

PROSPER COLLECTION

ACCESS DESIGN REVIEW – STATE SIGNIFICANT DEVELOPMENT APPLICATION (SSDA)

5-9 Cowan Road, St Ives, NSW, 2075



Project number: 251480
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JENSEN HUGHES

Quality management

Revision	Date	Revision description	
ADR 1.1	28 th August 2025	This accessibility report has been prepared by Jensen Hughes to accompany a detailed State Significant Development Application (SSDA) for a residential development (including in-fill affordable housing) at 5-9 Cowan Road, St Ives within the Ku-ring-gai Local Government Area (LGA). This report details compliance of the drawings provided against relevant adaptable and silver level requirements, access provisions, standards and the Building Code of Australia (BCA) 2022.	
ADR 1.2	17 th September 2025		
		Prepared by	Reviewed by
		Molly Denison-Pender Accessibility Consultant Signed by: Molly Denison-Pender FD9D5AE56BE144D...	Andrew Beames Manager, Building Code and Accessibility DocuSigned by: Andrew Beames 0612937BEA204FB...

Jensen Hughes Pty Limited
ABN 29 077 183 192

Table of contents

1.0 Executive Summary4

2.0 Project Overview / Summary.....4

 2.1 Site Location.....6

 2.2 Surrounding Context7

 2.3 Review summary8

 2.4 Performance based solution summary.....8

3.0 Legislative requirements9

 3.1 Referenced legislation and standards.....9

 3.2 Council development approval / development control plans (DCPs).....10

4.0 Documentation reviewed.....11

5.0 Exemptions and performance-based solutions.....13

 5.1 Exemptions.....13

 5.2 Performance based solutions.....13

6.0 Design requirements14

 6.1 General building access requirements.....14

 6.2 External approaches to buildings – accessways, walkways, kerb ramps15

 6.3 Vehicle and bicycle access into the site.....16

 6.4 Entrances16

 6.5 Stairs, Ramps and Walkways17

 6.6 Access to and within lifts18

 6.7 Doors and Doorways.....19

 6.8 Internal accessways – corridors, rooms.....19

 6.9 Wayfinding (Signage Component) – Common Use Areas.....20

 6.10 Apartment Design Guide – Livable Housing Silver level.....20

 6.11 Class 2 adaptable housing (as4299).....27

 6.12 Emergency egress and evacuation.....31

 6.13 Landscaping, Streetscapes and Terraces.....31

 6.14 Lighting31

7.0 Compliance summary33

1.0 Executive Summary

This accessibility report has been prepared by Jensen Hughes to accompany a detailed State Significant Development Application (SSDA) for a residential development (including in-fill affordable housing) at 5-9 Cowan Road, St Ives within the Ku-ring-gai Local Government Area (LGA).

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-88948458) on 25 July 2025.

This report concludes that the proposed mixed-use development is suitable and warrants approval subject to the implementation of the following mitigation measures.

- Compliance with silver level LHA requirements
- Compliance with adaptable housing standard AS4299 requirements
- Compliance with the BCA clauses and Australian Standards referenced in section 6.1.1

Following the implementation of the above mitigation measures, the remaining impacts are considered appropriate.

Prosper have engaged the services of Jensen Hughes as access consultants to conduct a review of project documentation to ensure that functional and compliant accessibility has been applied to the design. Further, as members of the Access Consultants Association (ACA), Jensen Hughes staff use our experience and expertise in the provisions of access to ensure the project team considers the objects of the *Disability Discrimination Act* (DDA) which are far reaching, extending beyond the minimums of building legislation.

2.0 Project Overview / Summary

Jensen Hughes has reviewed the SSDA documents for the proposed residential development. The SSD application seeks development consent for a proposed residential flat building, including in-fill affordable housing at 5-9 Cowan Road, St Ives (the site). The proposed works include demolition of existing structures, site preparation works, excavation and construction of the building and associated landscaping works.

Specifically, the SSDA seeks development consent for:

- Demolition of the existing row of 10 attached townhouses at the site;
- Construction of a 9-storey residential flat building comprising:
 - 74 new dwellings (62 market residential units and 12 affordable housing units)
 - 3 basement levels for car parking
 - Communal open space at Ground Level and Level 7
- Landscaping; and
- Associated site works.

The proposal also incorporates 15% of the total gross floor area for affordable housing and seeks to utilise the incentive controls under Chapter 2, Part 2, Division 1, Section 16 of State Environmental Planning Policy (Housing) 2021 (Housing SEPP) to achieve 30% additional building height and 30% additional floor space ratio (FSR).

This report has been prepared in response to the requirements contained within the Secretary’s Environmental Assessment Requirements (SEARs) dated 25 July 2025 and issued for the SSDA (SSD-88948458). Specifically, this report has been prepared to respond to the SEARs requirement issued below.

Item	Description of requirement	Section reference (this report)
1. Statutory Context	• Address all relevant legislation, environmental planning instruments (EPIs) (including drafts), plans, policies, guidelines and planning circulars. • Identify compliance with applicable development standards and provide a detailed justification for any non-compliances. • Provide an explanation of how the development as described in the EIS is consistent with the development as was described in the request for SEARs (including any components that were not SSD) and provide a justification for any differences. • Address the requirements of any approvals applying to the site, including any concept approval, any endorsed or draft master plan, precinct plan or any recommendation from Gateway determination. • Provide an accurate summary of the detailed assessment of the impacts of the project and integrate the findings and recommendations of technical reports into the justification and evaluation of the project as a whole. • If affordable housing is being proposed, provide the name and ABN of the registered community housing provider that will be responsible for managing the affordable housing component, along with documentation confirming the provider’s agreement to this responsibility.	Section 3 – Legislative requirements Section 6 – Design Requirements

2.1 Site Location

The site is located at 5-9 Cowan Road, St Ives, within the Ku-ring-gai Local Government Area, and is legally described as SP30097. The site has an area of approximately 3,467.7sqm and is rectangular in shape.

The site currently contains a single row of ten, two-storey attached townhouses. The site is defined by large mature trees along the northern, eastern and western boundaries. Vehicular access to the site is provided at the southern boundary of the site from Cowan Road. The site is relatively flat.

