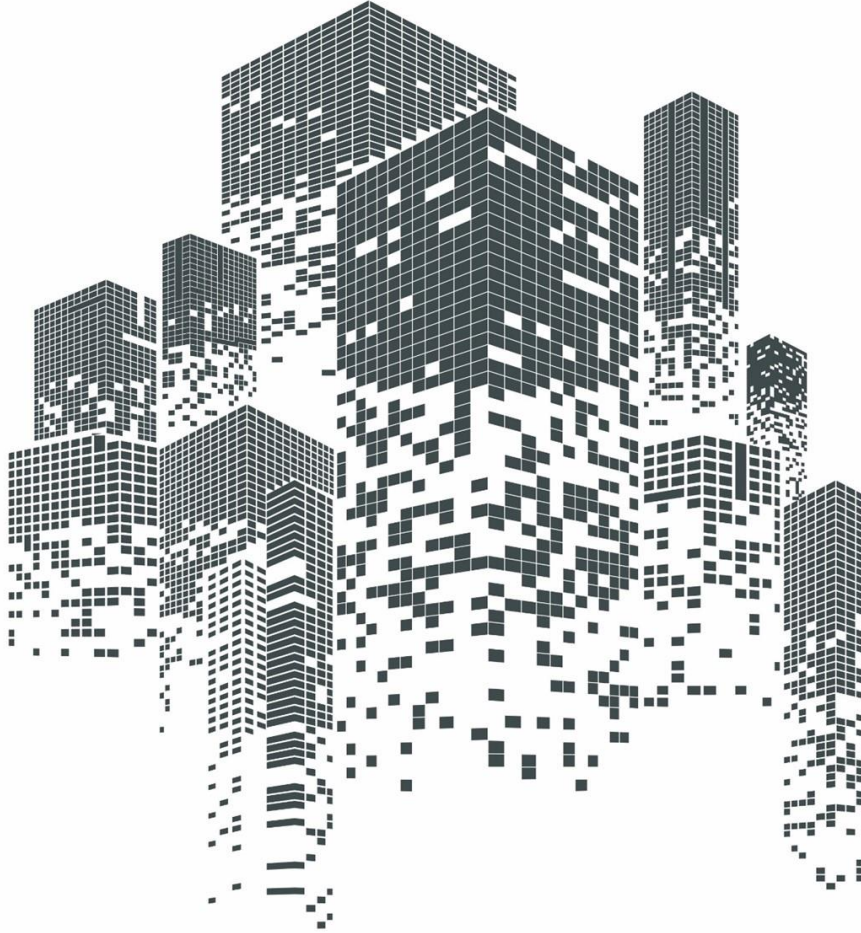




CREDWELL



Project	5 Lauderdale Avenue, Fairlight
Report	Access Assessment Report (BCA 2022)
Reference	240372-Access-r2
Date	4/11/2024
Client	Platform Architects
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Document Control

Reference/Revision	Date	BCA Assessment Report	
240372-Access-r1	01/08/2024	Prepared by	Ian O'Neill Building Surveyor
		Reviewed by	Christopher Ward Building Surveyor – Unrestricted BDC2789
240372-Access-r2 Update to Part 3 of report only based on latest plans and comments provided by the architect.	04/11/2024	Prepared by	Christopher Ward Building Surveyor – Unrestricted BDC2789

1 Introduction

1.1 Objectives

The purpose of this report is to provide an assessment against:

1. all relevant clauses of the National Construction Code 2022 Volume 1 (the “NCC”) relating to the provision of access for people with a disability;
2. Objective 4Q-1 of the Apartment Design Guidelines (ADG);
3. the Livable Housing Design Guidelines (LHDG) – Silver Level;
4. the adaptable housing requirements of Manly Development Control Plan 2013 (the “DCP”); and
5. associated Standards called up by the NCC and DCP including AS 1428.1-2009, AS 1428.4.1-2009, AS 2890.6-2009 and AS 4299-1995,

addressing all relevant Deemed-to-Satisfy clauses therein to identify where the subject building achieves compliance and non-compliance, as well as provide appropriate Performance Solutions where available, which are required to be prepared under separate cover.

It is presumed the assumptions, content, and limitations of this report are reviewed, noted, and understood by the reader. Credwell Consulting are to be contacted to clarify any queries or assumptions made in relation to the contents of this report and further, Credwell Consulting take no responsibility for misinterpretation of any of the content herein.

1.2 Limitations

This report does not include, nor imply, any audit, assessment, or upgrading of:

1. The structural adequacy or design of the building;
2. The capacity or design of any electrical, fire, hydraulic or mechanical services;
3. The inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to); and
4. Sections B, C, E (except Clauses E3D6, E3D7 and E3D8), F (except clause F4D5, F4D6, F4D7, F4D12), G, H, I and J, and Parts D1 and D2 of the BCA; and
5. The capacity or design of any electrical, fire, hydraulic or mechanical services.

This report does not include, nor imply, any assessment of, or compliance with:

1. The National Construction Code – Plumbing Code of Australia Volume 3;
2. The Disability Discrimination Act 1992 including the Disability ((Access to Premises – Buildings) Standards 2010 – unless specifically referred to);
3. Any Development Consent conditions;
4. The Liquor Licencing Act 2007;
5. The Work Health and Safety Act 2011;
6. The Swimming Pools Act 1992; and
7. Requirements of Authorities including, but not limited to, Fire and Rescue NSW, WorkCover, RMS, Council, Telecommunications Supply Authority, Electricity Supply Authority, Water Supply Authority, Gas Supply Authority and the like.
8. Requirements of BCA Section J.

Interpretations

A number of matters within the BCA are known to be interpretive. Where these matters are encountered, interpretations have been used that are consistent with Credwell Consulting's understanding of standard industry practice.

Dimensions and Tolerances

In some instances, the BCA specifies minimum dimensions for construction. The assessment of plans and specifications includes a review of such minimum dimensions that are relevant to the project, but Credwell Consulting does not guarantee that all relevant minimum dimensions have been assessed where they are not clearly and explicitly denoted/marked on the architectural drawings.

The relevant designer(s) and builder(s) should confirm that all minimum dimensions are achievable on site prior to works and consideration/attention should be given to construction tolerances impacted by wall set outs, applied finishes, and skirtings to corridors and bathrooms. For example, tiling bed thickness on walls and floors can adversely impact critical minimum dimensions relating to access for people with disabilities, stair and corridor widths, and balustrade heights.

1.3 Reviewed documentation

This report is based on documentation referenced in Annexure A.

2 Proposed Development

For the purposes of this assessment, the building has been described as detailed in the following Sections of this Report.

2.1 Building location

The building, the subject of this report, is located at 5 Lauderdale Avenue, Fairlight NSW 2094.



Figure 1 | Satellite Image of the Site | source: Six Maps

2.2 Proposal

The proposed development consists of a new residential five storey building located on Lauderdale Avenue.



Figure 2 | Image of the proposed development | source: Platform architect

2.3 Areas Required to be Accessible

The below table describes the access requirements of the various areas of the building as specified by the BCA. Buildings and parts of the development are to be accessible as required below unless exempt under D4D5.

Classification	Use	Access Requirement
Class 2	Residential	a) 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. b) To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like. c) Where a ramp complying with AS 1428.1 or a passenger lift is installed— (i) to the entrance doorway of each sole-occupancy unit; and (ii) to and within rooms or spaces for use in common by the residents. d) The requirements of (c) only apply where the space referred to in (c)(i) or (ii) is located on the levels served by the lift or ramp.
Class 7a	Carparking	To and within any level containing accessible carparking spaces.

