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| 108589-Access-r2 | 23/11/17 | Description: | Access Assessment Report | |
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1 BASIS OF ASSESSMENT

1.1 Location

The building development, the subject of this report, is located at 88 Christie Street, St Leonards. The development is a mixed use building, comprising retail, commercial, community (library) and residential use. The development comprises two residential towers (comprising 637 units) and one commercial tower, which are connected by the commercial, retail and carpark parts at ground level and basement levels to form a single building. Vehicular access to the site is via Christie Street and the new Christie Lane (which is to be provided as part of the development).

1.2 Purpose

The purpose of this report is to assess the proposed building against the following documentation, to clearly outline those areas where compliance is not achieved and provide recommendations to upgrade such areas to achieve relevant compliance:

- The Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards);
- Building Code of Australia 2016, Volume One, Amendment 1 (BCA2016) – Part D3 and Clauses E3.6 and F2.4;
- Lane Cove Council's DCP
- Adaptable Housing Code AS4299:1995 (AS4299) – As required by DCP; and
- Applicable Australian Standards AS1428.1:2009, AS1428.4.1:2009 and AS2890.6:2009 – as called up in the BCA.

1.3 Limitations

This report is limited to an assessment of the access and amenity provisions for people with a disability against the provisions of the BCA2016 as outlined in 1.2 above. It is not an assessment of the proposal against all provisions of the BCA2016 and if this is required, a separate report will be necessary.

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

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

This report does not include, or imply compliance with:

- The Disability Discrimination Act (it cannot be guaranteed that that a complaint under the DDA will not be made, however should the building comply with BCA2016 and the Premises Standard then those responsible for the building cannot be subject to a successful complaint);
- BCA2016 Sections B, C, E, F, G, H, I, J, Parts D1 and D2 – refer to separate BCA report;
- Demolition Standards not referred to by the BCA2016;
- Work Health and Safety Act;
- Construction Safety Act;
- Requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Roads and Transport Authority, Local Council, ARTC, Department of Planning and the like; 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 provisions of BCA2016.

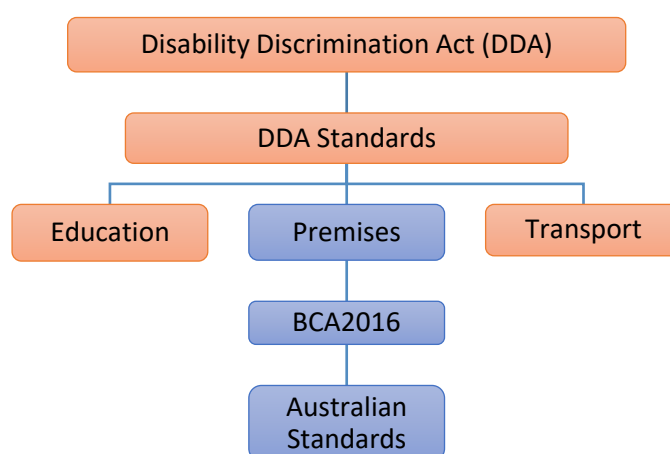
1.4 Federal Disability Discrimination Act (DDA)

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

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

The DDA applies nationally and is complaint based. While the BCA2016 is recognised as a design standard to satisfy certain aspects of the DDA, compliance with the BCA2016 and the referenced standards does not guarantee that a complaint will not be lodged.

The graph below indicates the current relationship of the BCA2016 to the DDA.



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. They do not apply to existing buildings that are not undergoing upgrade. They will 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 BCA2016 and reference a range of Australian Standards relating to access and other associated matters. The Premises Standards aim to provide certainty for the building industry in relation to meeting the requirements for access in new and upgraded buildings.

The “affected part” is the accessway from the principal pedestrian entrance to the area of the new works including the entry door at principal pedestrian entrance. The relevant provisions of the Premises Standards will apply to a new part of a building, and any “affected part” of a building, if the building is Class 1b, Class 2 (if a new and short term rent accommodation is available) and Classes 3, 5, 6, 7, 8, 9 or 10 buildings.

As a new Class 2, 5, 6, 7a, 7b & 9b building is included within this development, the Premises Standards will apply to this building. However, with the requirements of the Premises Standards mirroring the requirements of the BCA2016, compliance under BCA2016 will be equivalent to achieve compliance with the Premises Standards.

1.6 Design Quality of Residential Apartment Development (SEPP65)

A comprehensive review of the Design Quality of Residential Apartment Development (SEPP65) was finalised in 2015, this review included the overhaul of the Residential Flat Design Code into the Apartment Design Guide (ADG) and Livable Housing Design Guidelines (LHDG). For apartment development applications lodged after 19 June 2015 and determined after 17 July 2015, the ADG, along with the changes to SEPP65 **WILL apply** to the common areas and Sole-Occupancy-Units (SOU's) within this development.

The ADG is to be used in conjunction with SEPP65 which sets out the NSW Government's policy direction for residential apartment development in NSW.

SEPP65 will apply to the following:

- Developments for the purpose of a residential flat building, shop top housing or mixed use development with a residential accommodation component if it is a new building, a substantial redevelopment / refurbishment of an existing building or the conversion of an existing building.
- Building with at least 3 or more storeys – not including levels below ground level (existing) or levels that are less than 1.2 metres above ground level (existing) that provide for car parking.
- Building containing at least 4 or more dwellings (SOU's).

Note: If a particular development comprises of a development to which subclause (1) applies and other development, this Policy applies to the part of the development that is development to which subclause (1) applies and does not apply to the other part.

Livable Housing Guidelines (LHDG) promotes homes to be designed and built to meet the changing needs of occupants across their lifetime, incorporating key easy living features that make the building easier and safer to use for all occupants including people with disability, elderly, people with temporary injuries, and families with young children.

LHDG has become legally relevant once required by ADG and therefore part of the current legislation. The eight design core elements within the guidelines are to be assessed and provided from an early stage of the development. However, the design element describes in these guidelines should only be applied to the parts of the building classes not covered by the Disability Standards and NCC (BCA216 Vol 1 and 2).

1.7 Design Documentation

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

2 BUILDING DESCRIPTION

For the purposes of the BCA2016 and Access Code for Buildings (Premises Standards – Schedule 1) the development may be described as follows.

2.1 Classification

Under the provisions of Clause A3.2 of BCA2016, the building has been classified as follows:

Table 1. Building Classification

| Class | Level | Description |
|-------|--|--|
| 2 | Part ground floor, part level 1 & Towers 1 & 2 levels 2 to 47 | Residential parts (including ground floor lobbies connected by void) |
| 5 | Part ground floor, part level 1 & Tower 3 levels 1 to 12 | Commercial |
| 6 | Part basement level 1, part lower ground floor & part ground floor | Retail |
| 7a | Part basement level 1 & basement levels 2 to 10 | Carpark |
| 7b | Part basement level 1 & part basement level 10 | Storage areas and waste rooms |
| 9b | Part ground floor | Library |
| 10b | Part level 26 in Tower 2 | Swimming pool |

2.2 Areas Required to be Accessible

Under the provisions of Clause D3.1 of BCA2016, the following areas of the building are required to be accessible, other than where exempted by Clause D3.4:

Table 2. Areas Required to be Accessible

| Level | Area / Room | Description |
|--|-----------------------------|--|
| Part ground floor, part level 1 & Towers 1 & 2 levels 2 to 47 | Class 2 - residential parts | Common areas of the residential levels |
| Part ground floor, part level 1 & Tower 3 levels 1 to 12 | Class 5 - office | To and within all areas normally used by the occupants |
| Part basement level 1, part lower ground floor & part ground floor | Class 6 - retail | To and within all areas normally used by the occupants |
| Part basement level 1 & basement levels 2 to 6 | Class 7a - carpark | To and within any level containing accessible car parking spaces |
| Part basement level 1 | Class 7b - storage | To and within all areas normally used by the occupants |
| Part ground floor | Class 9b - library | To and within all areas normally used by the occupants |
| Part level 26 in Tower 2 | Class 10b – swimming pool | To and into the swimming pool |

2.3 Flexible SOU's

Within the 637 sole-occupancy units (SOUs) provided within the plans, the following SOUs are required to maintain accessible features in accordance with the Council DCP and SEPP65 accessible design requirements.

Table 3. Flexible SOU's

| Description | Location | SOU's |
|-----------------|---|--|
| Adaptable SOU's | <p>The adaptable unit plans indicate there are 64 adaptable units contained within Towers 1 & 2 in the following mix:</p> <p>T1 2 Bed = 45 T1 3 Bed = 5 T2 2 Bed = 14</p> | <p>Tower 1, 2-Bed Adaptable units: 10105, 10205, 10305, 10405, 10505, 10605, 10705, 10805, 10905, 11005, 11105, 11205, 11305, 11405, 11505, 11605, 11705, 11805, 11905, 12005, 12105, 12205, 12305, 12405, 12505, 12605, 12705, 12805, 12905, 13005, 13105, 13205, 13305, 13405, 13505, 13605, 13705, 13805, 13905, 14005, 14105, 14205, 14305, 14405, 14505.</p> <p>(it is noted that the above units are also livable units)</p> <p>Tower 1, 3-Bed Adaptable units: 13301, 13401, 13501, 13601 & 13701</p> <p>Tower 2, 2 Bed Adaptable units: 20211, 20201, 20311, 20301, 20411, 20401, 20511, 20501, 20506, 20611, 20601, 20905, 21105, 21305.</p> |
| Livable SOU's | <p>The livable unit plans indicate there are 128 livable units contained within Towers 1 & 2 in the following mix:</p> <p>T1 2 Bed (adpt) = 45 T1 2 Bed = 73 T2 1 Bed = 5 T2 2 Bed = 5</p> <p>The 45 Tower 1, 2 bed 1XX05 adaptable units also incorporate the required livable features.</p> | <p>Tower 1 2-Bed Livable (and adaptable) units (45): 10105, 10205, 10305, 10405, 10505, 10605, 10705, 10805, 10905, 11005, 11105, 11205, 11305, 11405, 11505, 11605, 11705, 11805, 11905, 12005, 12105, 12205, 12305, 12405, 12505, 12605, 12705, 12805, 12905, 13005, 13105, 13205, 13305, 13405, 13505, 13605, 13705, 13805, 13905, 14005, 14105, 14205, 14305, 14405, 14505,</p> <p>Tower 1, 2-Bed Livable units (73): 10103, 10104, 10203, 10204, 10303, 10304, 10403, 10404, 10503, 10504, 10603, 10604, 10703, 10704, 10803, 10804, 10903, 10904, 11103, 11104, 11203, 11204, 11303, 11304, 11403, 11404, 11503, 11504, 11603, 11604, 11703, 11704, 11803, 11804, 11903, 11904, 12003, 12004, 12103, 12104, 12203, 12204, 12303, 12304, 12403, 12404, 12503, 12504, 12603, 12604, 12703, 12704, 12803, 12804, 1903, 13003, 13103, 13203, 13303, 13403,</p> |

| | | |
|-----------------|----------------------------|---|
| | | <p>13503, 13603, 13703, 13803, 13903, 14003, 14203, 14303, 14403, 14503</p> <p>Tower 2, 1-Bed Livable units (5): 20209, 20309, 20409, 20509, 20609</p> <p>Tower 2, 2-Bed Livable units (5): 20406, 20804, 21004, 21204, 21404</p> |
| Visitable SOU's | As per the adaptable units | Adaptable SOU's are Visitable SOU's – no additional ones required by DCP. |