The site adjoins St Ives Shopping Village to the north and east. Existing residential development (No. 3 Cowan Road) and St Ives Christ Church border the site to the south. To the west, two storey detached houses are located along Cowan Road.

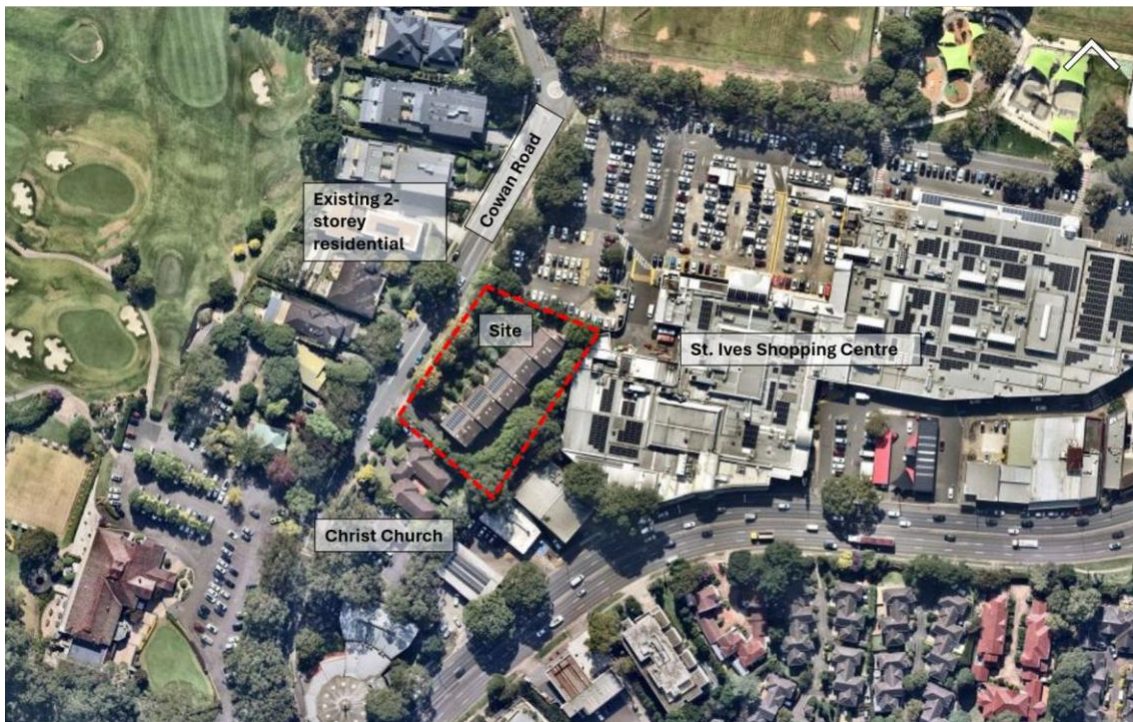


Figure 1: Site Location (Source: Nearmap, 2025)

2.2 Surrounding Context

The site is located 800-metres east of Cowan Creek which is separated from the site by Pymble Golf Club. The site is also located within 105-metres of Emerald Fitness Centre, 245-metres from St Ives Village Green, and 210-metres from St Ives Playground. The building heights in the immediate locality are generally single to two-storeys, with increased heights of up to 5-storeys on Mona Vale Road, opposite St Ives Christ Church.

The site is accessible via bus services with stops located along Mona Vale Road which is a 4-minute walk to the south, and along Killeaton Street, which is a 9-minute walk to the north. The bus routes connect the site to Mona Vale, Gordon, and the Northern Suburbs.



Figure 2: Broader Site Context (Source: Nearmap, 2025)

2.3 Review summary

A detailed review has been undertaken of the documentation listed within this report (refer below) against the following:

- + Objects of the *Disability Discrimination Act 1992*
- + *Disability (Access to Premises- Buildings) Standards 2010.*
- + Building Code of Australia 2022 Amendment 2 (BCA2022) Volume 1 – Part D4 and Clauses E3D7 and F4D5
- + Applicable Australian Standards AS1428.1:2021, AS1428.1:2021, AS1428.4.1:2009 and AS2890.6:2009, AS1735.12-1999.

The design review includes general areas of the proposed development including but not limited to items as noted below:

- + Accessways (continuous accessible path of travel) from the allotment boundary and any accessible parking bay within the allotment associated with the building.
- + Building entrances.
- + Provision of vertical transport (where relevant)
- + Doors (hinged/sliding) and doorway circulation space.
- + Stairs, ramps, and walkway/pathway requirements.
- + Car parking.
- + Sanitary Facilities including Unisex accessible toilets and ambulant facilities.
- + Landscaping.
- + Adaptable housing provisions AS 4299

Subject to addressing the actions identified as necessary within the future design stages of the project, Jensen Hughes confirm that the project documentation provides accessibility capable of complying with the Disability (Access to Premises – Buildings) Standards 2010 (APS), National Construction Code (BCA) and Ku-ring-gai Development Control Plan (DCP) requirements.

2.4 Performance based solution summary

The assessment of the design documentation has revealed that the following areas require assessment against the relevant performance requirements of the BCA:

Item	BCA Clause	Relevant Performance Requirement	Technical Requirement	Technical Departure
1.	Nil	Nil	Nil	Nil

3.0 Legislative requirements

The minimum legislative requirements for this project comprise both Federal and State legislation. These are outlined below.

Federal

The Federal *Disability Discrimination Act 1992* (DDA) was enacted in 1993. The objects of the DDA are to eliminate as far as possible, discrimination against persons on the basis of their disabilities, in particular access to premises (as defined under the DDA); work; accommodation; the provisions of facilities, services; and land; to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

The DDA is complaints-based legislation administered by the Australian Human Rights Commission (AHRC).

The DDA utilises legislative instruments known as Disability Standards to specify how the objects of the DDA are to be achieved. These standards include:

- + *Disability (Access to Premises – Buildings) Standards 2010,*
- + *Disability Standards for Education 2005; and*
- + *Disability Standards for Accessible Public Transport 2002.*

Where relevant, these Standards reference the Australian Standards for access and mobility (and others), including parts of the AS1428 series, primarily AS1428.1-2021, , AS1428.4.1-2009 and others such as AS2890.6 2009.