Note: D4D5 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).

For the purpose of this report, the following areas are considered exempt under this clause (subject to Certifier approval at the Construction Certificate stage):

- Basement pump room
- Lower ground floor electrical rooms and services corridor

2.4 Lift travel distance

The lift travels from the Basement storey (having an FFL of 8.05m) to the Level 2 storey (having an FFL of 17.80m). Therefore, the lift travels 9.75m (17.80 – 8.05 = 9.75m) which is less than 12m.

A stretcher facility in the lift in accordance with Clause E3D3 is not required.

3 Relevant Legislation

3.1 Disability Discrimination Act

The Disability Discrimination Act 1992 (Cth) (the “DDA”) is Commonwealth legislation (applies nationally). Amongst other things, it provides an avenue for an affected party to make a complaint of discrimination. Compliance with the NCC does not restrict a complaint of discrimination relating to the provision of access to and within a building from being made under the DDA. However, provided the building complies with the NCC and the Disability (Access to Premises – Building) Standards 2010, such a complaint cannot be successful.

3.2 Disability (Access to Premises – Buildings) Standards 2010

The Disability (Access to Premises – Buildings) Standards 2010 (the “Premises Standards”) was created under the DDA and is also Commonwealth legislation (applies nationally). The Premises Standards identifies buildings to which it applies before specifying construction standards that those buildings are required to comply with. In summary, the Premises Standards are applicable to a new building, a new part of a building, and an affected part of a building, and the construction standards applicable are contained within “Schedule 1 Access Code for Buildings”.

The Premises Standards provides a definition for a new building, a new part of a building, and an affected part of a building. The definition of a new building and a new part of a building is currently considered to be in line with standard dictionary definitions (unless a building or part obtained construction approvals prior to 1 May 2011). However, the term “affected part” is specific to the Premises Standards and is defined by clause 2.1(5) as follows –

- a) the principal pedestrian entrance of an existing building that contains a new part; and*
- b) any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.*

The upgrade requirements of the Premises Standards are founded on determining whether a development within an existing building results in the creation of an affected part.

As previously mentioned, the construction standards of the Premises Standards are contained within “Schedule 1 Access Code for Buildings”. It should be noted that this part of the Premises Standards was prepared in consultation with the Australian Building Codes Board (ABCB – publisher of the NCC). As such, the requirements outlined in each document are the same. Therefore, assessment of the proposed development against the relevant requirements of the NCC applicable to access for people with a disability ensures that it also complies with the Premises Standards.

The subject proposed development incorporates construction of a new building, therefore, the entire building must comply with the Premises Standards. An assessment of the building against the relevant requirements of the NCC applicable to access for people with a disability, as outlined in this Report, is equivalent to an assessment against “Schedule 1 Access Code for Buildings” of the Premises Standards. Therefore, confirmation of compliance with the NCC should also be taken as confirmation of compliance with the Premises Standards.

3.3 Apartment Design Guide (ADG) Assessment

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (“SEPP 65”) is New South Wales legislation applicable to the erection, substantial redevelopment, or conversion of buildings that result in the creation of residential flat buildings (cl4(1)(a), SEPP 65).

Application of SEPP 65 is limited to residential flat buildings having –

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) (cl4(1)(b), SEPP 65) that contain “at least 4 or more dwellings” (cl4(1)(c), SEPP 65).

The subject proposed development has three (3) or more storeys and contains four (4) or more dwellings so SEPP 65 is applicable.

Clause 28(2)(c) of SEPP 65 requires consent authorities to consider the Apartment Design Guide (ADG) when assessing development applications. Generally, the ADG refers to matters outside the scope of an access assessment, however, Objective 4Q-1 (the “Objective”) requires that –

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

This is related to the provision of access, therefore, an assessment against the requirements of this Objective are provided in this Report.

The “Design guidance” provided with the Objective states the following –

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

The Glossary of the ADG then identifies the Livable Housing Design Guidelines (LHDG) as being “published by Livable Housing Australia and available on its' website”. The version of the LHDG available on the Livable Housing Australia website at the time this Report was prepared is the Fourth edition, dated 2017. The following assessment table outlines a review of the units within the subject proposed development designated as “livable” against the Silver Level requirements outlined in the Fourth Edition of the LHDG.

The subject building has a total of five (5) units. 20% of 5 units is one (1) unit. For this assessment, unit 4 (level 1) only must incorporate the Livable Housing Guideline's silver level universal design features.

Refer to Part 7 of this report for further details of this assessment.

3.4 Manly Council Development Control Plan 2013 and AS 2499-1995

The application of the requirements of AS 4299-1995 to residential flat buildings is specified by the Development Control Plan relating to the proposed development.

As the building is a residential flat building, the former Manly Council Development Control Plan 2013, and AS 2499-1995 does apply.

Part 3.6.3.1 Accessible (Adaptable) Accommodation requirements are as follows:

Access in accordance with AS4299 - Adaptable Housing must be provided to at least 25 percent of dwellings within residential accommodation containing 4 or more dwellings.

a) The provision of any required Adaptable Housing need to be demonstrated in the DA drawings. In particular, the following building features are to be included for adaptable housing:

- i) Provision of plans showing the dwelling in its pre-adaptation and post adaptation stages;
- ii) A continuous accessible path of travel from the car space to and within the adaptable dwelling and to common facilities;
- iii) Provision of an adaptable parking space of at least 3.8m wide;
- iv) Circulation space to allow potential wheelchair manoeuvrability externally and internally;
- v) Modular kitchen cabinetry;
- vi) Easily adjustable bathroom facilities;
- vii) Easy to use laundry facilities;
- viii) Easy use of Garbage facilities by mobility impaired residents; and
- ix) Easy egress in case of emergency.

b) Council's DA determination may condition that the required adaptable units be certified to meet the essential design elements listed in Australian Standard - AS4299. In this regard, applicants will need to submit sufficient design and construction details with the DA that demonstrate that the development is capable of satisfying future levels of access - post adaptation to meet access requirements including full wheelchair accessibility.

c) In relation to Backpackers' Accommodation at least 1 room capable of accommodating 4 people should be adaptable for access to a person with a disability. Kitchen facilities should also be capable of being used by a person with a disability. Toilet and shower rooms should be provided of suitable design and dimension to allow ease of use by a person with a disability as required by Australian Standard - AS 1482.

Part 3.6.3.2 Car Parking Facilities requirements are as follows:

a) This plan specifies parking rates for people with disabilities (which may exceed the Building Code of Australia in certain circumstances). All development involving a new or refurbished building must provide parking for people with disabilities at a rate of at least:

- i) 1 car parking space for development comprising at least 10 spaces and less than 50 spaces
- ii) 2 car parking spaces for development comprising at least 50 spaces and less than 100 spaces and 1 additional car for every 50 spaces thereafter.

b) The car spaces must be identified and reserved at all times and be in the vicinity of lifts or as close as possible to public areas and facilities. See Schedule 3 Minimum Dimension for further access requirements.

c) Parking spaces for people with disabilities should be used only by those entitled to use the spaces. In this regard DA applicants need to demonstrate evidence of an operational management plan to implement ongoing maintenance to ensure amenable and safe use of the accessible facility.

d) Notices must be displayed in parking stations at the entrance and at each change in direction including the location of car parking spaces for people with disabilities and also detailing the maximum headroom for vehicles.