3 ACCESS REQUIREMENTS FOR PEOPLE WITH DISABILITIES

3.1 Introduction

The table below is a summary of all the individual elements that relate directly to the ability of a person with a disability to access all the portions of the building required to be accessible as outlined in Part 2 of this report.

Accessibility has been assessed against the relevant portions of the BCA2016, Access Code for Buildings, SEPP65 and the related Australian Standards for each item listed below.

Compliance has been indicated by using the following symbols:

Table 4. Legend of Symbols

| Symbol | Description |
|--------|--|
| ✓ | Compliance is achieved, and no further information is required. |
| ✓ | Specific details are not provided, but compliance can be readily achieved. |
| ✗ | From the documentation provided, compliance is not achieved. |

3.2 Council's Development Control Plan Requirements (DCP)

Lane Cove Council DCP 2010 provides Council's planning controls on the provision of Accessibility / Adaptability / Universal Design under Parts D & F of that Plan.

The relevant Controls for Accessibility Parts D & F of the DCP are as follows:

Table 5. Controls for Accessibility

| Item No. | Control | Comment | Compliance |
|----------|---|---|--|
| 1. | <u>Part D - 1.11</u> Any new development must comply with Australian Standards AS 1428 Design for Access and Mobility, AS 4299 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. | Assessment of these Australian Standards requirements are contained within this report. | Refer to Adaptable Housing assessment in Part 3.6 & BCA assessment in Part 3.6 of Report |
| 2. | <u>Part D - 1.12</u> Accessible and well sign-posted toilet facilities complying with AS 1428 shall be provided in all developments containing 10 or more shops or more than 500m ² of retail floor space | Accessible sanitary facilities are provided as required. | ✓ |
| 3. | <u>Part D – 5.7</u> Provide a minimum 10% of dwellings as adaptable housing. | The minimum requirement of 10% adaptable units has been met. | Refer to Adaptable Housing assessment in Part 3.5 of Report |

| Item No. | Control | Comment | Compliance |
|----------|--|--|------------|
| 4. | <u>Part D – 5.7</u> Design common corridors with a minimum width of 2m to be accessible and facilitate movement. | Corridors are less than 2m in width however are capable of full compliance with the dimensional requirements, including passing and turning space requirements of BCA Part D3. | ✗ |
| 5. | <u>Part F – 3.3 Provision no. 1</u> Developments on public and / or private properties must provide and maintain accessible links and paths of travel between BCA Class 2 to Class 10 buildings and to adjacent public spaces or pedestrian networks. | Level access is provided from the site to the adjoining public spaces and civic plaza. | ✓ |
| 6. | <u>Part F – 3.3 Provision no. 3</u> Public spaces are to have features as per AS1428.2, such as pathways, tables, seating, lighting, passing spaces, drinking fountains, rubbish bins, traversable play areas, etc. | Compliance is readily achievable. | ✓ |
| 7. | <u>Part F – 3.5 Adaptable and Visitable Housing</u> (residential flats and dual occupancies) | Advice received from consultant planner is that this section is superseded by Part D of the DCP for Mixed Use Development. | - |
| 8. | <u>Part F – 3.7</u> ATM's are to be installed in accordance with the requirements of AS3769-1990. | Compliance readily achievable. | ✓ |
| 9. | <u>Part F – 3.8 Provision 3</u> 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. | Compliance readily achievable. | ✓ |
| 10. | <u>Part R – 2.8 Disabled Parking Provision</u> Disabled parking spaces must be built in accordance with AS/NZS 2890.6:2009 Parking facilities—Off-street parking or people with disabilities. | The plans indicate the spaces will comply. | ✓ |
| 11. | <u>Part R – Table 2 Car parking Rates</u> | To be reviewed by Traffic Consultant. | - |

3.3 Apartment Design Guide Requirements (ADG / SEPP65)

A comprehensive review of SEPP65 was finalised in 2015, this review included the overhaul of the Residential Flat Design Code into the Apartment Design Guide (ADG) and Livable Housing Design Guideline (LHDG). For apartment development applications lodged after 19 June 2015 and determined after 17 July 2015, the ADG, along with the changes to SEPP65 will apply.

The SEPP 65 Apartment Design Code requires the following in relation to adaptability / accessibility within a residential flat building:

1. Access, entries and pathways are accessible and easy to identify. Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces (page 67).
 - (a) Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces.
 - (b) Minimise level changes along pathways and entries on ground floor and underground car parks.
 - (c) Steps and ramps should be integrated into the overall building and landscape design.
 - (d) For large developments “way finding” maps should be provided to assist visitors and residents.
 - (e) For large developments electronic access and audio/video intercom should be provided to manage access.
2. Street frontage activity is maximised where ground floor apartments are located. Direct street access should be provided to ground floor apartments (page 109).
3. Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline’s silver level universal design features. Note: Universal design is different to adaptable housing which is governed by AS4299 (page 119).
4. A variety of apartments with adaptable designs in accordance with the relevant council policy are provided including the following design solutions (page 119):
 - (a) Convenient access to communal and public areas
 - (b) Minimal structural change and residential amenity loss when adapted.
 - (c) Larger car parking spaces for accessibility.

Outlined below is a detailed assessment of the proposal against the relevant provisions of the ADG / SEPP65, with reference to the requirements as numbered above:

Table 6. ADG Assessment

| Item | Design Element | Comment | Compliance |
|------|--|---|------------|
| 1. | Access, entries and pathways are accessible and easy to identify. | Accessible pathways to / from the street frontages, basement carparks and Civic Plaza can easily be achieved. | ✓ |
| 2. | Street frontage activity is maximised where ground floor apartments are located | Not applicable – there are no ground floor apartments within the development | NA |
| 3. | 20% of Livable Housing Design Guidelines (LHDG) silver level universal design benchmark to be included in the development. | The plans indicate compliance with the required number of Livable housing units. | ✓ |

| | | | |
|----|---|---|---|
| 4. | A variety of apartments with adaptable designs are provided | Adaptable apartments have been provided over a variety of 2 and 3 bedroom apartment designs with no structural changes required for adaption. Each apartment has convenient access to communal and public areas. Accessible car parking spaces have been provided for those adaptable units allocated with a car space. | ✓ |
|----|---|---|---|

3.4 Livable Housing Design Guidelines Requirements (LHDG / SEPP65).

LHDG universal design features are required for Class 2 buildings and applicable to the parts of the building class not covered by the Disability Standards and BCA2016 (Vol. 1 and 2).

The new ADG / SEPP65 is applicable for development applications lodged from 17th of July 2015 which requires a benchmark of 20% of units to be designed under the LHDG “silver level” universal design requirements. A total of 129 SOU's are to include LHDG requirements in compliance with the 20% benchmark according ADG / SEPP65.

Currently, 132 SOU's have been identified as Livable therefore assessed as follows:

Table 7. LHDG Assessment

| Item | Design Element | Comment | Compliance |
|-----------|--|--|------------|
| 1. | DWELLING (SOU) ACCESS | | |
| | Safe and continuous pathway from the boundary or carpark (1000mm clear width, even, firm and slip resistance surface, 1:14 max. cross fall). | Not applicable – common areas are covered by the BCA | - |
| | Maximum pathway slope of 1:14. Ramps (1:14) to have landings at 9m max. and walkways (1:20) with landings at 15mm max. | Not applicable – common areas are covered by the BCA | - |
| | Step-free path of travel | Not applicable – common areas are covered by the BCA | - |
| | Garages forming part of the dwelling access to be 3200x 5400mm min. | Not applicable – common areas are covered by the BCA | - |
| | Provide even, firm and slip resistant surface. | Not applicable – common areas are covered by the BCA | - |
| | Provide 1:40 max. level surface (1:33 max. asphalt). | Not applicable – common areas are covered by the BCA | - |
| | Step ramps allowed for 190mm rise max. (1:10 gradient, 1000mm clear width, and 1900mm length max., 1200mm landing length) | Not applicable – common areas are covered by the BCA | - |
| 2. | DWELLING (SOU) ENTRANCE | | |
| | Provide 820mm min. clear door width opening | SOU designs show minimum 820mm clear door openings. | ✓ |