This review has considered the requirements of the *Disability (Access to Premises – Buildings) Standards 2010*.

State

With the introduction of the *Disability (Access to Premises – Buildings) Standards 2010*, the Building Code of Australia 2011 was modified to align with the federal legislation. The aim of this alignment/inclusion was to ensure that where a building complies with the relevant sections of the BCA, it is deemed to comply with the 'premises' component of the DDA relevant to buildings. However, it is to be noted that compliance with the BCA alone does not necessarily mean compliance with the Disability Discrimination Act, provisions of which extend beyond the building itself.

3.1 Referenced legislation and standards

The design review has been undertaken against the following:

- + Objects of the *Disability Discrimination Act (DDA) 1992*.
- + *Disability (Access to Premises – Buildings) Standards 2010*.
- + National Construction Code (BCA) - Building Code of Australia (BCA) 2022 Volume 1. and referenced Australian Standards including:
 - AS1428.1 2021 Part 1: General Requirements for access – new building work.

- AS1428.1 2021 Part 1: General Requirements for access – new building work.
- AS1428.2 1992 Part 2: Enhanced and additional requirements – Buildings and facilities.
- AS1428.4.1 2009 Part 4.1: Means to assist the orientation of people with vision impairment – Tactile Ground Surface Indicators (TGSIs).
- AS2890.6 2009 Part 6: Off-street parking for people with disabilities.
- AS1735.12 1999 Lift facilities for people with disabilities.

3.2 Council development approval / development control plans (DCPs)

Further to the above listed Federal and State based legislative considerations, adherence to the Ku-ring-gai Development Control Plan is required.

The proposed development must not be inconsistent with the endorsed drawings and all relevant conditions will need to be satisfied and accurately reflect the construction issue drawings.

4.0 Documentation reviewed

This report is specific to the following key stage drawings.

Architectural Plans Prepared by pbd Architects			
Drawing Number	Revision	Date	Title
DA000	P4	20.08.25	Cover Page
DA001	P5	22.08.25	Project Information
DA002	P4	20.08.25	Demolition Plan
DA003	P4	20.08.25	Site Analysis
DA004	P4	20.08.25	Site Plan
DA100	P4	20.08.25	Basement 3 plan
DA101	P4	20.08.25	Basement 2 plan
DA102	P4	20.08.25	Basement 1 plan
DA103	P4	20.08.25	Ground floor plan
DA104	P4	20.08.25	Level 1&2 plan
DA105	P4	20.08.25	Level 3 plan
DA106	P4	20.08.25	Level 4 plan
DA107	P4	20.08.25	Level 5 plan
DA108	P4	20.08.25	Level 6 plan
DA109	P4	20.08.25	Level 7 plan
DA110	P4	20.08.25	Roof plan
DA201	P4	20.08.25	Elevation Sheet 1
DA202	P4	20.08.25	Elevation Sheet 2
DA203	P4	20.08.25	Elevation Sheet 3
DA204	P4	20.08.25	Elevation Sheet 4
DA301	P4	20.08.25	Section Sheet 1
DA302	P4	20.08.25	Section Sheet 2
DA303	P4	20.08.25	Section Sheet 3
DA304	P4	20.08.25	Section Sheet 4
DA400	P4	20.08.25	Finishes Schedule
DA410	P4	20.08.25	Photomontage

Architectural Plans Prepared by pbd Architects			
DA500	P4	20.08.25	GFA Diagram
DA501	P5	22.08.25	Affordable Housing GFA Diagram
DA510	P4	20.08.25	Landscape & Deep soil diagram
DA520	P4	20.08.25	Height Limit Diagram
DA530	P4	20.08.25	Cross ventilation diagram
DA540	P4	20.08.25	Communal open space diagram
DA550	P4	20.08.25	Unit Mix Diagram
DA560	P4	20.08.25	Storage Calculation Diagram
DA561	P4	20.08.25	Storage Calculation Diagram
DA680	P4	20.08.25	Solar Access Diagram Sheet 1
DA681	P4	20.08.25	Solar Access Diagram Sheet 2
DA710	P4	20.08.25	Shadow Diagram sheet 1
DA711	P4	20.08.25	Shadow Diagram sheet 2
DA712	P4	20.08.25	Shadow Diagram sheet 3
DA713	P4	20.08.25	Shadow Diagram sheet 4
DA800	P4	20.08.25	Pre & post adaptable layouts
DA801	P4	20.08.25	Pre & post adaptable layouts

5.0 Exemptions and performance-based solutions

5.1 Exemptions

Based on the use of some areas within a building, it is reasonable to not provide access to some spaces where it is deemed inappropriate because of the required tasks which are to be performed in the space or if the area poses as a health or safety risk for people with a disability. These areas include:

- + 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 area exempted by (a) or (b).

Examples of these rooms/spaces as outlined within the Guideline on the Application of The Premises Standards, Version 2, February 2013, developed by the Australian Human Rights Commission could include: cleaners store rooms, commercial kitchens, staff serving areas behind bars, cool rooms, rigging lofts, waste-containment areas, foundry floors, abattoir animal process areas, railway shunting yards, electrical switch rooms, chemical and hazardous material store areas, loading docks, fire lookouts, plant and equipment rooms and other similar areas.

5.1.1 Subject site – exemptions from the requirements of access

It is expected that plant, mechanical and lift services would meet the parameters of exemption as outlined above.

5.2 Performance based solutions

Where compliance via the current Deemed to Satisfy (DtS) building legislation cannot be met, these departures are to be addressed via the Performance Based Solution (PBS) Assessment process. This assessment when utilised, will be unique to each building and/or site, combining an understanding of the principles of access with alternative methods to assist the design team, building owners/operators and occupants to achieve an effective solution.

Item	BCA Clause	Relevant Performance Requirement	Technical Requirement	Technical Departure
1.	Nil	Nil	Nil	Nil

6.0 Design requirements

The following highlights the key accessibility features that are to be addressed as the design progresses. It should be noted that for technical specifications, relevant Australian Standards are to be utilised.