Part 3.6.3.3 Lifts requirements are as follows:

Reference: AS1735.12 and Building Code of Australia. In addition to the requirements in accordance with AS1735.12, the provision of a vertical lift is to be considered for all buildings containing adaptable housing as required in this plan. Building Code of Australia requirements for the lift dimensions are at least 1.1m by 1.4m.

Part 3.6.3.4 Sanitary Facilities requirements are as follows:

Reference: F2.4 (Building Code of Australia), AS1428.1 cl.10 and AS1428.2 cl.15

a) At least one uni-sex sanitary facility accessible for a person with a disability must be provided in all new or refurbished buildings. Exceptions to requirement for small shops and restaurants

b) In relation to small shops and restaurants, Council may vary the requirement for sanitary facilities in circumstances where there may be existing shared toilet amenities available for these smaller premises. Where provision of an accessible toilet facility is not achievable the applicant must submit an access statement in accordance with this plan. Council acknowledges that retail uses with a floor space of under 50sqm, are particularly constrained by the building envelope to provide compliant accessible toilet facilities. In this regard the floor space required for the sanitary facility may be 10sqm alone.

c) Accessible toilet facilities which are entered from the interior of a building should not be locked. In this regard applicants need to demonstrate evidence of an operational management plan to implement ongoing maintenance to ensure open, amenable and safe use of the accessible facility.

Part 3.6.3.5 Continuous Accessible Path of travel requirements are as follows:

Reference: AS1428.1 cl.5 & AS1428.2 cl.7. New buildings

a) In relation to all new buildings, a continuous accessible path of travel is required to:

- i) the main entrance and exit points of the building; or
- ii) the public areas of the building including colonnades, plazas, tunnels and bridges and to all shops, restaurants and other services of a retail or service nature excluding residential accommodation comprising less than 5 dwellings.

Alterations and additions

b) In relation to alterations and additions, a continuous accessible path of travel is required to:

- i) all existing buildings or developments where this plan applies if it is proposed to carry out substantial alterations;
- ii) a principal entrance if substantial alterations to the main entrance are proposed; and
- iii) public areas if it is proposed to carry out a substantial intensification of use. In no case should alterations result in a decrease in access.

Mixed use development

c) In relation to mixed use development, a continuous accessible path of travel will be required to the main entrance and to the relevant floors of all residential buildings if it is proposed to use part of the building for an office, shop or other commercial use which would be open to the public.

Interface with public areas

d) In relation to where private development encroaches upon the public domain to achieve equitable access via a ramp or tactile ground surface indicators then the applicant should obtain consent from Council prior to lodgement of a DA

Entrances to buildings

e) Entrances to buildings should be kept free of clutter at all times. Note: This is particularly important in the case of shops where in many instances merchandise and other items on display near the entrance present an obstacle to people entering or leaving the shop.

Obstacles in corridors

f) Objects such as fire extinguishers, drinking fountains, planter boxes, litter bins and photocopiers should be placed in a way that they do not become an obstacle or a hazard for people using the corridors. Similarly, corridors and aisles within shops should be free from obstructions which would make their use difficult or impossible for people with disabilities.

Part 3.6.3.7 Signage and Hearing Augmentation requirements are as follows:

a) Appropriate signage and tactile information indicating accessible facilities must be provided at the main entrance directory, or wherever directional signage or information is provided to those buildings where access and facilities have been provided. Such signage will have regard to the provisions of Australian Standard - AS1428.2. Reference: AS1428.1 cl.16 & Building Code of Australia part 3.7.

b) An assistive listening device must be provided in accordance with Building Code of Australia part 3.7 to any new/ refurbished public theatre, auditorium, hall, conference centre, church, or the like, where a public address system is installed such as a loop system, 100p receiver or FM system.

Reference: AS1428.1 - Cl.14.

Part 3.6.3.8 Fire Safety and Maintenance requirements are as follows:

Fire safety

a) Fire isolated stairs are to provide handrails on both sides of stairs and contrast stripping on the edge of the stair nosing in accordance with AS1428.1 cl.10. Fire isolated ramps are to comply with Australian Standard - AS1428.1 cl. 5. Evidence of a documented fire safety strategy is to be considered for emergency egress for people with disabilities.

Inspection of facilities

b) The access and facilities provided in accordance with this plan should be inspected and maintained on a regular basis.

Floor surfaces

c) Floor surfaces should be kept in a clean condition and in a good state of repair, as dirt, grit, litter, broken surfaces and the like may constitute a hazard to ambulant people, and make it difficult for wheelchair users to move about.

4 Summary of Assessment

The documentation referenced in Annexure A of this Report has been assessed against the documents referenced in Section 1.2 of this Report. This assessment has identified the following areas where compliance requires further consideration.

4.1 Possible Performance Solutions

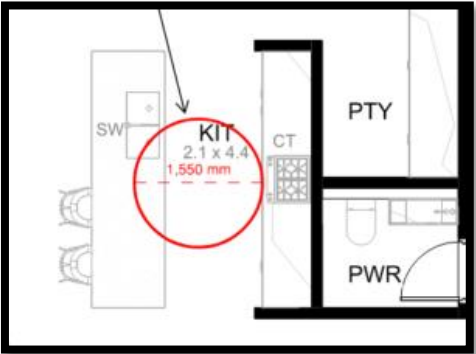
The following items relate to areas where a Performance Solution may be available to justify a deviation from the DtS requirements of the BCA. This report does not form a Performance Solution.

Where a Performance Solution is proposed, the solution is to be prepared by a suitably qualified person in consultation with all stakeholders.

Item	Possible Performance Solution	DtS Provision	Performance Requirements
1.	TBA	-	-

4.2 Design amendments required

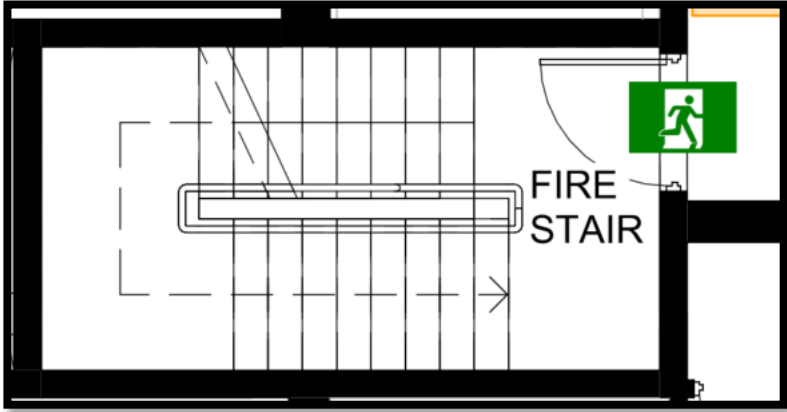
The following items have been identified as departures from the BCA deemed-to-satisfy provisions, and Credwell recommend these items to be resolved with minor design amendments:

Item	Amendments required	Provision
1.	<p>Circulation prior to adaptation- AS4299-1995 – Part 4.5.2</p> <p>Within unit 4, a minimum clearance of 1550 mm shall be maintained between all opposing base cabinets, appliances and walls to allow for a 180° turn by a person in a wheelchair.</p>  <p>Details to be shown on the pre-adaptation plan are to be provided to determine compliance with this Clause.</p>	Adaptable housing AS4299-1995, Part 4.5.2

	<p>4.5.2 Circulation prior to adaptation Minimum clearances in front of appliances and between opposing base cabinets shall be provided at the outset. A minimum clear floor space of 1500 mm × 820 mm that allows either a forward or parallel approach by a person in a wheelchair shall be provided at the sink and all appliances in the kitchen. In addition, a minimum clearance of 1550 mm shall be maintained between all opposing base cabinets, appliances and walls to allow for a 180° turn by a person in a wheelchair. For further guidance see AS 1428.2.</p> <p>Architectural pre-adaptation plans are to be updated <u>at the Construction Certificate stage</u> to provide a minimum 1,550mm between the opposing cabinetries.</p>	
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4.3 Further information required

The below information is required to enable a full assessment against the BCA. This information must be provided and reviewed by Credwell prior to the issuance of the Final BCA Report for the purposes of the Construction Certificate application.