| | | | |
|-----------|---|--|---|
| | Ensure a level (step-free) transition. | SOU's show a "step free" entrance. | ✓ |
| | Ensure 5mm max. vertical tolerance between bevelled abutting surfaces. | SOU's show level entrance. Flooring to comply with this requirement, achieved at construction stage. | ✓ |
| | Reasonable shelter from the weather. | Not applicable | - |
| | Provide 1200x1200mm level landings on the arrival side of the entry doors. | Not applicable – common areas are covered by the BCA | - |
| | "Ramped threshold" (Fig 1b) allowed between 5-56mm height change. | Not applicable – common areas are covered by the BCA | - |
| | Level & "step-free" entrance connected to the "safe and continuous pathway". | Not applicable – common areas are covered by the BCA | - |
| | Waterproofing and termite management at entry door (as per NCC). | Not applicable – common areas are covered by the BCA | - |
| 3. | INTERNAL DOOR AND CORRIDORS | | |
| | 820mm clear door opening at entry level rooms (living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment). | Internal doors have 820mm min. clear width. | ✓ |
| | 5mm max. vertical tolerance between bevelled abutting surfaces. | To be achieved at construction stage. | ✓ |
| | 1000mm internal corridors at entry level rooms (living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment). | Internal corridors have 1000mm clear width. | ✓ |
| 4. | TOILET | | |
| | Toilet to be on entry level (ground floor). | Toilet at entry level is provided. | ✓ |
| | If WC is located in a separate room. WC pan circulation space to be 900x1200mm front if WC (door not to encroach) (Fig 3a). | WC circulation space is achieved. | ✓ |
| | If WC is located within a bathroom. WC pan circulation space to be in the corner of the room to enable installation of grabrails (door not to encroach) (Fig 3b). | The toilet in the livable unit designs is located in a corner of the room, as required. | ✓ |
| 5. | SHOWER | | |
| | Bathroom to have slip resistant and hobless shower recess (portable shower screens allowed) | SOU's to be provided with a hobless shower recess. Shower screen can be provided, however to be portable only. | ✓ |

| | | | |
|-----------|--|--|---|
| | | Test results and further details to be provided at construction stage. | |
| | Shower recess located in a room corner to enable the installation of grabrails. | Shower recess provided in the corner. | ✓ |
| 6. | REINFORCEMENT ON WALLS | | |
| | Walls to be constructed of solid masonry or concrete, otherwise to be reinforced. | Details to be provided at construction stage. | ✓ |
| | For WC, the reinforcement to be 25mm thick noggings (Fig 6a), or 12mm thick sheeting (Fig 6b) | Details to be provided at construction stage. | ✓ |
| | For baths, reinforcement to be 25mm thick noggings (Fig 7a), or 12mm thick sheeting (Fig 7b) | Details to be provided at construction stage. | ✓ |
| | For showers, reinforcement to be 25mm thick noggings (Fig 8a), or 12mm thick sheeting (Fig 8b) | Details to be provided at construction stage. | ✓ |
| 7. | INTERNAL STAIRS | | |
| | A continuous stairway handrail where there is a rise of more than 1m. | Not applicable | - |

Note: The design elements describes in these guidelines should only be applied to the parts of the building classes not covered by the Disability Standards and NCC (BCA2016 Vol 1 and 2).

3.5 Adaptable Housing Code Assessment Summary (AS4299)

The meaning of “adaptability” is the design of a residential SOU with accessibility provisions from the pre-adaptation stage therefore they can be easily modified at post-adaptation stage with a minimum cost and work involved for the owner. Additionally, the adaptable SOU is to be “visitable” which means an SOU capable to allow a visitor in wheelchair to use the front door, the living room and a visitable toilet from the pre-adaptation stage.

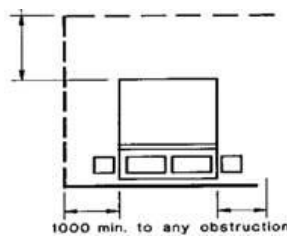
Under Part D of Council’s DCP, a total of 10% (65) adaptable units are required in the development. The adaptable unit is required to comply with the requirements of AS4299 for Class C (essential items only). The following table details the requirements for the design of a Class C adaptable unit:

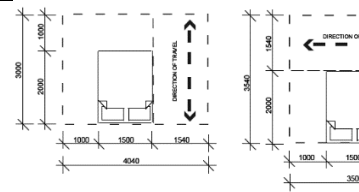
Table 8. Class C

| Item | Room/Item | Clause | Comment | Compliance |
|---|--|--------|--|------------|
| DRAWINGS | | | | |
| 1 | Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages | 2.3 | Pre and post adaption plans provided. | ✓ |
| SITING | | | | |
| 3 | A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1 | 3.3.2 | An accessway (walkways and ramps) from the street frontage will be provided. Access will be provided from the basement carpark to all SOU's via a shared lift. | ✓ |
| LETTERBOXES IN ESTATE DEVELOPMENTS | | | | |

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|----------------------------------|--|-------|--|---|
| 11 | Letterboxes to be on hard standing area connected to accessible pathway. | 3.8 | Letterboxes for the residential units are located within the residential lobby areas. | ✓ |
| PRIVATE CAR ACCOMMODATION | | | | |
| 14 | Car parking space or garage min area 6.0x3.8m | 3.7.2 | No garages provided within this development. The adaptable car spaces are provided within basement car park. The sizing of the spaces for the adaptable units and the accessible visitor's car parking spaces are suitable with AS2890.6 as per DCP requirement (2400x5400mm). Care is to be taken to ensure that a clear height of 2.5m over the car parking space and 2.2m leading to it will be achieved. This is to be clarified at the CC stage of the development. | ✓ |
| ACCESSIBLE ENTRY | | | | |
| 20 | Accessible entry | 4.3.1 | The entry door to the adaptable unit is to have a minimum clear opening of 850mm and comply with door circulation spaces under AS1428.1. It must be ensured that the entry door is not recessed more than 300 mm, so as not to obstruct access to the door handle. Minor amendment is required to the design. | ✗ |
| 21 | Accessible entry to be level (i.e. max. 1:40 slope) | 4.3.2 | Units are accessed from an external level common walkway. | ✓ |
| 23 | Threshold to be low-level | 4.3.2 | Public corridors assumed to be flat. | ✓ |
| 24 | Landing to enable wheelchair manoeuvrability | 4.3.2 | The SOU's entry doors are internal to the building. | ✓ |
| 25 | Accessible entry door to have 850mm minimum clearance | 4.3.1 | The entry door to the adaptable unit is to have a minimum clear opening of 850mm and comply with door circulation spaces under AS1428.1. | ✓ |
| 27 | Door lever handles and hardware to AS1428.1 | 4.3.4 | Door handles are to comply with AS1428.1-2009 at construction stage. | ✓ |
| INTERIOR GENERAL | | | | |
| 32 | Internal doors to have 820mm min. clearance | 4.3.3 | Not all doorways are currently detailed on the plans. Design to comply at CC stage. | ✓ |

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| 33 | Internal corridors width of 1000mm min. | 4.3.7 | Internal corridors within the unit are to have a minimum width of 1000mm. Ensure this is provided clear of skirting. Further details to be provided at CC stage. | ✓ |
| 34 | Provision for compliance with AS1428.1 for door approaches | 4.3.7 | Provision is made for door circulation to comply with AS1428.1-2009. | ✓ |
| LIVING ROOM & DINING ROOM | | | | |
| 36 | Provision for circulation space of 2250mm min. diameter | 4.7.1 | Provision for 2250 mm circulation space is demonstrated in the post-adapted design. | ✓ |
| 38 | Telephone adjacent to GPO | 4.7.4 | Telephone outlet adjacent to GPO in living/dining area to be indicated on post adaption plan at CC stage. | ✓ |
| 41 | Potential illumination level min. 300Lux | 4.10 | Lighting to comply at CC stage | ✓ |
| KITCHEN | | | | |
| 42 | Minimum width 2.7m (1550mm clear between benches) | 4.5.2 | 1550mm min. clearance is provided in front of sink and appliances. | ✓ |
| 43 | Provision for circulation at doors to comply with AS1428.1 | 4.5.1 | There are no kitchen doors proposed. | - |
| 44 | Provision for benches planned to include at least one work surface of 800mm length, adjustable in height from 750 mm to 850mm or replaceable. Refer to Figure 4.8. | 4.5.5 | To be updated post adaption, with no works required at this stage. | ✓ |
| 45 | Refrigerator adjacent to work surface | 4.5.5 | An 800 mm worksurface is indicated adjacent to the refrigerator on each of the adaptable unit designs | ✓ |
| 46 | Kitchen sink adjustable to heights from 750mm to 850mm or replaceable | 4.5.6 | To be updated post adaption, with no works required at this stage. | ✓ |
| 47 | Kitchen sink bowl max. 150mm deep | 4.5.6 | To be updated post adaption, with no works required at this stage. | ✓ |
| 48 | Tap set capstan or lever handles or lever mixer | 4.5.6(e) | To be updated post adaption, with no works required at this stage. | ✓ |
| 49 | Tap set located within 300mm of front of sink | 4.5.6(e) | To be updated post adaption, with no works required at this stage.. | ✓ |
| 51 | Cook tops to include either front or side controls with raised cross bars | 4.5.7 | To be updated post adaption, with no works required at this stage. | ✓ |
| 52 | Cook tops to include isolating switch | 4.5.7 | Cook tops to be provisioned with isolating switches or gas stop valves that can be easily and safely operated with the cook top is in use. | ✓ |

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| | | | Further details to be provided at CC stage. | |
| 53 | Work surface min. 800mm length adjacent to cook top at same height | 4.5.7 | An 800 mm worksurface next to the cook top is indicated on the plans. | ✓ |
| 54 | Oven located adjacent to an adjustable height or replaceable work surface | 4.5.8 | An 800 mm worksurface next to the oven is indicated on the plans. | ✓ |
| 59 | GPOs to comply with AS 1428.1. At least one double GPO within 300mm of front of work surface | 4.5.11 | GPOs to comply with AS1428.1. At least one double GPO within 300mm of front of work surface. | ✓ |
| 60 | GPO for refrigerator to be easily reachable when the refrigerator is in its operating position | 4.5.11 | GPO for refrigerator to be easily reachable when the refrigerator is in its operating position. | ✓ |
| 61 | Slip-resistant floor surface | 4.5.4 | Floors to be slip resistant to comply with AS3661.1. Certificate to be provided at CC stage. Note: AS4586:2013/HB 198:2014 is satisfactory. | ✓ |
| MAIN BEDROOM | | | | |
| 62 | At least one bedroom of area sufficient to accommodate queen size bed, wardrobe and circulation space requirements of AS1428.2 | 4.6.1 | <p>Adaptable bedrooms cater for a queen size bed with a turning bay at base overlapping with circulation space at doorway, and clearances around the bed of 1000mm min.</p> <p>Note: Queen size bed is 1520mm W x 2030mm L.</p> <p>Note: Turning bays at bed base according to AS4299:1995 or on the side of the bed closest to the door approach (in the direction of travel) according to LHDG 2015 (Design Element 11) are considered suitable – see figures below.</p>  <p>AS4299:1995 (AS1428.2:1992)</p> | ✓ |