6.1 General building access requirements

Buildings and parts of buildings must be accessible in accordance with D4D2 of BCA 2022 Amendment 2. Unless subject to an exemption, access is required as follows:

Building Classification	Access Requirements
Class 2 – Residential Common areas	Access is required: From a pedestrian entrance required to be accessible to at least one floor containing sole-occupancy units (SOUs) and to the entrance of each SOU located on that level. To and within not less than one 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 of the like. Where a ramp complying with AS 1428.1 or a passenger lift is installed: - To the entrance doorway of each SOU, and - To and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.
Class 7a – a car park	Access is required to and within any level containing accessible carparking spaces

6.1.1 BCA Clauses and referenced Australian Standards reviewed:

BCA Clauses – BCA 2022 references	
D4D2 General building access requirements	Applicable
D4D3 Access to buildings	Applicable
D4D4 Parts of buildings to be accessible	Applicable
D4D5 Exemptions	Applicable
D4D6 Accessible car parking	Applicable
D4D7 Signage	Applicable
D4D8 Hearing augmentation	Not applicable
D4D9 Tactile indicators	Applicable
D4D10 Wheelchair seating spaces in a Class 9b assembly building	Not applicable
D4D11 Swimming Pools	Not applicable
D4D12 Ramps	Applicable
D4D13 Glazing on an accessway	Applicable
E3D7 Passenger lift types and their limitations	Applicable

BCA Clauses – BCA 2022 references	
F4D5 Accessible sanitary facilities	Applicable
Australian Standard references	
AS1428.1-2021	Applicable
AS1428.4.1-2009	Applicable
AS4299 1995	Applicable
AS1428.2-1992	Applicable
AS 2890.6-2009	Applicable
AS1735.12-1999 – Post Adaptation	Applicable

6.2 External approaches to buildings – accessways, walkways, kerb ramps

6.2.1 Access requirements

An accessway (continuous accessible path) is required to the new buildings:

- + from the main points of a pedestrian entry at the allotment boundary; and
- + from another accessible building connected by a pedestrian link; and
- + from any required accessible car parking space on the allotment.

Accessways are required to incorporate a minimum width of 1000mm, 1500mm x 1500mm at locations where a 90deg turn is required, and 1540mm (W) x 2070mm (L) where it is not possible to continue, within 2m of the end of the accessway. Passing spaces are also required at maximum 20m intervals, where a direct line of sight is not available within an accessway. Where the accessway incorporates a linear grade between 1:20 and 1:40, it is to meet the requirements of AS 1428.1-2021 relevant to walkways.

Crossfalls and gradients of the external pathways are to not exceed 1:40 and be constructed of a firm, hardstand surface in accordance with AS1428.1-2021 requirements.

Ground surfaces are required to incorporate finishes which are slip resistant, including the abutment of surfaces which don't limit the movement of a person with disability, with the orientation and placement of elements such as drains also important considerations.

Doorways and gates within accessways are to meet the provisions of AS1428.1-2021 including circulation space to both sides of the gate/door, luminance contrast, and the provision of appropriate door controls.

Where there is no environmental cue available for people with vision loss e.g., level transition at a road crossing point, the incorporation of tactile ground surface indicators (TGSIs) in accordance with the requirements of AS1428.4.1-2009 is necessary.

Where a kerb ramp is installed, it is to meet the provisions of AS1428.1-2021, including transitions, surface abutments and landing depth and width, according to the direction of travel and/or any required change of direction.

6.2.2 Subject site – access assessment

Based on a review of the drawings provided, external approaches to the building from the allotment boundary and basement car parking appear capable of complying with relevant access provisions and will be further reviewed as the design progresses to ensure continued compliance with the access provisions prescribed by the relevant Australian Standards and BCA 2022.

Ground surfaces within the common use areas would require further reviewing as the design progresses.

6.3 Vehicle and bicycle access into the site

6.3.1 Access requirements

Carparking

There are no requirements for car parking relevant to this class of building (Class 2) under the BCA. AS4299 and Livable Housing Design Guidelines require a car space be provided for each unit nominated as adaptable or silver level livable housing.

Bicycle

Bicycle parking where provided should consider the approach, entry, and circulation space available within any secure bicycle parking area e.g., space for a 180deg turn if necessary, and the layout of any bike racks to ensure that bicycles when in-situ, don't impact the use of any associated/adjacent accessways. For example, a recumbent bike which extends over an accessway when parked.

6.3.2 Subject site – access assessment

Whilst buildings of this classification (Class 2) are not required under the minimum prescriptive measures of the BCA to incorporate accessible car parking, AS4299 requires a car space for each unit nominated to comply. An accessway is available through a common open space from these parking bays to the passenger lifts within all basement levels.

The car parking as currently detailed requires amendment to be capable of meeting the provisions of access as prescribed by the Australian Standards 4299. The documentation will be further reviewed as the design progresses to ensure compliance is met.

6.4 Entrances

6.4.1 Access requirements

Doors/gates within paths of travel common to building users, require the following to meet the provision of AS1428.1-2021 Clause 13:

- + Unobstructed clear opening widths to be a minimum of 850mm (a 920mm door leaf is required for a hinge swing door; 1020mm required for a swing door).
- + Controls including after-hours swipe cards, key locks, auto door controls etc. located on a level landing, in an accessible location.
- + Circulation spaces which consider the angle of approach and direction of swing/slide at both sides of the entrance door.
- + Light operational forces (less than 20 N).

- + Appropriately procured and installed door/gate controls and hardware.
- + Luminance contrast which is measured at not less than 30%.

6.4.2 Subject site – access assessment

Based on a review of the drawings provided, entrances and circulation spaces within common use areas where required to be accessible appear capable of complying with relevant access provisions and will be further reviewed as the design progresses to ensure continued compliance with the access provisions prescribed by the relevant Australian Standards and BCA 2022.

6.5 Stairs, Ramps and Walkways

6.5.1 Access requirements

Stairs within the site are to incorporate (excluding fire isolated stairs):

- + Handrails to both sides which are continuous, consistent, and incorporate a diameter of 30-50mm, extensions and terminations at the top and base, a clear unobstructed width of no less than 1000mm between them.
- + Opaque risers.
- + Nosing strips which provide a luminance contrast of no less than 30%.
- + Tactile ground surface indicators (TGSIs) at the top and base which incorporate a luminance contrast of 30-60% dependent upon the installation type.