Item	Further information required	Provision
1.	<p>Fire Safety and Maintenance</p> <p>In accordance with the Manly Council Development Control Plan 2013 section 3.6.3.8 for fire safety, fire isolated stairs are to provide handrails on both sides of stairs.</p> <p>The fire isolated stairway only provides a handrail on one side of the stairway.</p>  <p>The design team are to provide handrails to both sides of the fire isolated stairway and <u>maintain a 1m width</u> throughout the stairway measured from handrail to handrail to be provided <u>at the Construction Certificate stage.</u></p>	<p>Manly Council Development Control Plan 2013</p>

4.4 DCP assessment

We provide the following comments for the application against the requirements of the former Manly Council Development Control Plan 2013, and AS 2499-1995:

Part	Comment	Compliance achievable
3.6.3.1 Accessible (Adaptable) Accommodation	<p>Access in accordance with AS4299 - Adaptable Housing must be provided to at least 25 percent of dwellings within residential accommodation containing 4 or more dwellings.</p> <p>The subject building has a total of 5 units. 25% of 5 units is 1.25 Units. For this assessment, we have rounded down to and access in accordance with AS4299 - Adaptable Housing applies to one (1) unit only.</p> <p>Unit 4 (level 1) being the nominated unit.</p>	Yes
3.6.3.2 Car Parking Facilities	<p>10 carparking spaces have been provided. 2 accessible carparking spaces are provided in the basement therefore exceeds the requirement.</p> <p>Compliance with AS2890.6 is satisfactory. Ensure a 2.5m internal vertical clearance is supplied from the basement entry way to each accessible space.</p>	Yes
3.6.3.3 Lifts requirements	<p>The lift is at least 1.1m by 1.4m (1.5m x 2.0m).</p>	Yes
3.6.3.4 Sanitary Facilities	<p>Does not apply to a Class 2 building. Further information may be required by Council.</p>	N/A
3.6.3.5 Continuous Accessible Path of travel	<p>In relation to all new buildings, a continuous accessible path of travel is required to the main entrance and exit points of the building.</p> <p>Refer to section 4.</p>	No
3.6.3.7 Signage and Hearing Augmentation	<p>To be provided at CC stage.</p>	-

3.6.3.8 Fire Safety and Maintenance	<i>Fire safety</i> a) Fire isolated stairs are to provide handrails on both sides of stairs. The Fire isolated stairway only provides handrail on one side of the stairway. Refer to section 4.	No
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Refer to Part 8 of this report for further details of the AS 4299-1995 (adaptable house class C) assessment.

5 Statement of Compliance

This office has completed a detailed access review of the subject proposed development, as indicated on the drawings referenced in Annexure A of this Report, against the relevant requirements of the documents referenced in Section 1.1 of this Report. The details of this review are specified in the Assessment Tables provided in the discussion of the proposed development against the relevant document. Subject to this review, this office advises that the design of the proposed development complies, or is capable of complying, with the relevant requirements of the BCA, LHDG, and AS 4299-1995.

6 Building Code of Australia 2022 Assessment

The following assessment table outlines a clause by clause review of the subject proposed development against the relevant Deemed-To-Satisfy (DTS) provisions of the BCA that relate to access for people with a disability. All DTS clauses of the BCA that relate to access for people with a disability applicable to the proposed development are referenced and discussed in the table below. Where a clause is not relevant to the proposed development it is not discussed.

The following abbreviations have been used in the table below:

PS	Performance Solution The design does not comply with the clause; however, a Performance Solution is proposed to justify the design in its current format.
CRA	Compliance Readily Achievable “Compliance Readily Achievable” – it is considered that whilst there is insufficient information currently provided to determine strict compliance with the DtS provisions of the BCA the proposed design is capable of comply subject to noting the requirements of the Clause. Additional information or documentation is necessary to confirm compliance. This may be in the form of additional drawing, a specification or design certification. See Appendix B for a proposed specification.
Complies	The proposed design complies with the relevant DTS clause
DNC	Does Not Comply The proposed design does not comply with the relevant DTS clause and requires amendment.
FI	Further Information Further information is required to determine whether the proposed design satisfies the requirements of the relevant DTS clause.
N/A	Not Applicable The relevant DTS clause is considered not applicable to the subject proposed development but requires further explanation to confirm reason(s).
Noted To be assessed at CC stage	The relevant DTS clause specifies information only, no assessment is required. An assessment against this provision is not included in a DA stage report due to the level of documentation provided. Pending further engagement, this will be assessed upon receipt of Construction Documentation

For the purposes of the BCA, the building is described as follows:

National Construction Code Assessment Table

Clause	[2019]	Description	Comments	Assessment
Part D4 – Access for people with a disability				
D4D1	D3.0	Deemed-to-Satisfy Provisions	Information only.	Noted
D4D2	D3.1	General building access requirements	<p>Access is required to be provided to each Class located within the building in accordance with the following:</p> <p><u>Class 2</u> From a pedestrian entrance required to be accessible to at least one (1) floor containing sole-occupancy units, and to the entrance doorway of each sole-occupancy unit located on that level.</p> <p>To and within not less than one (1) of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool (discussed later), common laundry, games room, individual shop, eating area, or the like.</p> <p>Where a ramp complying with AS 1428.1-2009 or a passenger lift is installed -</p> <p>(a) to the entrance doorway of each sole-occupancy unit; and</p> <p>(b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.</p> <p>The current design of the building does not provide access in accordance with these requirements.</p> <p><u>Class 7a</u> To and within any level containing accessible carparking spaces.</p>	CRA
D4D3	D3.2	Access to buildings	<p>An accessway must be provided to a building required to be accessible -</p> <p>(i) from the main points of a pedestrian entry at the allotment boundary; and</p> <p>(ii) from another accessible building connected by a pedestrian link; and</p> <p>(iii) from any required accessible carparking space on the allotment.</p>	CRA
D4D4	D3.3	Parts of buildings to be accessible	Parts of the building must comply with the relevant requirements of this clause.	CRA
D4D5	D3.4	Exemptions	<p>The following areas are not required to be accessible:</p> <p>a) An area where access would be inappropriate because of the particular purpose for which the area is used.</p> <p>b) An area that would pose a health or safety risk for people with a disability.</p> <p>c) Any path of travel providing access only to an area exempted by (a) or (b).</p> <p>For the purpose of this report, the following areas are considered exempt under this clause:</p> <ul style="list-style-type: none"> Basement pump room Lower ground floor electrical rooms and services corridor 	Noted