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|-----------------|---|----------|--|---|
| | | |  <p>LHDG 2017</p> | |
| BATHROOM | | | | |
| 75 | Provision for bathroom area to comply with AS1428.1 | 4.4.1 | <p>The bathroom + shower area in the post-adaption stage is to comply with Clause 15 of AS1428.1-2009.</p> <p>Note: Extra capped-off plumbing services to be provided as fixture relocation is required at post-adaptation stage. It is recommended to arrange fixtures in post-adaptation location where possible.</p> <p>The following compliance issues are noted:</p> <ul style="list-style-type: none"> - Unit 2XX01 - ensure the 390-400 mm shower seat is clear of the 1900 mm wide pan circulation. The bathroom must be no less than 2290 mm wide to achieve compliance. - Unit 2XX11 – shower is shown in area of doorway. | ✗ |
| 76 | Slip-resistant floor surface | 4.4.2 | Floors to be slip resistant to comply with AS3661.1. Certificate to be provided at CC stage. Note: AS4586:2013/HB 198:2014 is satisfactory. | ✓ |
| 77 | Shower recess-no hob. Minimum size 1160x1100mm to comply with AS1428.1 (Refer Figures 4.6 and 4.7) | 4.4.4(f) | Shower to be hob-less. The post adaption plans indicate AS1428.1 compliant sizes and fit-out. | ✓ |
| 78 | Shower area waterproofed to AS3740 with floor to fall to waste | 4.4.4(f) | Entire bathroom to comply with AS3740. | ✓ |
| 79 | Recessed soap holder | 4.4.4(f) | Soap holder to be recessed. | ✓ |
| 80 | Shower taps positioned for easy reach to access side of shower sliding track | 4.4.4(f) | Shower head and taps to be located at a height and clearance compliant to AS1428.1. | ✓ |
| 82 | Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook | 4.4.4(h) | Provisioning to be provided. | ✓ |

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| | (plumbing and wall – strengthening provision) | | is required at post-adaptation stage, including 700mm height shower outlet with back-flow retention valve. | |
| 83 | Provision for grabrail in shower (Refer to Figure 4.7) to comply with AS1428.1 | 4.4.4(h) | Provisioning to be provided. | ✓ |
| 86 | Tap sets to be capstan or lever handles with single outlet | 4.4.4(c) | Taps may be updated post adaption, with no works required at this stage. | ✓ |
| 88 | Provision for washbasin with clearances to comply with AS1428.1 | 4.4.4(g) | Taps may be updated post adaption, with no works required at this stage. | ✓ |
| 90 | Double GPO beside mirror | 4.4.4(d) | Double GPO to be provided beside mirror. | ✓ |
| TOILET | | | | |
| 92 | Provision of either “visitable toilet” or accessible toilet | 4.4.3 | The adaptable units are provided at pre-adaptation stage with a “visitable” toilet with 900x1250mm clearance in front of pan clear of the door swing. | ✓ |
| 93 | Provision to comply with AS1428.1 | 4.4.1 | The bathroom area is to comply with Clause 15 of AS1428.1-2009 in relation to dimensions of fixtures, location and circulation spaces. | ✓ |
| 94 | Location of WC pan at correct distance from fixed walls | 4.4.3 | Extra capped-off plumbing services to be provided as fixture relocation is required | ✓ |
| 95 | Provision for grab rail zone (Refer Figure 4.6) | 4.4.4(h) | To be shown in the post-adaptation plans. Further details to be provided at CC stage. | ✓ |
| 96 | Slip resistant floor surface (vitreous tiles or similar) | 4.4.2 | Floors to be slip resistant to comply with AS3661.1. Certificate to be provided at CC stage. Note: AS4586:2013/HB 198:2014 is satisfactory. | ✓ |
| LAUNDRY | | | | |
| 98 | Circulation at doors to comply with AS 1428.1 | 4.8 | Not applicable - no laundry room included within this development | - |
| 99 | Provision for adequate circulation space in front of or beside appliances (min. 1550x1550mm) | 4.8 | 1550 mm turning space is provided in front of laundries. | ✓ |
| 100 | Provision for automatic washing machine | 4.8(e) | Provision made for washing machine | ✓ |
| 102 | Where clothes line is provided, an accessible path of travel to this | 4.8(a) | Not applicable | - |
| 105 | Double GPO | 4.8(g) | Double GPO to be provided. | ✓ |
| 108 | Slip-resistant floor surface | 4.9.1 | Slip-resistance floor surface to be provided. | ✓ |

| DOOR LOCKS | | | | |
|------------|--|-------|---|---|
| 110 | Door hardware operable with one hand, located 900–1100mm above floor | 4.3.4 | Door hardware operable with one hand, located 900–1100mm above floor. | ✓ |

3.6 Building Code of Australia 2016 Assessment Summary (BCA2016)

Table 9. BCA2016 Summary

| CLAUSE | | COMMENT | STATUS |
|--|--------------------------------------|---|-----------------------|
| SECTION D: ACCESS AND EGRESS | | | |
| PART D3 - ACCESS FOR PEOPLE WITH A DISABILITY | | | |
| D3.0 | Deemed To Satisfy Provisions | Informational | Noted |
| D3.1 | General Building Access Requirements | <p>Access complying with AS 1428.1-2009 must be provided from the principal pedestrian entrance(s):</p> <p><u>Class 2–</u></p> <ul style="list-style-type: none"> to and within not less than 1 of each type of room or space for use in common by the residents; and to the entrance doorway of each sole-occupancy unit. <p><u>Class 5, 6 & 9b</u></p> <ul style="list-style-type: none"> to and within all areas normally used by the occupants. <p><u>Class 7a–</u></p> <ul style="list-style-type: none"> to and within any level containing accessible car parking spaces. <p><u>Class 10b–</u></p> <ul style="list-style-type: none"> to and within the swimming pool with a total perimeter greater than 40 m. <p>Door circulation space at the door to the Manager's office at Ground Level must comply with Figure 31 of AS 1428.1-2009. A column currently encroaches on the clear space required to the latch side of the doorway.</p> | <p>Noted</p> <p>x</p> |
| D3.2 | Access to Buildings | <ul style="list-style-type: none"> Access complying with AS 1428.1-2009 must be provided to the building from the main points of pedestrian entry at the allotment boundary. Required accessible car parking on the allotment Compliant access must be provided through the main pedestrian entrance and not less than 50% of all pedestrian entrances; and In a building with a total floor area of more than 500m², a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance. Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm. | x |

| SECTION D: ACCESS AND EGRESS | | |
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| | The double doors on the western side of the G04 restaurant tenancy at Ground Level do not provide at least one leaf with 850 mm unobstructed width. | |
| D3.3 | <p>Parts of Buildings to be Accessible</p> <ul style="list-style-type: none"> Walkways and ramps must comply with clause 10 of AS 1428.1-2009. The design of the ramp access to the pool area at level 26 is to be further detailed at CC stage to ensure ramp handrails do not protrude into the transverse path of travel. Non-fire-isolated stairways must comply with Clause 11 of AS 1428.1-2009. Fire-isolated stairways must comply with clause 11 (f) & (g) of AS 1428.1-2009. Accessways must have passing spaces (1800 mm x 2000 mm) complying with AS 1428.1-2009 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available. Accessways must have turning spaces (1540 mm x 2070 mm) within 2m of the end of the accessway and at maximum 20 m intervals along the accessway. Note: Turning spaces must be provided clear of fixtures and fittings such as skirtings, general purpose outlets (GPOs), fire extinguishers etc. An intersection of accessways satisfies the spatial requirements for a passing and turning space. <p>Note: The Access to Premises Standards do not provide the concessions provided in sub-clauses (g) and (h) in this clause, hence compliance with the Access to Premises Standards will require the floor covering in the accessible areas to strictly comply with Clause 7.4.1(a) of AS1428.1-2009.</p> | ✓ |
| D3.4 | <p>Exemptions</p> <p>Informational – The following areas are not required to be accessible:</p> <ul style="list-style-type: none"> an area where access would be inappropriate because of the particular purpose for which the area is used. an area that would pose a health or safety risk for people with a disability. any path of travel providing access only to an exempted area. | - |
| D3.5 | <p>Accessible Car Parking</p> <p>Accessible car spaces must comply with AS 2890.6-2009 including signage requirements and clearances above the spaces and to and from the spaces from the carpark entry and exit.</p> <p>It is noted that a sufficient number accessible car parking spaces have been indicated on the</p> | ✓ |

| SECTION D: ACCESS AND EGRESS | | |
|------------------------------|--|---|
| | <p>plans to satisfy the following rates required by Table D3.5:</p> <p><u>Class 5</u></p> <p>1 space for every 100 car parking spaces or part thereof.</p> <p><u>Class 6</u></p> <p>1 space for every 50 car parking spaces or part thereof.</p> | |
| D3.6 | Signage | <ul style="list-style-type: none"> • Braille and tactile signage complying with Specification D3.6 and incorporating the international symbol of access, or deafness as appropriate, must identify each: <ul style="list-style-type: none"> – sanitary facility; and – any space with a hearing augmentation system; and – identify each door required by E4.5 to be provided with an exit sign and state “Exit” and “Level” and either: <ul style="list-style-type: none"> (aa) the floor level number; or (bb) a floor level descriptor; or (cc) a combination of (aa) and (bb) • 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 – <ul style="list-style-type: none"> – the type of hearing augmentation; and – the area covered within the room; and – if receivers are being used and where the receivers can be obtained. • Signage to accessible sanitary facilities must identify if the facility is suitable for left or right handed use; and • Signage to identify an ambulant accessible facility in accordance with AS 1428.1 must be located on the door of the facility. • 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; • Where a bank of facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in |