Ramps within the site are to incorporate (excluding fire isolated ramps):

- + A gradient of not more than 1:14.
- + Landings which are incorporated at the intervals required based upon the gradient of the ramp and which do not exceed 1:40, taking into consideration the direction of travel, and adjusting the landing depth/width, as necessary.
- + Handrails to both sides which are continuous, consistent, and incorporate a diameter of 30-50mm, extensions and terminations at the top and base, a clear unobstructed width of no less than 1000mm between them.
- + Kerb rails installed to both sides of the ramp.
- + Tactile ground surface indicators (TGSIs) at the top and base which incorporate a luminance contrast of 30-60% dependent upon the installation type.

A set back is required from transverse paths of travel, typically 700mm from an internal corner and 900mm from the allotment boundary.

Walkways within the site are to incorporate:

- + Ensure 1:20 walkways have suitable landings at 15m max. intervals, compliant with AS1428.1.
- + Ensure walkway landings are 1200mm min. length, (no change in direction) or 1500mm x 1500mm min. length (internal splay permitted), for 90 degree turn, compliant with AS1428.1 2021.

- + Provide a suitable height wall (450mm min. height) or kerbing along open walkway sides, compliant with AS1428.1 fig. 19: Kerbing to be between 65-75mm height above FFL, or; At least 150mm height above FFL.

NB. The top of kerbing must not be within 75-150mm range above FFL to minimise risk of wheelchair footplate entrapment. If kerbing extends within 75-150mm range between it must be continuous with no gap greater than 20mm. Kerb rails installed to both sides of the ramp.

- + Without walls or kerbing, walkways (1:20 - 1:33 gradients) need to extend at least 600mm min. width at same grade in firm and level surface of different material compliant with AS1428.1.
- + Ensure curved walkways have 1500mm min. clear width with appropriate min. inside curve radius compliant with AS1428.1 fig. 20.
- + Ensure the threshold of 1:20 walkway has smooth level transition between surfaces. Alternatively, provide wall or handrail and kerbing compliant with AS1428.1 to minimise potential trip hazards.

A set back is required from transverse paths of travel, typically 700mm from an internal corner and 900mm from the allotment boundary.

Fire-isolated Stairs (FIS)

All fire isolated stairs are to incorporate:

- + Nosing strips which provide a luminance contrast of no less than 30%.
- + Handrails which meet the provisions of AS1428.1-2021 Clause 12.

6.5.2 Subject site – access assessment

Common use stairs will be required to meet the provisions of AS 1428.1-2021 and AS 1428.4.1-2009 as the design progresses. No ramps were noted within the common use areas at this stage of design. Based on a review of the drawings provided, the walkway at the principle pedestrian entry off Cowan Street appears capable of complying with relevant access provisions and will be further reviewed as the design progresses to ensure continuing compliance.

6.6 Access to and within lifts

6.6.1 Access requirements

An accessway is required to any passenger lift where available within a building. Where a passenger lift travels greater than 12m a minimum car size of 1400mm wide x 2000mm depth is required, if travelling less than 12m a minimum car size of 1100mm wide x 1400mm depth is accepted. Where stretcher use is indicated on a lift travelling greater than 12m, a 2000mm depth is necessary. The clear opening width of the door of the lift car must be no less than 900mm.

Internal fit out of the lift is required to comply with AS1735.12 including:

- + Handrails which incorporate a minimum length of 600mm, installed 850mm – 950mm above the finished floor within the lift car.
- + Control buttons and panels which correctly located within the car – from internal corner and floor) which incorporate tactile and Braille.
- + An audible announcement where the lift travels more than 2 floor levels.

6.6.2 Subject site – access assessment

Based on a review of the drawings provided, the lifts as currently detailed appear capable of meeting compliance regarding passenger passing spaces and lift door clear opening. Where, in the future a lift is installed, compliance will be assured and checked at the time of procurement, engagement of a lift supplier/contractor. This would be required prior to the issue of a Construction Certificate.

6.7 Doors and Doorways

6.7.1 Access requirements

Doors and doorways within paths of travel required to be accessible, require the following to meet the provision of AS1428.1-2021 Section 10:

- + Unobstructed clear opening widths to be a minimum of 850mm (a 920mm door leaf is required for a hinge swing door; 1020mm required for a swing door).
- + Controls including after-hours swipe cards, key locks, auto door controls etc. located on a level landing, in an accessible location.
- + Circulation spaces which consider the angle of approach and direction of swing/slide at both sides of the entrance.
- + Light operational forces (less than 20 N).
- + Appropriately procured and installed door controls and hardware.
- + Fully glazed doors or sidelights to incorporate a visual contrast strip no less than 75mm wide for the full width of the glazing, with the lowest edge at 900-1000mm above the finished floor.
- + Luminance contrast which is measured at not less than 30%.
- + A level transition shall be provided to all entrances and external areas e.g. bike storage which will be achieved via provision of threshold ramps where required in accordance with AS1428.1-2021 requirements.

6.7.2 Subject site – access assessment

Based on a review of the drawings provided, doors and doorways on accessible paths of travel within common use areas where required to be accessible appear capable of complying with relevant access provisions and will be further reviewed as the design progresses to ensure continuing compliance.

6.8 Internal accessways – corridors, rooms

6.8.1 Access requirements

An accessway is required within all common use areas of a building normally used by occupants, unless subject to the exemption provisions of the BCA.

Where provided and relevant, internal accessways are required to ensure:

- + a minimum clear width of 1000mm is available, adjusting as necessary to address door circulation space.
- + Doors/doorways are provided with appropriate controls, circulation spaces and contrasts, with visual glazing strips installed, as necessary.

- + Ground surfaces and abutments meet the provisions of AS1428.1-2021.
- + Ramps i.e. step and threshold meet the provisions of AS1428.1-2021.
- + Passing and turning spaces where provided meet the provisions of access as prescribed by AS1428.1-2021.

6.8.2 Subject site – access assessment

Based on a review of the drawings provided, the accessways within the common use areas appear capable of complying with the provisions of AS 1428.1-2021. They will continue to be reviewed as the design progresses to ensure compliance with the access provisions prescribed by the relevant Australian Standards and BCA 2022.