Clause	[2019]	Description	Comments	Assessment
D4D6	D3.5	Accessible carparking	Note the NCC does not have class 2 requirements for car parking numbers. This is covered by the Council DCP. Compliance with the DCP is readily achievable 10 carparking spaces have been provided. 2 accessible carparking spaces are provided in the basement therefore exceeds the DCP requirement. Compliance with AS2890.6 is satisfactory. Ensure a 2.5m internal vertical clearance is supplied from the basement entry way to each accessible space.	CRA
D4D7	D3.6	Signage	Braille and tactile signage must be provided in accordance with this clause and Specification 15. Where illuminate exit signage is provided to an exit door, a braille and tactile sign complying with this clause must be provided stating "Exit" and "Level XX" (XX being the relevant floor level number, descriptor, or a combination of both. Details are to be provided at CC stage.	To be assessed at CC stage
D4D8	D3.7	Hearing augmentation	No inbuilt amplification system other than the emergency warning is proposed	N/A
D4D9	D3.8	Tactile indicators	Tactile Ground Surface Indicators (TGSIs) must be provided to warn people that they are approaching a stairway, ramp and/or overhead obstruction in accordance with the requirements of this clause and AS 1428.4.1-2009.	To be assessed at CC stage
D4D10	D3.9	Wheelchair seating spaces in Class 9b assembly buildings	The development does not incorporate a Class 9b part therefore this clause does not apply.	N/A
D4D11	D3.10	Swimming pools	The development does not incorporate a swimming pool therefore this clause does not apply.	N/A
D4D12	D3.11	Ramps	No ramps shown on the current plans. The accessways are 1:20 and are therefore considered Walkways.	N/A
D4D13	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 AS1428.1-2009.	To be assessed at CC stage
Specification 15 – Braille and Tactile Signs				
S15C1	Spec D3.6:1	Scope	This Specification sets out the requirements for the design and installation of braille and tactile signage as required by clause D3.6.	Noted
S15C2	Spec D3.6:2	Location of braille and tactile signs	Braille and tactile signage must be located in accordance with this clause. To be assessed at CC stage.	CRA
S15C3	Spec D3.6:3	Braille and tactile sign specification	Braille and tactile signage must have characters in accordance with this clause. To be assessed at CC stage	CRA
S15C4	Spec D3.6:4	Luminance contrast	The luminance contrast of the signage must comply with this clause. To be assessed at CC stage	CRA

Clause	[2019]	Description	Comments	Assessment
S15C5	Spec D3.6:5	Lighting	Braille and tactile signage must be illuminated to ensure the luminance contrast requirements are met at all times during which the sign is required to be read. To be assessed at CC stage	CRA
S15C6	Spec D3.6:6	Braille	The braille characters must comply with this clause. To be assessed at CC stage	CRA
SECTION E – SERVICES AND EQUIPMENT				
Part E3 – Lift Installations				
E3D1	E3.0	Deemed-to-Satisfy Provisions	Information only.	Noted
E3D6	E3.5	Landings	Access and egress to and from lift well landings must comply with Parts D2, D3 and D4.	CRA
E3D7	E3.6, table E3.6a, Table E3.6b	Passenger lift types and their limitations	The lift travels 9.75m (17.80 – 8.05 = 9.75m) which is less than 12m. Therefore, must have floor dimensions of no less than 1,100mm (wide) x 1,400mm (deep). The lift has been measured to scale as having dimensions of 1,500mm (wide) x 2,000mm (deep). The lift must be provided with features in accordance with Table E3.6b that comply with AS1735.12-1999. Note a design certificate from the Lift Engineer will be required to provide to ensure compliance prior to the issue of the construction certificate.	CRA
E3D8	Table E3.6a, Table E3.6b	Accessible features required for passenger lifts	The lift must be provided with features in accordance with this Clause and with AS1735.12-1999. Note a design certificate from the Lift Engineer will be required to provide to ensure compliance prior to the issue of the construction certificate	CRA
SECTION F – HEALTH AND AMENITY				
Part F4 – Sanitary and Other Facilities				
F4D1	F2.0	Deemed-to-Satisfy Provisions	Information only.	Noted
F4D5	F2.4	Accessible sanitary facilities	Not applicable.	N/A
F4D6	Table F2.4a	Accessible unisex sanitary compartments	Not applicable.	N/A
F4D7	Table F2.4b	Accessible unisex showers	Not applicable.	N/A
F4D12	F2.9	Accessible adult change facilities	Not applicable.	N/A

7 Apartment Design Guide (Objective 4Q-1) Assessment

State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (“SEPP 65”) is New South Wales legislation applicable to the erection, substantial redevelopment, or conversion of buildings that result in the creation of residential flat buildings (cl4(1)(a), SEPP 65).

Application of SEPP 65 is limited to residential flat buildings having –

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) (cl4(1)(b), SEPP 65) and that contain “at least 4 or more dwellings” (cl4(1)(c), SEPP 65).

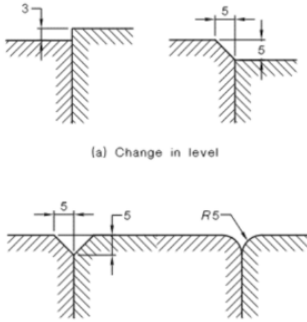
The subject building has a total of five (5) units. 20% of 5 units is one (1) unit. For this assessment, **Unit 4 (level 1)** only must incorporate the Livable Housing Guideline's silver level universal design features.

The following abbreviations have been used in the table below:

CRA	Compliance Readily Achievable “Compliance Readily Achievable” – it is considered that whilst there is insufficient information currently provided to determine strict compliance with the DtS provisions of the BCA the proposed design is capable of comply subject to noting the requirements of the Clause. Additional information or documentation is necessary to confirm compliance. This may be in the form of additional drawing, a specification or design certification. See Appendix B for a proposed specification.
Complies	The proposed design complies with the relevant clause
DNC	Does Not Comply The proposed design does not comply with the relevant clause and requires amendment.
FI	Further Information Further information is required to determine whether the proposed design satisfies the requirements of the relevant clause.
N/A	Not Applicable The relevant clause is considered not applicable to the subject proposed development.

Livable Housing Design Guidelines Assessment Table

Part	Comments	Assessment
LIVEABLE HOUSING		
Silver Level Elements		
1 Dwelling Access	Part 1 of the ABCB Standard for Livable Housing Design requires a step-free access path from the parking space or the property boundary, to the dwelling entry door. In a Class 2 buildings, this requirement is already addressed by Part D4 and the Disability (Access to Premises—Buildings) Standards 2010.	N/A

Part	Comments	Assessment
LIVEABLE HOUSING		
	As such, it is not necessary to apply Part 1 of the ABCB Standard for Livable Housing Design to a Class 2 building.	
2 Dwelling entrance	<p>The entrance door with a level landing 1200mm x 1200mm with a minimum clear opening width of 820mm.</p> <p>The entrance to the livable units must have a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled). Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided in accordance with Figure 1(b).</p>  <p style="text-align: center;">(a) Change in level</p> <p style="text-align: center;">(b) Continuous paving units—flush-jointed with level surfaces</p> <p style="text-align: center;">DIMENSIONS IN MILLIMETRES AND ARE MAXIMUM</p> <p style="text-align: center;">FIGURE 6 ACCEPTABLE CONSTRUCTION TOLERANCES FOR ABUTMENT OF SURFACES</p> <p>The entrance to the livable units must be sheltered from the weather.</p> <p>The entrance is connected to the accessible path as required by the NCC and AS 1428.1-2009. It should be noted that the LHDG specifies that its requirements “should only be applied to the parts of the building classes not covered by the Disability Standards and NCC (BCA Vol 1 and 2)” – see “Note” on p.15.</p> <p>It is noted this information will be provided as part of future assessments.</p>	<p>Complies</p> <p>CRA</p> <p>Complies</p> <p>CRA</p>
3 Internal doors and corridors	<p>The internal doorways serving the living, dining, bedroom, bathroom, kitchen, laundry, and sanitary compartment must have a minimum clear opening width of 820mm.</p> <p>The internal corridors/passageways to the doorways referenced above must have a minimum clear width of 1,000mm.</p>	<p>Complies</p> <p>Complies</p>
4 Toilet	<p>The toilet must be located on the ground floor or entry level of the dwelling.</p> <p>The toilet must provide the following:</p> <ul style="list-style-type: none"> (i) have a minimum clear width of 900mm between the walls or obstructions in the room it is located; (ii) have a minimum 1,200mm clear circulation space forward of the toilet pan, exclusive of the swing of the door; and 	<p>Complies</p> <p>Complies</p> <p>Complies</p>