| SECTION D: ACCESS AND EGRESS | | |
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| | accordance with AS 1428.1 must be places at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex facility. | |
| D3.7 Hearing Augmentation | <p>(a) A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—</p> <p>(i) in a room in a Class 9b building; or</p> <p>(ii) in conference room or meeting room; or</p> <p>(iii) at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.</p> | ✓ |
| D3.8 Tactile Indicators | <p>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—</p> <p>(i) a stairway, other than a fire-isolated stairway; and</p> <p>(ii) an escalator; and</p> <p>(iii) a passenger conveyor or moving walk; and</p> <p>(iv) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and</p> <p>(v) in the absence of a suitable barrier—</p> <p>(A) an overhead obstruction less than 2 m above floor level, other than a doorway; and</p> <p>(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,</p> <p>except for areas exempted by D3.4. (b)</p> <p>b) Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1.</p> | ✓ |
| D3.9 Wheelchair seating spaces in Class 9b Assembly Buildings | Not applicable | - |
| D3.10 Swimming Pools | <ul style="list-style-type: none"> Not less than 1 means of accessible water entry/exit in accordance with Specification D3.10 must be provided to the swimming pool. An accessible entry/exit must be by means of— (i) a fixed or movable ramp and an aquatic wheelchair; or | ✓ |

| SECTION D: ACCESS AND EGRESS | | |
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| | (ii) a zero depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or (iii) a platform swimming pool lift and an aquatic wheelchair; or (iv) a sling-style swimming pool lift. • Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS 1428.1. | |
| D3.11 | Ramps | A landing for a step ramp must not overlap a landing for another step ramp or ramp. ✓ |
| 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 AS 1428.1. ✓ |
| SPECIFICATION D3.6 – BRAILLE AND TACTILE SIGNS | | |
| 1. | Scope | Noted - |
| 2. | Location of Braille and Tactile Signs | The location of braille and tactile signs shall be in accordance with AS1428.1 and Specification D3.6. ✓ |
| 3. | Braille and Tactile Sign Specification | All accessible signage to comply with this clause and AS1428.1. Tactile characters to be raised in sentence case with matt finish. ✓ |
| 4. | Luminance-contrast | All accessible signage to comply with this clause and AS1428.1. The sign background to have at least 30% luminance contrast with the 5mm width border, tactile characters and braille. Luminance contrast to be measured on the location once installed. ✓ |
| 5. | Lighting | Braille and tactile signs to be appropriately illuminated, in compliance with this Clause and AS1428.1. The access pathway must have a minimum luminance contrast of 30%, in accordance with AS1428.1. ✓ |
| 6. | Braille | Braille must be in accordance with the criteria set out by the Australian Braille Authority. ✓ |

| SECTION E: SERVICES AND EQUIPMENT | | |
|-----------------------------------|------------------------------|---|
| PART E3 – LIFT INSTALLATIONS | | |
| E3.0 | Deemed-to-Satisfy Provisions | Noted - |
| E3.6 | Passenger Lifts | The passenger lifts must be one of the types specified in Table E3.6a, have accessible features in accordance with Table E3.6b, as follows: – Handrail complying with the provisions for a mandatory handrail in AS 1735.12. ✓ |

| SECTION E: SERVICES AND EQUIPMENT | | |
|-----------------------------------|---|--|
| | <ul style="list-style-type: none"> – Lift floor dimensions not less than 1400 mm wide by 1600 mm deep (lifts that travel more than 12m) – Lift floor dimensions not less than 1100 mm wide by 1400 mm deep (lifts that travel not more than 12m) – Minimum clear door opening complying with AS 1735.12. – Passenger protection system complying with AS1735.12. – Lift car and landing control buttons complying with AS 1735.12. – Lighting in accordance with AS 1735.12. – (a) Automatic audible information within the lift car to identify the level each time the car stops; and – (b) audible and visual indication at each lift landing to indicate the arrival of the lift car; and – (c) audible information and audible indication required by (a) and (b) is to be provided in a range of between 20–80 dB(A) at a maximum frequency of 1 500 Hz. – Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received. <p>Note: Platform lifts can be used up to 4m travel distance.</p> <p>Note: Stairway lifts are not allowed where is possible to install another type of passenger lift (e.g. unjustifiable hardship, heritage buildings)</p> | |

| SECTION F: HEALTH AND AMENITY | | | |
|---|---|---|---|
| PART F2 – SANITARY AND OTHER FACILITIES | | | |
| F2.0 | Deemed-to-Satisfy Provisions | Noted | - |
| F2.4 | Accessible Sanitary Facilities (including Table F2.4) | <p>In a building required to be accessible—</p> <p>(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and</p> <p>(b) accessible unisex showers must be provided in accordance with Table F2.4(b); and</p> <p>(c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex</p> | x |

| SECTION F: HEALTH AND AMENITY | | |
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| | <p>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</p> <p>(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</p> <p>(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</p> <p>(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</p> <p>(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and</p> <p>(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and</p> <p>(i) an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D3.3(f) to be provided with a passenger lift or ramp complying with AS 1428.1.</p> <p>Male and female ambulant toilets are currently not indicated within the end of trip facilities on Basement level 05.</p> | |

4 MATTERS FOR FURTHER CONSIDERATION

4.1 General

Assessment of the architectural design documentation against the Access Provisions of the BCA2016 & Council's DCP has revealed the following areas where compliance may require further consideration.

Note: Parts 3.2 to 3.6 of this report provide a detailed assessment of the proposal against all relevant deemed-to-Satisfy Provisions of the BCA2016 and Council's DCP. It is important that Parts 3.2 to 3.6 of this report 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.

4.2 Lane Cove Council DCP

4.2.1 Corridor widths

Section 5.7 of Council's DCP requires common corridors to have a minimum width of 2m to be accessible and facilitate movement. It is noted that the corridors in the design are less than 2m in width however are capable of full compliance with the dimensional requirements, including passing and turning space requirements of BCA Part D3.

It is recommended that an exemption be sought from Council for this requirement.

4.3 Adaptability (AS4299)

4.3.1 Adaptable unit entries

The entry door to the adaptable unit is to have a minimum clear opening of 850mm and comply with door circulation spaces under AS1428.1-2009.

It must be ensured that the entry door is not recessed more than 300 mm, so as not to obstruct access to the door handle. Minor amendment is required to the design.

4.3.2 Arrangement of fixtures in adaptable bathrooms

Extra capped-off plumbing services are to be provided at pre-adaption stage as relocation of fixtures will be required for post-adaptation. It is recommended to arrange fixtures in post-adaptation location from the beginning where possible.

Note: No waterproofing works are allowed at post adaptation stage due to high cost of works involved, therefore waterproofing and tiling works are to be provided from the outset.

4.3.3 Adaptable bathrooms

The bathroom + shower area in the post-adaption stage is to comply with Clause 15 of AS1428.1-2009.

The following compliance issues are noted:

- Unit 2XX01 - ensure the 390-400 mm shower seat is clear of the 1900 mm wide pan circulation. The bathroom must be no less than 2290 mm wide to achieve compliance.
- Unit 2XX11 – shower is shown in area of doorway.

4.4 Accessibility (BCA)

4.4.1 Turning spaces within internal corridors

Ensure turning spaces are provided within 2m of the end of the residential and commercial corridors. Turning spaces are to be no less than 1540 mm x 2070 mm and must be provided clear of fixtures including skirtings.

4.4.2 Accessible Toilets

Ensure the number of left and right hand unisex accessible toilets within Tower 3 are provided as evenly as possible. Currently all are right hand transfer facilities.

4.4.3 Access to Manager Office

Door circulation space at the door to the Manager's office at Ground Level must comply with Figure 31 of AS 1428.1-2009. A column currently encroaches on the clear space required to the latch side of the doorway.

4.4.4 Access to G04 tenancy

The double doors on the western side of the G04 restaurant tenancy at Ground Level do not provide at least one leaf with 850 mm unobstructed width.

4.4.5 Passenger lifts

In accordance with BCA Clause E3.6, all lifts that travel more than 12m must have lift floor dimensions not less than 1400 mm wide by 1600 mm deep. Compliance to be detailed in the construction stage plans.

4.4.6 Ambulant toilets

Male and female ambulant toilets are currently not indicated within the end of trip facilities on Basement level 05.

4.5 Design Certification

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

General

1. Tactile ground surface indicators will be installed at the top and bottom of stairways / ramps (other than fire isolated stairways / ramps); and where an overhead obstruction is less than 2 metres above the floor level. Tactile ground surface indicators will comply with Sections 1 and 2 of AS1428.4.1.
2. On an accessway where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights or glazing capable of being mistaken for a doorway or opening will be clearly marked and comply with Clause 6.6 of AS1428.1-2009. A solid non-transparent contrasting line not less than 75mm wide is to extend across the full width of the glazing panel. The lower edge of the contrasting line is to be located between 900-1000mm above the plane of the finished floor level. The contrasting line is to provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 metres of the glazing on the opposite side.
3. All doorways will have a minimum luminance contrast of 30% in accordance with Clause 13.1 of AS1428.1-2009.
4. Fixtures and fittings in accessible sanitary facilities will be provided and installed in accordance Clause 15 of AS1428.1-2009.
5. Fixtures and fittings in ambulant facilities will be provided and installed in accordance Clause 16 of AS1428.1-2009.
6. Walkways will comply with Clause 10 of AS1428.1-2009.
7. For the walkways, the floor or ground surface abutting the sides of the walkway will be firm and level of a different material to that of the walkway at the same level and follow the grade of the walkway and extend horizontally for a minimum of 600mm, or be provided with a kerb or kerb rail in accordance with Clause 10.2 of AS1428.1-2009.
8. Stairways will comply with Clause 11 of AS1428.1-2009.
9. The fire isolated stairs will comply with Clause 11.1(f) and (g) of AS1428.1-2009.
10. Handrails will comply with Clause 12 of AS1428.1-2009.
11. Grabrails will comply with Clause 17 of AS1428.1-2009.
12. Accessible car spaces will achieve compliant headroom clearances in accordance with Clause 2.4 of AS2890.6-2009.