6.9 Wayfinding (Signage Component) – Common Use Areas

6.9.1 Access requirements

Where a pedestrian entrance is not accessible, raised tactile and Braille directional signage incorporating the international symbol of access is required to direct a person to the location of the nearest accessible pedestrian entrance.

Further raised tactile and Braille signage is required to be installed at accessible sanitary facilities, identifying the configuration of the facility, ambulant sanitary facilities (where available), spaces which incorporate hearing augmentation, including information about the type of system in use and the availability/location of receivers. Signage is also required at exit doors identifying the location.

A signage and wayfinding strategy should be created to ensure key accessible transition points are identified and captured around a building and/or site e.g., highlighting the location of accessible sanitary facilities, parking bays etc.

6.9.2 Subject site – access assessment

Based on a review of the drawings provided signage package will be assessed as the design progresses to ensure compliance with relevant accessibility provisions prescribed by the Australian Standards and BCA 2022.

6.10 Apartment Design Guide – Livable Housing Silver level

6.10.1 Accessibility Requirement

In accordance with the BCA, a Class 2 building has no minimum requirement for the provision of accessible or livable units. However, in accordance with:

The NSW Planning and Environment Apartment Design Guide, provision for a minimum of 20% of units which incorporate the Livable Housing Design Guideline's silver level features are to be addressed, these features include:

- + Dwelling access
- + Dwelling entrance
- + Internal doors and corridors
- + Toilet

- + Shower
- + Reinforcement of bathroom and toilet walls
- + Internal stairways

LHA Clause Number	Room/Item	Current Status
Performance Criteria		
<u>1 Dwelling access</u>		
There is a safe and continuous pathway from the street entrance and/or parking areas to a dwelling entrance that is level.		
Silver		
1	Provide a safe and continuous pathway from:	Capable of complying
1 a (i)	the front boundary of the allotment; or	Capable of complying
1 b	The path of travel as referred to in 1.a should have a minimum clear width of 1000mm; and	Capable of complying
1 b (i)	an even, firm, slip resistant surface; and	Capable of complying
1 b (ii)	a crossfall of not more than 1:40; and	Capable of complying
1 b (iii)	a maximum pathway slope of 1:14, with landings provided at no greater than 9m for a 1:14 ramp and no greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length, and	Capable of complying
1 b (iv)	be step-free.	Capable of complying
1 c	A step ramp* may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should provide:	Not applicable
1 c (i)	a maximum gradient of 1:10; and	Not applicable
1 c (ii)	a minimum clear width of 1000mm (please note width should reflect the pathway width); and	Not applicable
1 c (iii)	a maximum length of 1900mm.	Not applicable
Performance Criteria		
<u>2 Dwelling entrance</u>		
There is a safe and continuous pathway from the street entrance and/or parking areas to a dwelling entrance that is level.		
Silver		
2 a	The dwelling should provide an entrance door with -	Capable of complying

LHA Clause Number	Room/Item	Current Status
2 a (i)	a minimum clear opening width of 820mm - See Figure 2(a); and	Capable of complying
2 a (ii)	a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and	Capable of complying
2 a (iii)	reasonable shelter from the weather.	Capable of complying
2 b	A level landing area of 1200mm x 1200mm should be provided at the level (step-free) entrance door.	Capable of complying
2 c	Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided. See Figure 1(b).	Not applicable
2 d	The level (step- free) entrance should be connected to the safe and continuous pathway as specified in Element 1.	Capable of complying
Performance Criteria		
3 Car parking Where the parking space is part of the dwelling access it should allow a person to open their car doors fully and easily move around the vehicle. If the parking space is NOT part of the path of access this section is NA. Note for client: this section is not applicable		
Silver		
3 a	Where the parking area forms part of the dwelling access the space should incorporate -	Not applicable
3 a (i)	minimum dimensions of at least 3200mm (width) x 5400mm (length); and	Not applicable
3 a (ii)	an even, firm and slip resistant surface; and	Not applicable
3 a (iii)	a level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen).	Not applicable
Performance Criteria		
4 Internal doors and corridors Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.		
Silver		
4 a	Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide:	Capable of complying
4 a (i)	a minimum clear opening width of 820mm; and	Capable of complying
4 a (ii)	a level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled).	Capable of complying
4 b	Internal corridors/passageways to the doorways referred to in 4.a should provide a minimum clear width of 1000mm.	Capable of complying

LHA Clause Number	Room/Item	Current Status
Performance Criteria		
<u>5 Toilet</u>		
The ground (or entry) level has a toilet to support easy access for home occupants and visitors.		
Silver		
5 a	Dwellings should have a toilet on the ground (or entry) level that provides:	Capable of complying
5 a (i)	a minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and	Not applicable
5 a (ii)	a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a).	Capable of complying
5 b	If the toilet is located within the ground (or entry) level bathroom, the toilet pan should be located in the corner of the room to enable the installation of grabrails.	Capable of complying
Performance Criteria		
<u>6 Shower</u>		
The bathroom and shower are designed for easy and independent access for all home occupants.		
Silver		
6 a	One bathroom should feature a slip resistant, hobless (step-free) shower recess. Shower screens are permitted provided they can be removed at a later date.	Capable of complying
6 b	The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date.	Capable of complying
Performance Criteria		
<u>7 Reinforcement of bathroom and toilet walls</u>		
The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.		
Silver		
7 a	Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails.	Further information required
7 b	The fastenings, wall reinforcement and grabrails combined must be able to withstand 1100N of force applied in any position and in any direction.	Further information required
7 c	The walls around the toilet are to be reinforced by installing-	Further information required
7 c (i)	noggings with a thickness of at least 25mm in accordance with Figure 6a; or	Further information required