Part	Comments	Assessment
LIVEABLE HOUSING		
	<p>(iii) be located in the corner of the room if it is located in a combined toilet/bathroom.</p> <p>The toilet located in the main bathroom, adjacent to laundry, of unit 4 has been assessed for this clause.</p>	Complies
5 Shower	<p>One (1) bathroom is to feature a slip-resistant, hobless shower recess located in the corner of the room.</p> <p>Shower screens are permitted provided they can be easily removed at a later date.</p> <p>The shower located in the main bathroom, adjacent to laundry, of unit 4 has been assessed for this clause</p>	<p>CRA</p> <p>CRA</p>
6 Reinforcement of bathroom and toilet walls.	<p>Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided), and toilet must be reinforced to provide a fixing surface for the safe installation of grabrails in accordance with the requirements of this clause.</p> <p>Updated plans are required to show the reinforcement at CC stage.</p>	CRA
7 Internal stairways	<p>This matter is regulated by the NCC for this building. It should be noted that the LHDG specifies that its requirements “should only be applied to the parts of the building classes not covered by the Disability Standards and NCC (BCA Vol 1 and 2)” – see “Note” on p.15.</p>	N/A

8 Manly Development Control Plan 2013 Assessment – Adaptable housing

It should be noted that AS 4299-1995 is now more than 20 years old and the AS 1428 series of Standards has been subject to significant updates since it was published. These updates have resulted in the requirements of AS 1428.2 essentially being incorporated into what is currently referred to as AS 1428.1-2009. As such, where AS 4299-1995 references AS1428.2, this is taken as a reference to AS 1428.1-2009.

The following assessment table outlines a review of the units designated as adaptable within the proposed subject development against the “adaptable house **class C**” requirements of AS 4299-1995.

The following abbreviations have been used in the table below:

CRA	Compliance Readily Achievable It is considered that, whilst there is insufficient information currently provided to determine strict compliance with the relevant clause, the proposed design can comply in its current format.
Complies	The proposed design complies with the relevant clause
DNC	Does Not Comply The proposed design does not comply with the relevant clause and requires amendment.
FI	Further Information Further information is required to determine whether the proposed design satisfies the requirements of the relevant clause.
N/A	Not Applicable The relevant clause is considered not applicable to the subject proposed development.

AS 4299-1995 (adaptable house class C) Assessment Table

Room/Item	Clause	Comments	Assessment
1.	2.3	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages A drawing(s) showing the unit in its pre-adaptable and post-adaptable stage have been provided.	Provided
		Siting	
2.	3.3.2	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1 No Street parking will be provided. An accessway from the primary principal entrance from the street frontage will be provided. Access will be provided from the basement carpark to the residential units via car lift.	CRA

Room/Item	Clause	Comments	Assessment	
Letterboxes in Estate Developments				
3.	Letterboxes to be on hard standing area connected to accessible pathway.	3.8	Letterboxes for the residential units are to be provided in the ground floor level entry lobby.	CRA
Private Car Accommodation				
4.	Carparking space or garage min area 6.0 m x 3.8 m	3.7.2	Accessible car spaces to be provided within basement car park. Compliance with AS2890.6 is satisfactory. Please ensure a 2.5m internal vertical clearance is supplied from the basement entry way to each accessible space.	CRA
Accessible Entry				
5.	Accessible entry	4.3.1	The entry door to an adaptable unit is to have a minimum clear opening of 850mm and comply with door circulation spaces under AS1428.1-2009. Details to be shown on the post adaption plan.	CRA
6.	Accessible entry to be level (i.e. max. 1:40 slope)	4.3.2	Units are accessed from an enclosed corridor.	CRA
7.	Threshold to be low-level	4.3.2	Public corridors assumed to be flat.	CRA
8.	Landing to enable wheelchair manoeuvrability	4.3.2	The unit entry doors are internal to the building.	N/A
9.	Accessible entry door to have 850mm min clearance	4.3.1	The entry door to the adaptable units are to have a minimum clear opening of 850mm and comply with door circulation spaces under AS1428.1-2009. Details to be shown on the post adaption plan.	CRA
10.	Door lever handles and hardware to AS 1428.1	4.3.4	Door handles are to comply with AS1428.1-2009 at the construction stage.	CRA
Interior: General				
11.	Internal doors to have 820 mm min clearance	4.3.3	Internal doors are required to have a minimum clear opening of 820mm. Details to be shown on the post adaption plan.	CRA
12.	Internal corridors min. width of 1000 mm	4.3.7	Internal corridors within the unit are to have a minimum width of 1000mm. Details to be shown on the post adaption plan.	Complies
13.	Provision for compliance with AS 1428.1 for door approaches	4.3.7	Circulation spaces at doorways within the unit are to comply with AS1428.1-2009. Details to be shown on the post adaption plan.	CRA

Room/Item	Clause	Comments	Assessment	
14.	Provision for circulation space of min. 2250 mm diameter	4.7.1	A circulation space of min. 2250 mm diameter is to be made available in the living areas after the furniture has been placed. Details to be shown on the post adaption plan.	Complies
15.	Telephone adjacent to GPO	4.7.4	Telephone outlet adjacent to GPO in living/dining area to be indicated on post adaption plan.	CRA
16.	Potential illumination level min. 300Lux	4.10	Lighting to comply at construction stage.	CRA
Kitchen				
17.	Minimum width 2.7 m (1550mm clear between benches)	4.5.2	1550mm clearance is required prior to adaption in front of sink and appliances. Details to be shown on the post adaption plan.	DNC Refer to section 4
18.	Provision for circulation at doors to comply with AS 1428.1	4.5.4	It is assumed no kitchen doors proposed.	N/A
19.	Provision for benches planned to include at least one work surface of 800 mm length, adjustable in height from 750 mm to 850 mm or replaceable. Refer to Figure 4.8	4.5.5	Work surface of 800mm to be indicated on post adaption plan.	CRA
20.	Refrigerator adjacent to work surface	4.5.5	Refrigerator to be adjacent to the work surface and to be indicated on post adaption plan.	CRA
21.	Kitchen sink adjustable to heights from 750 mm to 850 mm or replaceable	4.5.6	Provision for benches planned to include at least one work surface of 800 mm length, adjustable in height from 750 mm to 850 mm or replaceable. Refer to Figure 4.8. Details to be shown on the post adaptation plan are to be provided to determine compliance with this Clause at CC stage.	CRA
22.	Kitchen sink bowl max. 150mm deep	4.5.6	Kitchen sink bowl to be max. 150mm deep, this item is noted as something that can be altered post adaption.	CRA
23.	Tap set capstan or lever handles or lever mixer	4.5.6(e)	Taps may be updated post adaption, with no works required at this stage.	CRA
24.	Tap set located within 300 mm of front of sink	4.5.6(e)	Taps may be updated post adaption, with no works required at this stage.	CRA
25.	Cook tops to include either front or side controls with raised cross bars	4.5.7	Cook top controls may be updated post adaption, with no works required at this stage.	CRA