13. Demarcation will be provided in the accessible car space and adjacent shared zone in accordance with Clause 3.1 and 3.2 of AS2890.6. Refer to Annexure B1 for a diagrammatic explanation.
14. Bollards will be provided in the shared disabled car space area in accordance with Clause 2.2.1(e) of AS2890.6-2009. Refer to Annexure B1 for a diagrammatic explanation.
15. Switches and power points will comply with Clause 14 of AS1428.1-2009.
16. Floor and ground floor surfaces on accessible paths and circulation spaces including the external areas will comply with Clause 7 of AS1428.1-2009. Any level difference over 3mm must be ramped according AS1428.1 Clause 10.5.
17. Braille and tactile signage will comply with BCA2016 Clause D3.6.
18. Signage will to comply with Clause 8 of AS1428.1-2009.
19. The passenger lifts will comply with BCA2016 Table E3.6b and AS1735.12.
20. The unobstructed height of a continuous accessible path of travel will be a minimum of 2000mm and 1980mm at doorways.
21. Door handles and controls will be in accordance with Clause 13.5 of AS1428.1-2009.

Adaptable Housing Units

22. All ground surfaces will be slip resistant to comply with HB197/AS4856.
23. The unit entry doors to the adaptable units will comply with the circulation spaces required under AS1428.2 in accordance with Clause 4.3.1 of AS4299.
24. Door hardware will be compliant with AS1428.1-2009 and all external doors will be keyed alike in accordance with Clause 4.3.4 of AS4299.
25. Internal door openings within the adaptable units will have a clear opening of 820mm with door circulation spaces complying with AS1428.1 in accordance with Clauses 4.3.3 and 4.3.7 respectively of AS4299.
26. A telephone outlet will be provided adjacent to GPO in living/dining area in accordance with Clause 4.7.4 of AS4299.
27. The kitchen cabinet design will allow for the removal of the cabinets under the sink and adjacent work surface in accordance with Clause 4.5.6 of AS4299.
28. Cook tops to be provisioned with isolating switches or gas stop valves that can be easily and safely operated with the cook top is in use in accordance with Clause 4.5.7 of AS4299.
29. GPO's will comply with AS 1428.1 with at least one double GPO provided within 300mm of front of work surface and a GPO for refrigerator will be easily reachable when the refrigerator is in its operating position in accordance with Clause 4.5.11 of AS4299.
30. The adaptable bathroom will be provisioned for the fit-out to comply with AS1428.1 in accordance with 4.4.1 of AS4299.
31. The shower of the adaptable bathroom will be hob-less in accordance with Clause 4.4.4(f) of AS4299.
32. The bathrooms will be waterproofed to comply with AS3740.
33. The soap holder will be recessed in accordance with Clause 4.4.4(f) of AS4299.
34. Shower heads and taps will be located at a height and clearance compliant with AS1428.1 in accordance with Clause 4.4.4(f) of AS4299.
35. Provision for the installation of all grabrails, shower hardware, and folding seat will be provided in the adaptable bathroom in accordance with Clause 4.4.4(h) of AS4299.
36. A double GPO will be provided beside the mirror in the adaptable bathroom in accordance with Clause 4.4.4(d) of AS4299.

37. Provision for the toilet to comply with AS1428.1, will be provided, including locating the pan in the correct position, and the provision for the installation of all grabrails in accordance with Clauses 4.4.1, 4.4.3 and 4.4.4(h) of AS4299.
38. A double GPO will be provided in the laundry, as will a shelf at a height of 1200mm maximum in accordance with Clause 4.8 of AS4299.
39. Lighting will be provided to the adaptable units in accordance with Clause 4.10 of AS4299.

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40. Entrance door to have 820mm min. clear door width opening and a level transition (5mm max. vertical tolerance where rounded).
41. All internal doors to have 820mm min. clear door opening at entry level rooms, 5mm max. vertical tolerance surface, and 1000mm min. internal corridors at entry level rooms.
42. Bathroom to have slip resistant and hobless shower recess (portable shower screens allowed)
43. Walls to bathroom to be constructed of solid masonry or concrete, otherwise to be reinforced (1100N min. withstand in all directions).
44. For WC, the reinforcement to be 25mm thick noggings (Fig 6a), or 12mm thick sheeting (Fig 6b)
45. For baths, reinforcement to be 25mm thick noggings (Fig 7a), or 12mm thick sheeting (Fig 7b)
46. For showers, reinforcement to be 25mm thick noggings (Fig 8a), or 12mm thick sheeting (Fig 8b)

5 STATEMENT OF COMPLIANCE

The design documentation as referred to in this report has been assessed against the applicable access provisions of the BCA2016 and Lane Cove Council's DCP 2010. It is considered that such documentation complies or is capable of complying (as outlined in Parts 3.2 to 3.6 of this Report) with those documents.

ANNEXURE A - DESIGN DOCUMENTATION

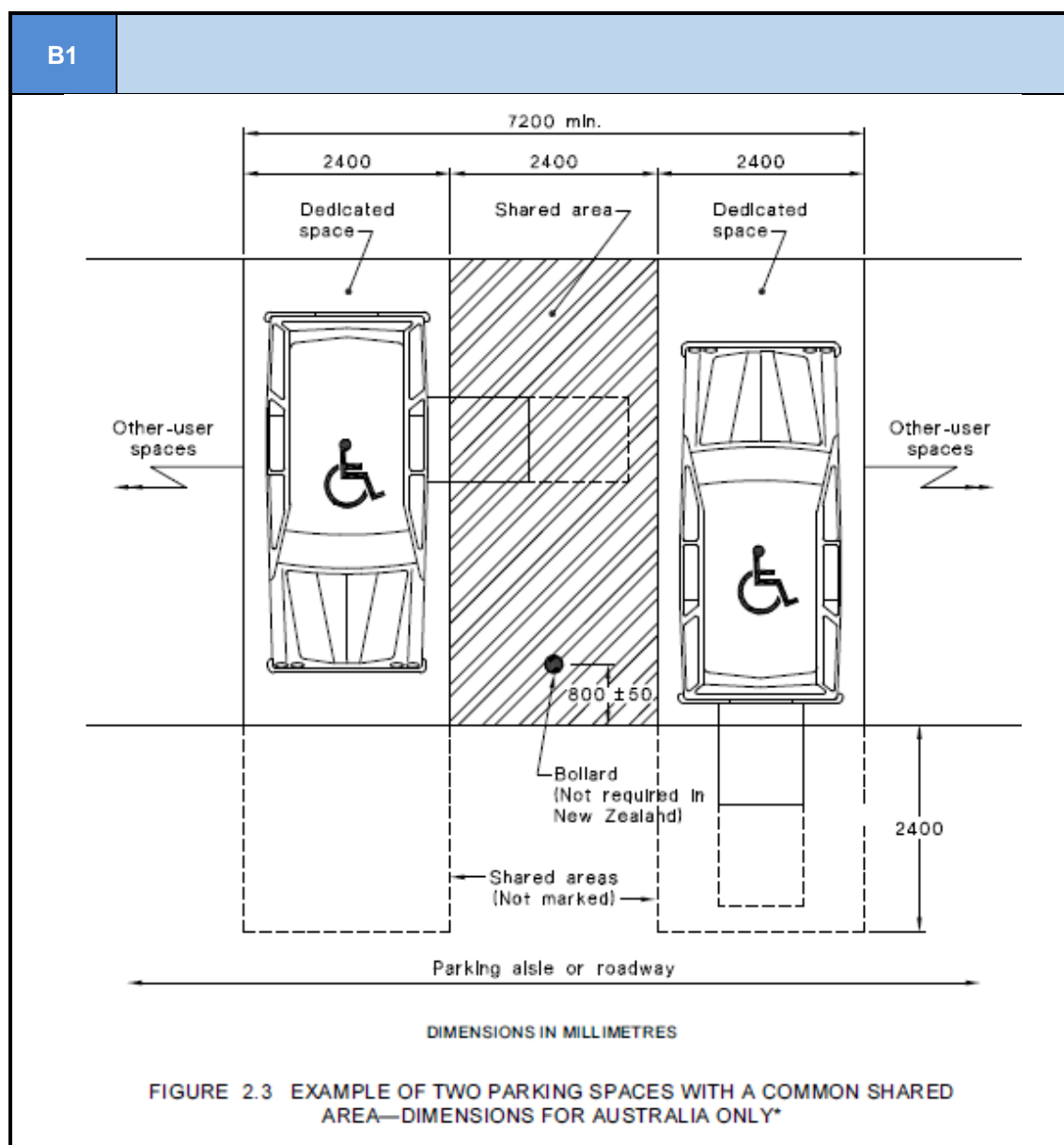
This report has been based on the following design documentation.