LHA Clause Number	Room/Item	Current Status
7 c (ii)	sheeting with a thickness of at least 12mm in accordance with Figure 6b.	Further information required
7 d	The walls around the bath are to be reinforced by installing:	Further information required
7 d (i)	noggings with a thickness of at least 25mm in accordance with Figure 7a; or	Further information required
7 d (ii)	sheeting with a thickness of at least 12mm in accordance with Figure 7b.	Further information required
7 e	The walls around the hobless (step-free) shower recess are to be reinforced by installing -	Further information required
7 e (i)	noggings with a thickness of at least 25mm in accordance with Figure 8a; or	Further information required
Performance Criteria		
<u>8 Internal stairways</u> Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation. If there are NO internal stairways then this section is NA. Note: Handrails on both sides of the stairway are preferred		
Silver		
8 a	Stairways in dwellings must feature:	Not applicable
8 a (i)	a continuous handrail on one side of the stairway where there is a rise of more than 1m	Not applicable
Performance Criteria		
<u>9 Kitchen</u> The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.		
Silver		
	No Requirements	Not applicable
Performance Criteria		
<u>10 Laundry</u> The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.		
Silver		
	No Requirements	Not applicable
Performance Criteria		

LHA Clause Number	Room/Item	Current Status
<u>11 Ground (or entry bedroom space)</u>		
There is a space on the ground (or entry) level that can be used as a bedroom		
Silver		
	No Requirements	Not applicable
Performance Criteria		
<u>12 Switches and powerpoints</u>		
Light switches and powerpoints are located at heights that are easy to reach for all home occupants		
Silver		
	No Requirements	Not applicable
Performance Criteria		
<u>13 Door and tapware</u>		
Home occupants are able to easily and independently open and close doors and safely use tap hardware.		
Silver		
	No Requirements	Not applicable
Performance Criteria		
<u>14 Family/Living space</u>		
The family/living room features clear space to enable the home occupant to move in and around the room with ease.		
Silver		
	No Requirements	Not applicable
Performance Criteria		
<u>15 Window sills</u>		
Windows sills are installed at a height that enables home occupants to view the outdoor space from either a seated or standing position.		
Silver		
	No Requirements	Not applicable

6.10.2 Subject site – access assessment

The site currently incorporates fifteen (15) adaptable units, with two (2) types, which will meet the Silver Level requirements of the Livable Housing Design Guide. All fifteen (15) units are required to demonstrate they are capable of meeting these Silver Level requirements, bringing the total number of units to 20%.

The following units appear to provide elements which, with some adjustment could meet the Silver Level requirements. These are:

- + L1-01
- + L2-01
- + L3-01
- + L4-01
- + L5-01
- + L1-05
- + L2-05
- + L3-05
- + L4-05
- + L5-05
- + L1-06
- + L2-06
- + L3-06
- + L4-06
- + L5-06

6.11 Class 2 adaptable housing (AS4299)

6.11.1 Accessibility Requirement

In accordance with the BCA, a Class 2 building has no minimum requirement for the provision of accessible units.

While not required within the Ku-ring-gai Council DCP, the developer Prosper has opted for an above best practice approach in accordance with the typical council DCP requirement that 20% adaptable units are provided to a Class C standard. Based on this, 15 adaptable units are to be provided.

6.11.2 Subject site – access assessment

The site as currently documented demonstrates an understanding and outlines application of the principles of ‘adaptable housing’ as outlined within the Foreword of AS 4299 – 1995.

The development has incorporated fifteen (15) adaptable dwellings within the seventy-four (74) proposed. The nominated units are as follows:

- + L1-01
- + L2-01
- + L3-01
- + L4-01
- + L5-01
- + L1-05
- + L2-05
- + L3-05
- + L4-05
- + L5-05
- + L1-06
- + L2-06
- + L3-06
- + L4-06
- + L5-06

Details available on Drawing DA800 outline the Pre-Adaptation and Post-Adaptation provisions for the unit 2 typical layout and unit 5/6 typical layout plans.

The drawings demonstrate that with some amendment they are capable of complying with the following (where applicable):

Adaptable House Class C – all essential features incorporated

Item	Room/Item	AS4299 Clause	Current Phase Review
Note: Item - As per Appendix A – Schedule of features for Adaptable Housing			
Drawings			
1.	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages	2.3	Capable of complying
Siting			
2.	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS 1428.1	3.3.2	Capable of complying
Letterboxes in Estate Developments			
3.	Letterboxes to be on hard standing area connected to accessible pathway	3.8	Capable of complying
Private car accommodation			
4.	Car parking space or garage a min. area of 6.0m x 3.8m	3.7.2	Does not comply
Accessible Entry			
5.	Accessible entry	4.3.1	Capable of complying
6.	Accessible entry to be level (i.e., max. 1:40 slope)	4.3.2	Capable of complying
7.	Threshold to be low-level	4.3.2	Capable of complying
8.	Landing to enable wheelchair manoeuvrability	4.3.2	Capable of complying
9.	Accessible entry door to have 850 mm min. clearance	4.3.1	Does not comply
10.	Door lever handles and hardware to AS 1428.1	4.3.4	Further information required
Exterior: General			
11.	Internal doors to have 820mm min. clearance	4.3.3	Capable of complying
12.	Internal corridors min. width of 1000mm	4.3.7	Capable of complying
13.	Provision for compliance with AS 1428.1 for door approaches	4.3.7	Does not comply
Living room and dining room			
14.	Provision for circulation space of min. 2250mm diameter	4.7.1	Capable of complying
15.	Telephone adjacent to GPO	4.7.4	Further information required
16.	Potential illumination level min. 300 lux	4.10	Further information required
Kitchen			
17.	Minimum width 2.7m (1550mm clear between benches)	4.5.2	Capable of complying