Room/Item	Clause	Comments	Assessment
26.	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. Cook top may be updated post adaption, with no works proposed at this stage.	CRA
27.	Work surface min. 800 mm length adjacent to cook top at same height	4.5.7 Work surface adjacent to, and at the same height as the, cook top of 800mm to be indicated on post adaption plan.	Complies
28.	Oven located adjacent to an adjustable height or replaceable work surface	4.5.8 The oven is to be adjacent to an 800mm wide work surface and to be indicated on post adaption plan.	CRA
29.	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 AS 1428.1. At least one double GPO within 300mm of front of work surface. To be indicated on post adaption plan.	CRA
30.	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. To be indicated on post adaption plan.	CRA
31.	Slip-resistant floor surface	4.5.4 Floors to be slip resistant to comply with AS3661.1. To be indicated on post adaption plan.	CRA
Main Bedroom			
32.	At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS 1428.2	4.6.1 Turning space minimum 1540 x 2070mm required. To be indicated on post adaption plan.	Complies
Bathroom			
33.	Provision for bathroom area to comply with AS 1428.1	4.4.1 The bathroom area is to comply with clause 15 of AS1428.1-2009. To be indicated on a pre-adaption plan and shown as an accessible bathroom on a post adaption plan. The required circulation spaces at doors and around WC pans, washbasins and showers shall be able to be provided without major plumbing changes.	CRA
34.	Slip-resistant floor surface	4.4.2 Floors to be slip resistant to comply with AS3661.1. To be indicated on a post adaption plan.	CRA
35.	Shower recess- no hob. Minimum size 1160 x 1100 to comply with AS 1428.1. (Refer Figures 4.6 and 4.7)	4.4.4(f) Shower to be hob-less. The post adaption plans to show AS1428.1 compliant sizes and fitout. To be indicated on the post adaption construction documentation. Refer to specification.	CRA

Room/Item		Clause	Comments	Assessment
36.	Shower area waterproofed to AS 3740 with floor to fall to waste	4.4.4(f)	Entire bathroom to comply with AS3740. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
37.	Recessed soap holder	4.4.4(f)	Soap holder to be recessed. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
38.	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. To be indicated on a post adaption plan. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
39.	Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall – strengthening provision)	4.4.4(h)	Provisioning to be provided. To be indicated on a post adaption plan. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
40.	Provision for grabrail in shower (Refer to Figure 4.7) to comply with AS 1428.1	4.4.4(h)	Provisioning to be provided. To be indicated on a post adaption plan. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
41.	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. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
42.	Provision for washbasin with clearances to comply with AS 1428.1	4.4.4(g)	The washbasin and associated clear spaces must comply with AS 1428.1. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
43.	Double GPO beside mirror	4.4.4(d)	Double GPO to be provided beside mirror. To be indicated on a post adaption plan. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
Toilet – “Visitable”				

Room/Item	Clause	Comments	Assessment
44.	Provision of either 'visitable toilet' or accessible toilet	4.4.3 Once adapted the housing unit will be provided with an accessible toilet. To be indicated on a post adaption plan. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
45.	Provision to comply with AS1428.1	4.4.1 The bathroom area is to comply with clause 15 of AS1428.1-2009. To be indicated on a pre-adaption plan and shown as an accessible bathroom on a post adaption plan. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
46.	Location of WC pan at correct distance from fixed walls	4.4.3 Pan to be located correct distances from the walls in accordance with AS1428.1-2009 at pre adaption stage. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
47.	Provision for grab rail zone. (Refer Figure 4.6)	4.4.4(h) Provisioning to be provided. To be indicated on a post adaption plan. To be indicated on the post adaption construction documentation. Refer to specification.	CRA
48.	Slip resistant floor surface. (Vitreous tiles or similar)	4.4.2 Floors to be slip resistant to comply with AS3661.1. To be indicated on a post adaption plan.	CRA
49.	Circulation at doors to comply with AS 1428.1	4.8 Doorways at laundries to have appropriate circulation spaces in accordance with AS 1428.1. To be shown on post adaptation plan.	CRA
50.	Provision for adequate circulation space in front of or beside appliances (min. 1550 mm depth)	4.8 A minimum 1,550mm circulation space must be provided in front of the laundry appliances.	CRA
51.	Provision for automatic washing machine	4.8(e) Space for an automatic washing machine is to be provided. To be indicated on a post adaption plan.	complies
52.	Where a clothesline is provided, an accessible path of travel to this	4.8(a) No clothesline shown on plans.	Noted
53.	Double GPO	4.8(g) Double GPO to be provided in the laundry. To be indicated on a post adaption plan.	CRA

Room/Item		Clause	Comments	Assessment
54.	Slip-resistant floor surface	4.9.1	Floors to be slip resistant to comply with AS3661.1. To be indicated on a post adaption plan.	CRA
Door Locks				
55.	Door hardware operable with one hand, located 900–1100mm above floor	4.3.4	<p>Door hardware operable with one hand, located 900–1100mm above floor. To be indicated on post adaption plan.</p> <p>To be indicated on the post adaption construction documentation. Refer to specification.</p>	CRA

Annexure A - Reviewed Documentation

This Report is based on a review of the documentation listed below.

Architectural Details prepared by Platform architects, Project reference 28		
Drawing Number	Revision	Title
DA1000	DA1	Basement
DA1001	DA1	Lower ground floor
DA1002	DA1	Upper ground floor
DA1003	DA1	Level 1
DA1004	DA1	Level 2
DA1950	DA1	Adaptable and Post-Adaptation Plans

Annexure B- Specification

The following matters are to be addressed by design certification or a specification issued by the architect or relevant design consultant at the Construction Certificate (CC) stage of the development.

General

1. The subject proposed development will be accessible in accordance with clause D4D2 (including Table D4D2a and D4D2b as applicable), D4D3, and D4D4 of NCC 2022, and AS 1428.1-2009. Specifically, continuous accessible paths of travel, door widths, circulation spaces at doorways, and floor coverings.
2. The unobstructed height of the continuous accessible paths of travel will be no less than 2,000mm generally, and 1,980mm at doorways.
3. Floor and ground floor surfaces on accessible paths and circulation spaces, including the external accessible areas, will comply with clause 7 of AS 1428.1-2009.
4. Carpets will have pile heights or thicknesses of not more than 11mm, and the carpet backing thickness will not exceed 4mm.
5. Doorways in accessible areas will have a clear opening of not less than 850mm and where a double door is provided the active leaf will provide a clear opening of not less than 850mm in accordance with clause 13 of AS1428.1-2009.
6. Accessible carparking will be provided in accordance with clause D4D6 of NCC 2022.
7. Accessible carparking spaces will comply with AS/NZS 2890.6-2009.
8. Bollards will be provided in the shared accessible car space area in accordance with clause 2.2.1(e) of AS/NZS 2890.6-2009.
9. Braille and tactile signage will comply with clause D4D7 of NCC 2022 and clause 8 of AS1428.1-2009. This includes identification of each sanitary facility, all accessible entrances (where there are entrances that are not accessible), and each door required by clause E4D5 of NCC 2022 to be provided with an exit sign.
10. Tactile ground surface indicators will be installed in accordance with clause D4D9 of NCC 2022 at the following locations:
 - a. to the top and bottom of stairways (other than fire-isolated stairways);
 - b. to warn of any overhead obstruction less than 2m above the finished floor level (in the absence of a suitable barrier); and
 - c. to an accessway meeting a vehicular way adjacent to a pedestrian entrance, excluding a pedestrian entrance serving an area referred to in D3D5, if there is no kerb or kerb ramp at that point.Tactile ground surface indicators will comply with Sections 1 and 2 of AS/NZS 1428.4.1-2009.
11. Walkways will comply with clause 10 of AS 1428.1-2009.