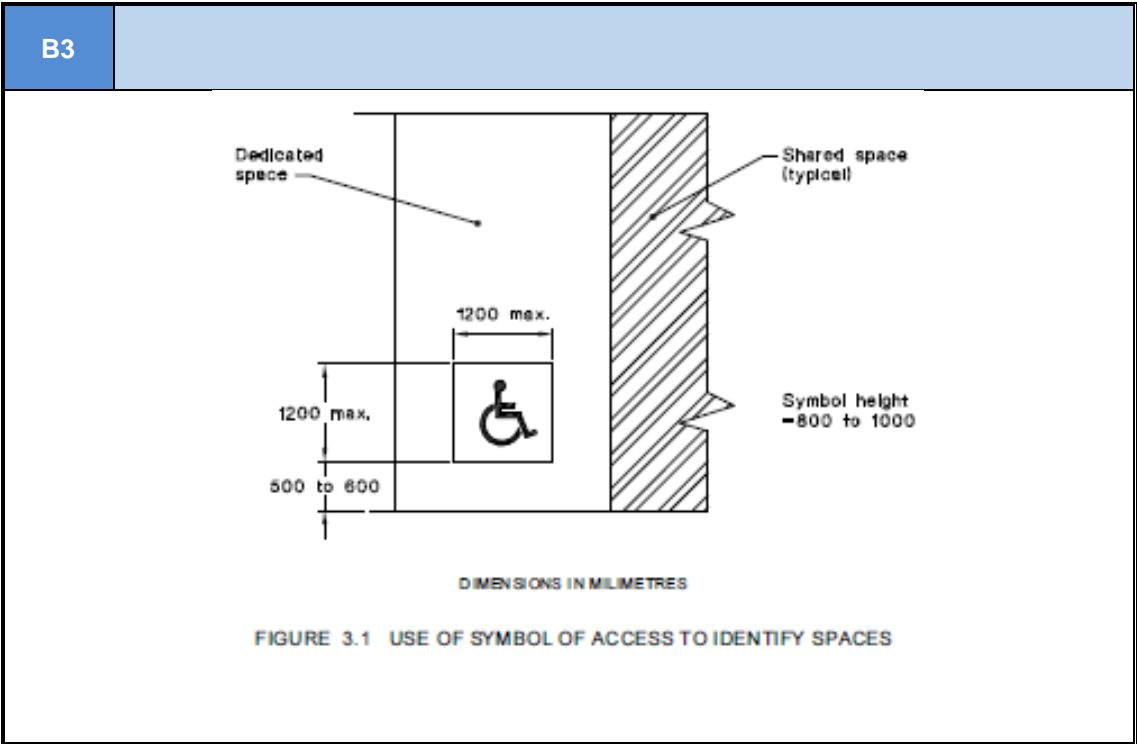
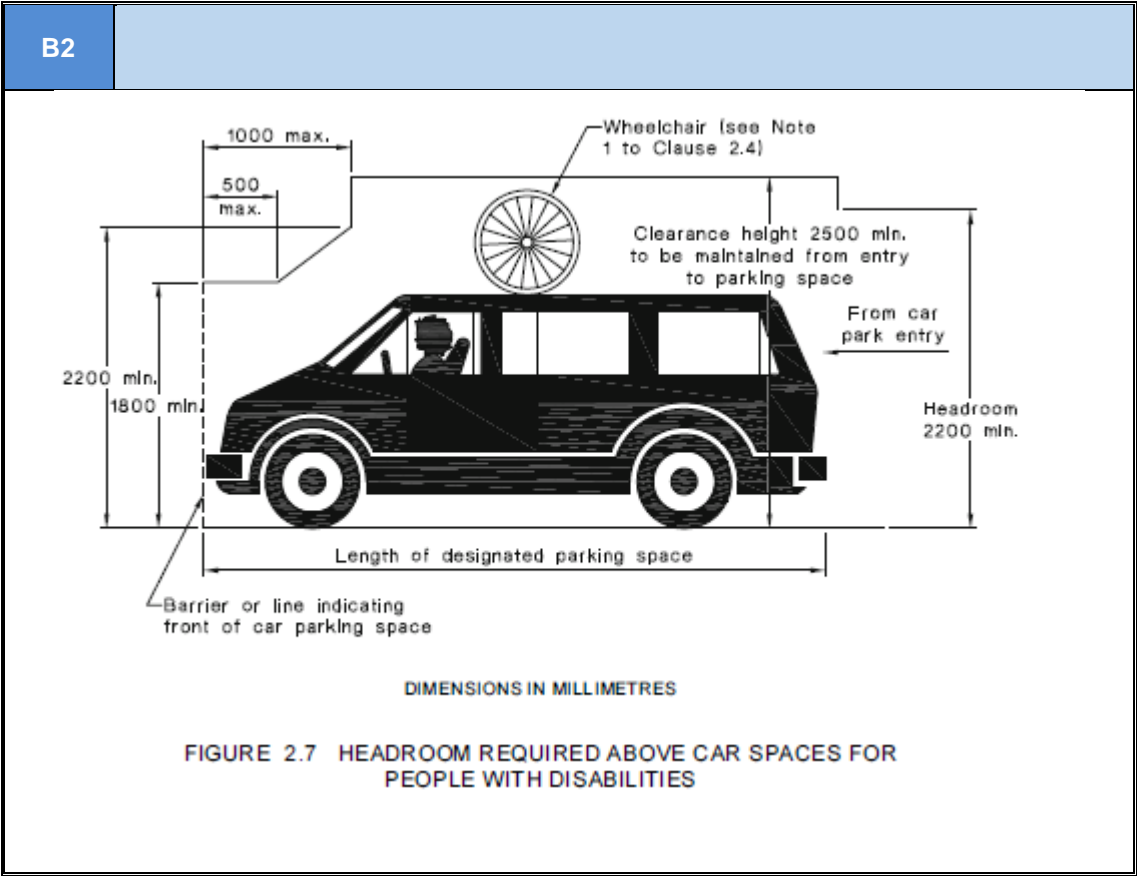
Table 10. Architectural Plans

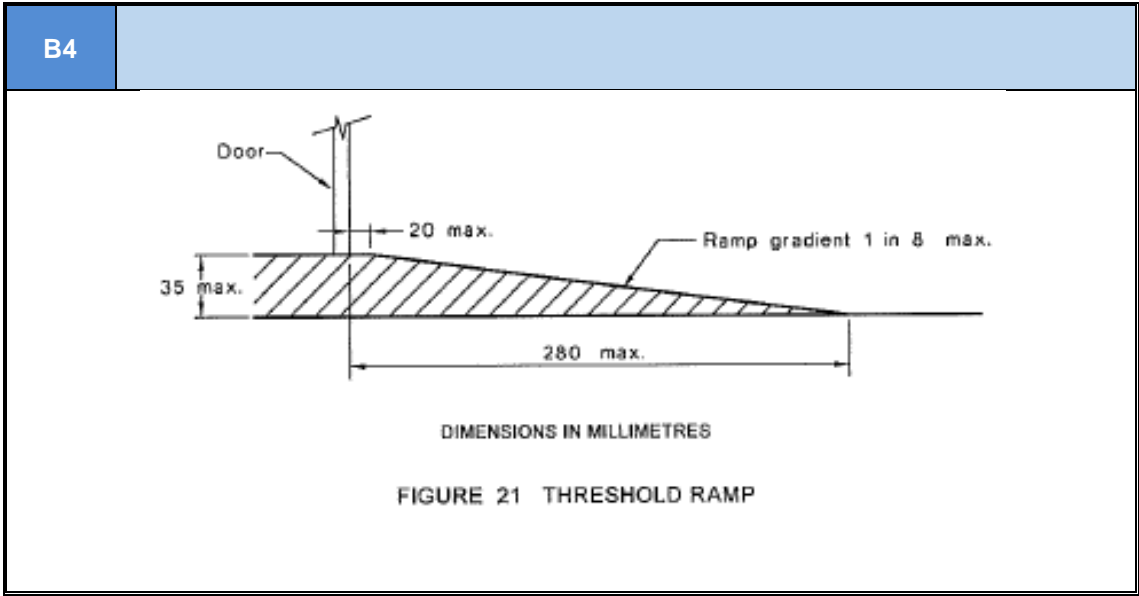
| Architectural Plans Prepared by PTW Architects | | | |
|--|----------|----------|-------------------|
| Drawing Number | Revision | Date | Title |
| DA-00-0000 | D | 17.01.20 | DRAWING LIST |
| DA-10-0900 | H | 17.01.20 | BASEMENT 10 PLAN |
| DA-10-1000 | H | 17.01.20 | BASEMENT 09 PLAN |
| DA-10-1100 | H | 17.01.20 | BASEMENT 08 PLAN |
| DA-10-1200 | I | 17.01.20 | BASEMENT 07 PLAN |
| DA-10-1300 | I | 17.01.20 | BASEMENT 06 PLAN |
| DA-10-1400 | I | 17.01.20 | BASEMENT 05 PLAN |
| DA-10-1500 | I | 17.01.20 | BASEMENT 04 PLAN |
| DA-10-1600 | I | 17.01.20 | BASEMENT 03 PLAN |
| DA-10-1700 | I | 17.01.20 | BASEMENT 02 PLAN |
| DA-10-1800 | J | 17.01.20 | BASEMENT PLAN 01 |
| DA-10-1900 | K | 17.01.20 | LOWER GROUND PLAN |
| DA-10-2000 | J | 17.01.20 | GROUND FLOOR PLAN |
| DA-10-2100 | H | 17.01.20 | LEVEL 01 PLAN |
| DA-10-2200 | J | 17.01.20 | LEVEL 02 PLAN |
| DA-10-2300 | J | 17.01.20 | LEVEL 03 PLAN |
| DA-10-2400 | H | 17.01.20 | LEVEL 04 PLAN |
| DA-10-2500 | H | 17.01.20 | LEVEL 05 PLAN |
| DA-10-2600 | H | 17.01.20 | LEVEL 06 PLAN |
| DA-10-2700 | H | 17.01.20 | LEVEL 07 PLAN |
| DA-10-2800 | G | 17.01.20 | LEVEL 08 PLAN |
| DA-10-2900 | G | 17.01.20 | LEVEL 09 PLAN |
| DA-10-3000 | G | 17.01.20 | LEVEL 10 PLAN |
| DA-10-3100 | H | 17.01.20 | LEVEL 11 PLAN |
| DA-10-3200 | H | 17.01.20 | LEVEL 12 PLAN |
| DA-10-3300 | H | 17.01.20 | LEVEL 13 PLAN |
| DA-10-3400 | H | 17.01.20 | LEVEL 14 PLAN |
| DA-10-3500 | H | 17.01.20 | LEVEL 15 PLAN |
| DA-10-3600 | H | 17.01.20 | LEVEL 16 PLAN |
| DA-10-3700 | H | 17.01.20 | LEVEL 17 PLAN |
| DA-10-3800 | H | 17.01.20 | LEVEL 18 PLAN |