Item	Room/Item	AS4299 Clause	Current Phase Review
18.	Provision for circulation at doors to comply with AS 1428.1	4.5.1	Capable of complying
19.	Provision for benches planned to include at least one worksurface of 800mm length, adjustable in height from 750mm to 850mm or replaceable. Refer to Figure 4.8 (AS 4299)	4.5.5	Further information required
20.	Refrigerator adjacent to work surface	4.5.5	Capable of complying
21.	Kitchen sink adjustable to heights from 750mm to 850mm or replaceable	4.5.6	Further information required
22.	Kitchen sink bowl max 150mm deep	4.5.6	Further information required
23.	Tap set capstan or lever handles or lever mixer	4.5.6 (e)	Further information required
24.	Tap set located within 300mm min of front of sink	4.5.6 (e)	Further information required
25.	Cooktops to include either front or side controls with raised cross bars	4.5.7	Further information required
26.	Cooktops to include isolating switch	4.5.7	Further information required
27.	Worksurface min. 800mm length adjacent to cooktop at same height	4.5.7	Capable of complying
28.	Oven located adjacent to an adjustable height or replaceable work surface	4.5.8	Further information required
29.	GPOs to comply with AS 1428.1. At least one double GPO within 300mm of front of worksurface	4.5.8	Further information required
30.	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position	4.5.11	Further information required
31.	Slip resistant floor surface	4.5.4	Further information required
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	Capable of complying
Bathroom			
33.	Provision for bathroom area to comply with AS 1428.1	4.4.1	Capable of complying
34.	Slip-resistant floor surface	4.4.2	Further information required
35.	Shower recess – no hob. Minimum size 1160 x 1100mm to comply with AS 1428.1 (refer Figures 4.6 and 4.7 – AS 4299)	4.4.4 (f)	Capable of complying

Item	Room/Item	AS4299 Clause	Current Phase Review
36.	Shower area waterproofed to AS 3740 with floor to fall to waste	4.4.4 (f)	Further information required
37.	Recessed soap holder	4.4.4 (f)	Further information required
38.	Shower tap positioned for each reach to access side of shower sliding track	4.4.4 (f)	Further information required
39.	Provision of adjustable, detachable handheld shower rose mounted on a slider grabrail or fixed hook (plumbing and wall-strengthening provision)	4.4.4 (h)	Further information required
40.	Provision for grabrail in shower (Refer to Figure 4.7 – AS 4299) to comply with AS 1428.1	4.4.4 (h)	Further information required
41.	Tap sets to be capstan or lever handles with single outlet	4.4.4 (c)	Further information required
42.	Provision for washbasin with clearances to comply with AS 1428.1	4.4.4 (g)	Capable of complying
43.	Double GPO beside mirror	4.4.4 (d)	Further information required
Toilet			
44.	Provision of either 'visitable toilet' or accessible toilet	4.4.3	Capable of complying
45.	Provision to comply with AS 1428.1	4.4.1	Capable of complying
46.	Location of WC pan at correct distance from fixed walls	4.4.3	Capable of complying
47.	Provision for grab rail zone (Refer Figure 4.6 – AS 4299)	4.4.4 (h)	Capable of complying
48.	Slip resistant floor surface (vitreous tiles or similar)	4.4.2	Further information required
Laundry			
49.	Circulation at doors to comply with AS 1428.1	4.8	Does not comply
50.	Provision for adequate circulation space in front of or beside appliances (min. 1550mm depth)	4.8	Capable of complying
51.	Provision for automatic washing machine	4.8 (e)	Further information required
52.	Where clothesline is provided, an accessible path of travel to this	4.8 (a)	Further information required
53.	Double GPO	4.8 (g)	Further information required
54.	Slip-resistant floor surface	4.9.1	Further information required
Door Locks			

Item	Room/Item	AS4299 Clause	Current Phase Review
55.	Door hardware operable with one hand, located 900-1100mm above the floor	4.3.4	Further information required

It is expected that at Construction Certification stage documentation will address, in finer detail, information relevant to the above requirements.

6.12 Emergency egress and evacuation

6.12.1 Access considerations

Any emergency evacuation strategy should address the operational considerations relevant to the evacuation of people with disabilities and should detail the following:

- + Stair refuges, or
- + Fire-isolated lift lobbies and use of lifts in emergency.

Fire evacuation plans should include provision of management plans to assist known occupants with disability. Individuals with mobility limitations should be provided with a “fire buddy” to escort them to pre-determined areas of refuge.

AS 3745 - 2010 Planning for emergencies in facilities can be utilised as a guideline to assist in the implementation of any Emergency Plan.

6.12.2 Subject site – access assessment

Note for consideration.

6.13 Landscaping, Streetscapes and Terraces

6.13.1 Access considerations

The following are some design considerations for providing equitable access to the external public space:

Lighting installations which minimise glare.

Luminance contrast of features such as bike racks, bollards, bins etc.

6.13.2 Subject site – access assessment

Note for consideration.

6.14 Lighting

6.14.1 Access considerations

The inclusion of quality light assists people in navigating their way through an environment and assist in the effective use of a building, potentially affecting working satisfaction and productivity.

Consideration should be given to lighting as follows:

Location	Lux level
Entrances, passageways, and walkways	150lx
Stairs	150lx
Ramps	150lx
Toilets and locker rooms	200lx
Counter tops	200lx
General displays	200lx

6.14.2 Subject site – access assessment

Note for consideration.

7.0 Compliance summary

As a member of the Access Consultants Association (ACA), I have reviewed the State Significant Development Application documentation (refer above) against the current requirements for access and mobility against the following:

- + Objects of the Disability Discrimination Act (DDA) 1992.
- + *Disability (Access to Premises – Buildings) Standards 2010.*
- + National Construction Code (BCA) - Building Code of Australia (BCA) 2022 Amendment 2 – Volume One and referenced Australian Standards including:
 - AS1428.1 2021 Part 1: General Requirements for access – new building work.
 - AS1428.2 1992 Part 2: Enhanced and additional requirements – Buildings and facilities.
 - AS1428.4.1 2009 Part 4.1: Means to assist the orientation of people with vision impairment – Tactile Ground Surface Indicators (TGSIs).
 - AS2890.6 2009 Part 6: Off-street parking for people with disabilities.
 - AS1735.12 1999 Lift facilities for people with disabilities.
 - AS 4299 – Adaptable Housing

This report provides the reader with an overview of the project with respect to achieving compliance against the above.

This report concludes that the proposed mixed-use development is suitable and warrants approval subject to the implementation of the following mitigation measures.

- Compliance with silver level LHA requirements
- Compliance with adaptable housing standard AS4299 requirements
- Compliance with the BCA clauses and Australian Standards referenced in section 6.1.1

Following the implementation of the above mitigation measures, the remaining impacts are considered appropriate. It is anticipated that within the next stage of the design process, additional detail will be available and reviewed.

If you've any questions in relation to this report, please contact the writer.

Review undertaken by:

Signed by:

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Molly Denison-Pender

Consultant, Accessibility