to include either front or side controls with raised cross bars	4.5.7	~	
52	Cooktops to include isolating switch	4.5.7	~	
53	Worksurface min. 800 mm length adjacent to cooktop at same height	4.5.7	✓	
54	Oven located adjacent to an adjustable height or replaceable work surface	4.5.8	~	
59	GPO's to comply with A\$1428.1. At least one double GPO within 300 mm of front of worksurface	4.5.11	~	
60	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position	4.5.11	~	
61	Slip-resistant floor surface	4.5.4	~	
	MAIN BEDROOM			
62	At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of A\$1428.2	4.6.1	~	
	BATHROOM			
75	Provision for bathroom area to comply with A\$1428.1	4.4.1	~	
76	Slip-resistant floor surface	4.4.2	~	
77	Shower recess-no hob. Minimum size 1160 x 1100 to comply with AS1428.1. (Refer figures 4.6 and 4.7)	4.4.4(f)	~	
78	Shower area waterproofed to AS3740 with floor to fall to waste	4.4.4(f)	~	
79	Recessed soap holder	4.4.4(f)	~	
80	Shower taps positioned for easy reach to access side of shower sliding track	4.4.4(f)	~	
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)	~	
83	Provision for grabrail in shower (Refer to Figure 4.7) to comply with AS1428.1	4.4.4(h)	~	
86	Tap sets to be capstan or lever handles with single outlet	4.4.4(C)	~	
88	Provision for washbasin with clearance to comply with A\$1428.1	4.4.4(g)	~	
	Double GPO beside mirror	4.4.4(d)	✓	



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	TOILET			
92	Provision of either 'visitable toilet' or accessible toilet	4.4.3	~	
93	Provision to comply with AS1428.1	4.4.1	~	
94	Location of WC pan at correct distance from fixed walls	4.4.3	~	
95	Provision for grabrail zone. (Refer Figure 4.6)	4.4.4(h)	~	
96	Slip resistant floor surface. (Vitreous tiles or similar)	4.4.2	~	
	LAUNDRY			
98	Circulation at doors to comply with A\$1428.1	4.8	~	
99	Provision for adequate circulation space in front of or beside appliances (min. 1550mm depth)	4.8	~	
100	Provision for automatic washing machine	4.8(e)	~	
102	Where clothes line is provided, an accessible path of travel to this	4.8(a)	~	
105	Double GPO	4.8(g)	~	
108	Slip-resistant surface	4.9.1	~	
	DOOR LOCKS			
110	Door Hardware operable with one hand, located 900-1100mm above floor	4.3.4	~	

## 25. CONCLUSION

It has been determined by this Access Assessment that the Amended Development Application Documentation for the Proposed Mixed Use Development at N° 56-60 Burns Bay Road Lane Cove meets all the access requirements in accordance with the Relevant Codes, Disability Discrimination Act 1992 (DDA), Premises Standards (PS), Building Code of Australia (NCC), Lane Cove Council and the Australian Standards 1428 series design relating to the accessibility in housing and common areas for access and mobility for people with disabilities.

However more details are required at Construction Certificate Stage outlining the requirements under the relevant Australian Standards for general requirements for disability access as well as D3.1, D3.2, D3.3, D3.4, D3.5, D3.6, D3.8, D3.12, Part E3 and F2.4 of the Building Code of Australia 2016.



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'I cannot control the fact I have multiple sclerosis but what I can control is my attitude' George Saliba

#### Disclaimer

This Amended Access and Adaptability Report has been prepared at the request of a+ design group on behave of the Owner(s) of N° 56-60 Burns Bay Road Lane Cove NSW 2066 and does not absolve the client(s) of the requirements pursuant of the Disability Discrimination Act 1992 Cth.

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