12. The floor or ground surfaces abutting the sides of the walkways will be firm and level, of a different material to that of the walkway, at the same level, and will follow the grade of the walkway and extend horizontally for a minimum of 600mm. Alternatively, the walkway will be provided with a kerb or kerb rail in accordance with clause 10.2 of AS 1428.1-2009.
13. 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 AS 1428.1-2009. 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 900mm and 1,000mm 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 2m of the glazing on the opposite side.
14. The luminance contrast at doorways will comply with clause 13.1 of AS 1428.1-2009. The doorways will have a luminance contrast of 30% between:
 - a. door leaf and door jamb/architrave; or
 - b. door leaf and adjacent wall; or
 - c. door jamb/architrave and adjacent wall.
15. Door controls will be in accordance with clause 13.5 of AS 1428.1-2009.
16. Stairways (except fire-isolated stairways) will comply with clause 11 of AS 1428.1-2009.
17. The fire-isolated stairs will comply with clause 11.1(f) and (g) of AS 1428.1-2009.
18. Handrails will comply with clause 12 of AS 1428.1-2009.
19. Accessible sanitary facilities will be provided in accordance with clause F4D5, F4D6, and F4D7 of NCC 2022, and AS 1428.1-2009.
20. Fixtures and fittings in accessible sanitary facilities will be provided and installed in accordance with clause 15 of AS 1428.1-2009.
21. Grabrails will comply with clause 17 of AS 1428.1-2009.
22. Switches and power points will comply with clause 14 of AS 1428.1-2009.
23. All switches on an accessible path of travel and to an accessible sanitary facility, other than general purpose outlets, will be located not less than 900mm nor more than 1,100mm above the finished floor level, and no less than 500mm from an internal corner in accordance with clause 14.1 of AS 1428.1-2009.
24. Within accessible areas of the building, particularly the accessible sanitary facilities, rocker action and toggle switches will be provided in accessible areas. These fittings will have minimum dimensions of 30mm x 30mm. Push-pad switches will have a minimum dimension of 25mm in diameter. These fittings will be located no less than 600mm nor more than 1,100mm from the finished floor level in accordance with clause 14.2 of AS 1428.1-2009.

25. Lift call buttons on an accessible path of travel will be located not less than 900mm nor more than 1,100mm above the finished floor level and no less than 500mm from an internal corner in accordance with clause 14.1 of AS 1428.1-2009.
26. Passenger lifts will comply with Clause E3D7 and Clause E3D8 of NCC 2022 and AS1735.12.

Livable Housing – Silver Level

27. The entrance doorway to the livable housing units will have a clear opening width of no less than 820mm.
28. Internal doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry, and sanitary compartment purposes within the livable housing units will have a clear opening width of no less than 820mm in accordance with clause 3 of the Livable Housing Design Guidelines.
29. Internal corridors/passageways serving doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry, and sanitary compartment purposes within the livable housing units will have a clear width of no less than 1,000mm in accordance with clause 3 of the Livable Housing Design Guidelines.
30. One (1) bathroom within the livable housing units will feature a slip-resistant, hobless shower recess in accordance with clause 5 of the Livable Housing Design Guidelines
31. Walls around the shower and toilet within the livable housing units will be reinforced to provide a fixing surface for the safe installation of grabrails in the future. The reinforcement will withstand 1,100N applied in any position or direction in accordance with clause 6 of the Livable Housing Design Guidelines.

Adaptable Housing Units

32. All ground surfaces serving the adaptable units will be slip-resistant to comply with AS/NZS 3661.1-1993.
33. Circulation spaces compliant with AS 1428.2009 will be provided adjacent to the entry doors of the adaptable units in accordance with clause 4.3.1 of AS 4299-1995.
34. The entry door serving, and all internal doors within, the adaptable units will have a clear opening of no less than 820mm in accordance with clause 4.3.3 AS 4299-1995.
35. Door hardware within the adaptable units will comply with AS1428.1-2009. Also, all external doors will be keyed alike in accordance with clause 4.3.4 of AS 4299-1995.
36. Circulation spaces compliant with AS 1428.2009 will be provided adjacent to internal door openings within the adaptable units (post-adaptation) in accordance with clause 4.3.3 and 4.3.7 of AS 4299-1995.
37. A telephone outlet will be provided adjacent to a GPO in the living/dining area within the adaptable units in accordance with clause 4.7.4 of AS 4299-1995.

38. The kitchen cabinet design within the adaptable units will allow for the removal of the cabinets under the sink and adjacent work surface (post-adaptation) in accordance with clause 4.5.6 of AS 4299-1995.
39. The cook tops within the adaptable units will be provided with isolating switches or gas stop valves that can be easily and safely operated while the cook top is in use in accordance with clause 4.5.7 of AS 4299-1995.
40. GPOs within the adaptable units will comply with AS 1428.1-2009 with at least one (1) double GPO provided within 300mm of the front of the kitchen work surface and the GPO for the refrigerator located such that it is easily reachable when the refrigerator is in its operating position in accordance with clause 4.5.11 of AS 4299-1995.
41. The adaptable bathrooms within the adaptable units will be provisioned for the fit-out to comply with AS1428.1-2009 (post-adaptation) in accordance with 4.4.1 of AS 4299-1995.
42. The showers in the adaptable bathrooms within the adaptable units will be hob-less in accordance with clause 4.4.4(f) of AS 4299-1995.
43. The bathrooms will be waterproofed to comply with AS3740-2010.
44. The soap holder in the adaptable showers of the adaptable units will be recessed in accordance with clause 4.4.4(f) of AS 4299-1995.
45. Shower heads and taps within the adaptable bathrooms of the adaptable units will be located at a height and clearance compliant with AS1428.1-2009 in accordance with clause 4.4.4(f) of AS 4299-1995.
46. Provision for the installation of the requisite grabrails, shower hardware, and folding seat will be allowed in construction of the adaptable bathrooms in the adaptable units in accordance with clause 4.4.4(h) of AS 4299-1995.
47. Provision for the installation of a washbasin with clearances compliant with AS1428.1-2009 will be provided to the adaptable bathrooms in the adaptable units in accordance with clause 4.4.4(g) of AS 4299-1995.
48. A double GPO will be provided beside the mirror in the adaptable bathrooms in the adaptable units in accordance with clause 4.4.4(d) of AS 4299-1995.
49. Provision for the toilet to comply with AS1428.1-2009 (post-adaptation) has been allowed in the adaptable bathrooms of the adaptable units. This includes locating the pan in the correct position or providing future plumbing connection, and provision for the installation of all grabrails in accordance with clauses 4.4.1, 4.4.3 and 4.4.4(h) of AS 4299-1995.
50. Where a clothesline is provided to the adaptable unit, an accessible path of travel will be provided to access it in accordance with clause 4.8(a) of AS 4299-1995.
51. A double GPO will be provided in the laundry of the adaptable units. Also, a shelf with a height not exceeding 1,200mm will be provided in accordance with clause 4.8 of AS 4299-1995.

52. Lighting will be provided to the adaptable units in accordance with clause 4.10 of AS 4299-1995.
53. Carparking spaces compliant with AS/NZS 2890.6-2009 will be provided to serve the adaptable units in accordance with clause 3.7.2 of AS 4299-1995.