| | | | |
|------------|---|----------|------------------------------------|
| DA-10-3900 | H | 17.01.20 | LEVEL 19 PLAN |
| DA-10-4000 | H | 17.01.20 | LEVEL 20 PLAN |
| DA-10-4100 | H | 17.01.20 | LEVEL 21 PLAN |
| DA-10-4200 | H | 17.01.20 | LEVEL 22 PLAN |
| DA-10-4300 | H | 17.01.20 | LEVEL 23 PLAN |
| DA-10-4400 | H | 17.01.20 | LEVEL 24 PLAN |
| DA-10-4500 | H | 17.01.20 | LEVEL 25 PLAN |
| DA-10-4600 | H | 17.01.20 | LEVEL 26 PLAN |
| DA-10-4700 | H | 17.01.20 | LEVEL 27 PLAN |
| DA-10-4800 | E | 17.01.20 | LEVEL 28 & 29 PLAN |
| DA-10-5000 | A | 17.01.20 | LEVEL 30-32 & LEVEL 38-42 PLAN |
| DA-10-5300 | E | 17.01.20 | LEVEL 33-LEVEL 37 PLAN |
| DA-10-6300 | E | 17.01.20 | LEVEL 43 – LEVEL 45 PLAN |
| DA-10-6600 | G | 17.01.20 | LEVEL 46 PLAN |
| DA-10-6700 | G | 17.01.20 | LEVEL 47 PLAN |
| DA-10-6800 | F | 17.01.20 | ROOF TOP PLAN |
| DA-20-0100 | F | 17.01.20 | NORTH ELEVATIONS |
| DA-20-0200 | F | 17.01.20 | SOUTH ELEVATION |
| DA-20-0300 | F | 17.01.20 | EAST ELEVATIONS |
| DA-20-0400 | E | 17.01.20 | WEST ELEVATIONS |
| DA-30-0100 | H | 17.01.20 | SECTIONS |
| DA-30-0200 | I | 17.01.20 | SECTIONS |
| DA-40-0001 | C | 17.01.20 | TOWER 01 FAÇADE CONCEPT |
| DA-40-0002 | C | 17.01.20 | TOWER 02 FAÇADE CONCEPT |
| DA-40-0003 | C | 17.01.20 | TOWER 03 FAÇADE CONCEPT |
| DA-50-1100 | C | 17.01.20 | 50-EDetail LIVABLE UNITS |
| DA-50-1200 | C | 17.01.20 | 50-DETAIL ADAPTABLE UNITS |
| DA-50-1710 | D | 17.01.20 | NEW CHRISTIE LANE ELEVATION |
| DA-97-0010 | C | 17.01.20 | 97-PERSPECTIVE VIEWS PERSPECTIVE 1 |
| DA-97-0020 | C | 17.01.20 | 97-PERSPECTIVE VIEWS PERSPECTIVE 2 |
| DA-97-0030 | C | 17.01.20 | 97-PERSPECTIVE VIEWS PERSPECTIVE 3 |
| DA-97-0040 | C | 17.01.20 | 97-PERSPECTIVE VIEWS PERSPECTIVE 4 |
| DA-97-0050 | C | 17.01.20 | 97-PERSPECTIVE VIEWS PERSPECTIVE 5 |
| DA-97-0060 | C | 17.01.20 | 97-PERSPECTIVE VIEWS PERSPECTIVE 6 |

ANNEXURE B - FIGURES AND DRAWINGS SAMPLE







B5

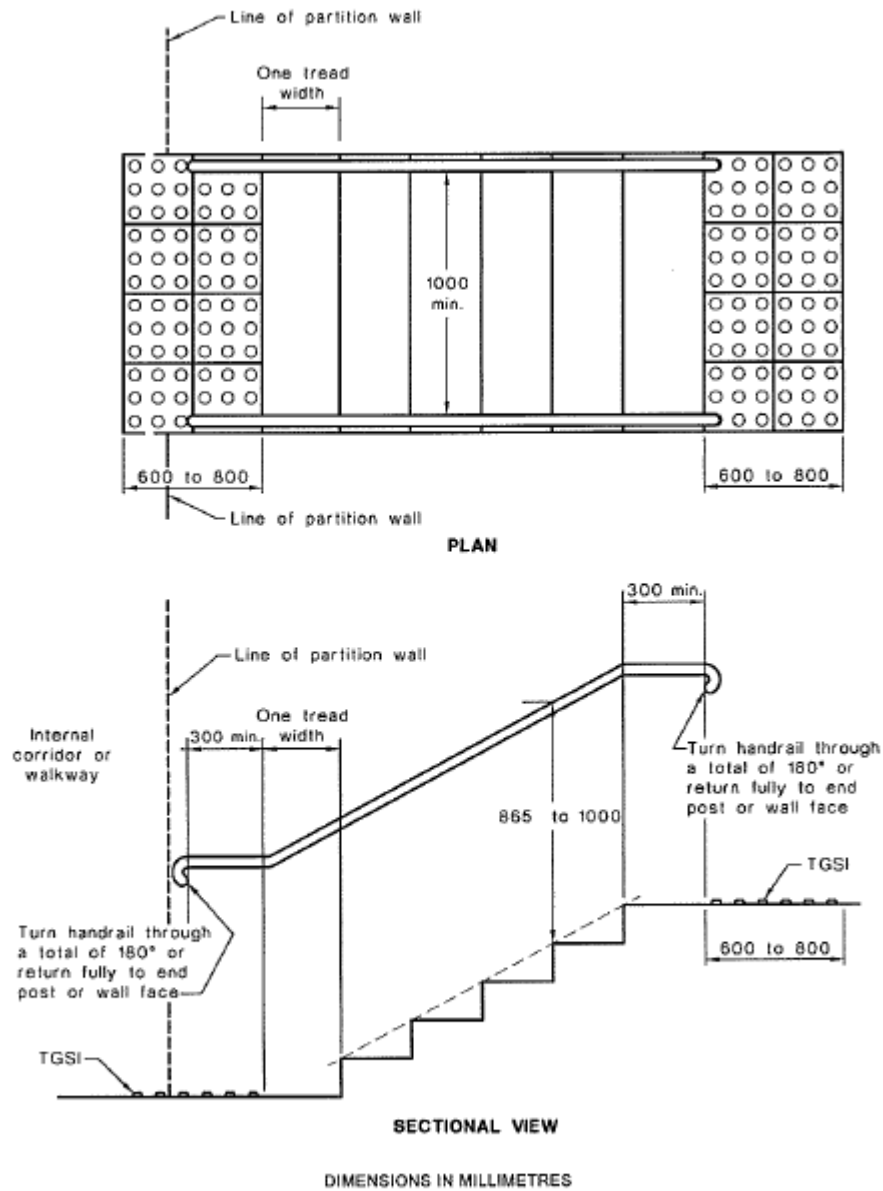
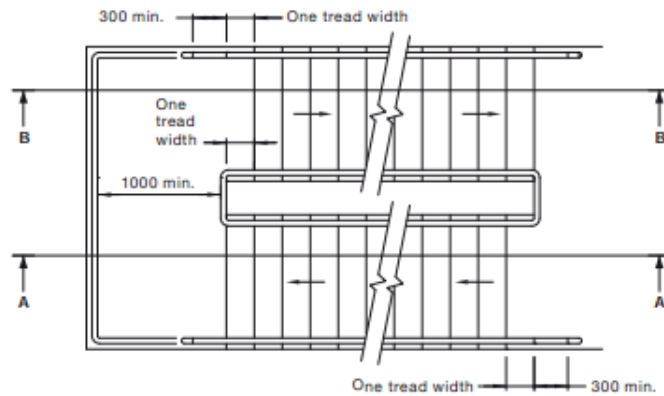


FIGURE 26(B) STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT END OF STAIRWAY OTHER THAN AT LINE OF BOUNDARY

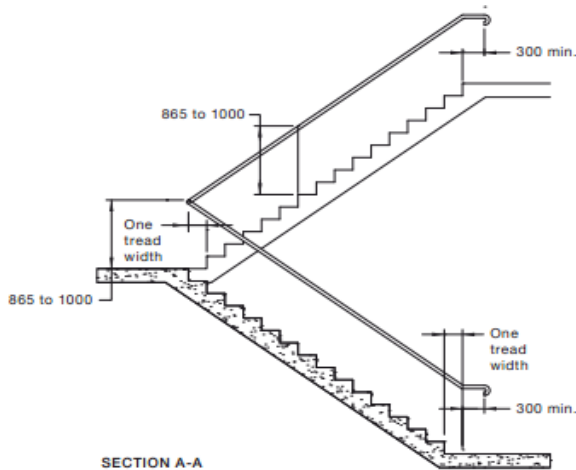
B6



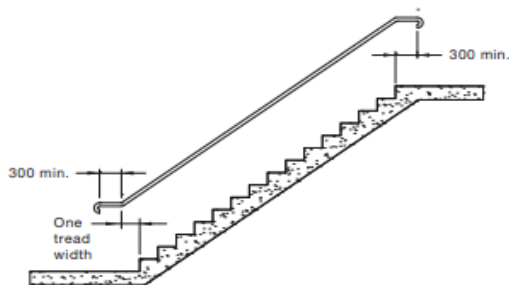
(a) Plan

DIMENSIONS IN MILLIMETRES

FIGURE 28 (in part) HANDRAILS TO STAIRS WITH INTERMEDIATE LANDINGS



SECTION A-A

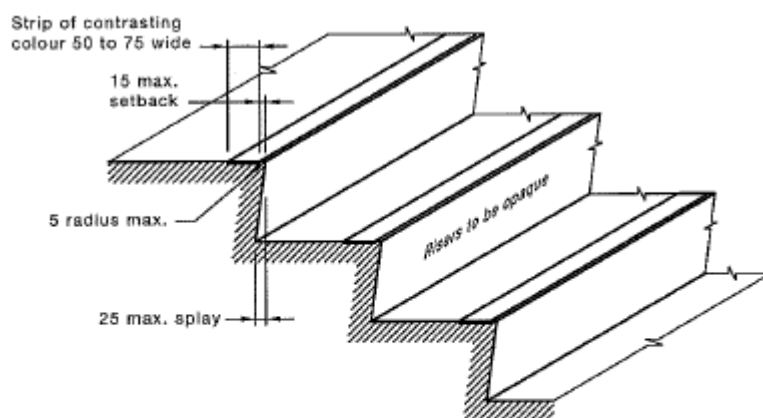


SECTION B-B

(b) Sections

DIMENSIONS IN MILLIMETRES

FIGURE 28 (in part) HANDRAILS TO STAIRS WITH INTERMEDIATE LANDINGS



NOTE: A chamfered nosing 5 x 5 mm may be used.

DIMENSIONS IN MILLIMETRES

FIGURE 27(A) A TYPICAL STAIR NOSING PROFILE WITH NOSING STRIP