

# **ACCESS REPORT**

## **PROJECT APPLICATION**



### **STAGE 1**

## **AVON ROAD, PYMBLE**

### **MULTI-UNIT RESIDENTIAL DEVELOPMENT**

Prepared By Mark Relf

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(amdt 8<sup>th</sup> Nov 2010)



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## Introduction

The purpose of this report is to provide an accessibility review of the subject development to ascertain whether the development is consistent with SEPP 65 and Council's LEP 194, DCP 55 and the DA Guide requirements for a proposed multi-unit residential development on a site at Avon Road, Pymble.

## Assessment Criteria

This assessment considers the following legislation, planning instruments and standards pertaining to access for people with disabilities:

- (1) SEPP 65 – Design Quality of Residential Flat Development.
- (2) SEPP 65 – Residential Flat Building Design Code (SEPP 65 Design Code).
- (3) LEP 194 – Ku-Ring-Gai Local Environment Plan.
- (4) DCP 55 – Ku-Ring-Gai Multi-Unit Housing.
- (5) DCP 31 – Access.
- (6) Australian Standard AS1428 – Design for Access and Mobility and referenced standards.
- (7) Australian Standard AS4299 – Adaptable Housing.
- (8) Australian Standard AS2890 part 1 – Off Street Parking.

## Development Summary

The development proposes the following configuration:

- The development proposes two multi-unit residential flat buildings consisting of six (6) residential levels and two (2) basement parking levels on a sloping site consisting of fifty (50) apartments.
- Basement parking for 83 vehicles providing 15 visitor spaces and 73 resident spaces (including at least 6 spaces that enable 3800mm width Accessible Resident Spaces and 2 X 3200mm visitor spaces. There is also storage for bicycles and garbage recycling.
- The development proposes a single principle site entrance from the Avon Road frontage with an almost level pedestrian pathway to the building entrance. The entrance lobby incorporates a lift that travels to all levels.
- Overall the development provides visitable wheelchair accessible access from the street frontage to 50 single level apartments by way of walkway and lifts access, which represents 100% of the 50 apartments.
- With regard to Adaptable and Manageable Housing the development proposes 6 apartments to Category C of AS4299, which represents 12% in accordance with Council's DCP 55/LEP 194.

**Development Application Plans**

The plans relied upon for this accessibility assessment includes the following:

<b>Drawing No.</b>	<b>Issue</b>	<b>Description</b>
0909 – PAI-000	A	Cover Sheet
0909 – PAI-100	A	Basement B2 & B1 Plans
0909 – PAI-101	A	Levels 0 & 1-3 Plan
0909 – PAI-102	A	Levels 4 & 5 Plan
0909 – PAI-103	A	Roof Plan
0909 – PAI-200	A	Elevations – North & West
0909 – PAI-201	A	Elevations – South & East
0909 – PAI-300	A	Sections
0909 – PAI-400	A	Shadow Diagrams
0909 – PAI-401	A	Shadow Diagrams
0909 – PAI-402	A	Shadow Diagrams
0909 – PAI-500	A	Perspectives

## Access & Adaptability Assessment

To determine whether the proposed development will be consistent with the objectives of SEPP 65 and Council's LEP 194 / DCP 55, which reference Australian Standards AS1428 / AS4299, the review provides the following functional definitions of “visitability”, “adaptability” and “manageability” that enable the following outcomes;

**Visitable** – To provide wheelchair accessible entry to a single level apartment or a level of a multi-level unit that provides access to a “living area” and a “visitable or accessible toilet”.

**Adaptable OR Manageable** – To provide wheelchair accessible entry to a single level apartment or a level of a multi-level residential unit that provides a “living/dining area”, “kitchen”, “main bedroom” and a “bathroom” that can be accessible from the outset or modified at minimal expense to satisfy the performance objectives of AS4299 – Adaptable Housing to Category C.

### ***Ku-Ring-Gai LEP 194 and DCP 55 – Multi-Unit Housing***

It is noted that Section 25N of the LEP 194 includes a requirement that lifts must be installed in all multi-unit housing buildings of more than 3 habitable storeys providing a wheelchair accessible path of travel to at least 70% of dwellings and that at least 10% of dwellings shall be designed to be “Manageable Housing” which is defined by Council's DCP 55 Appendix F to be housing designed to Category C of the Adaptable Housing Standard – AS4299.

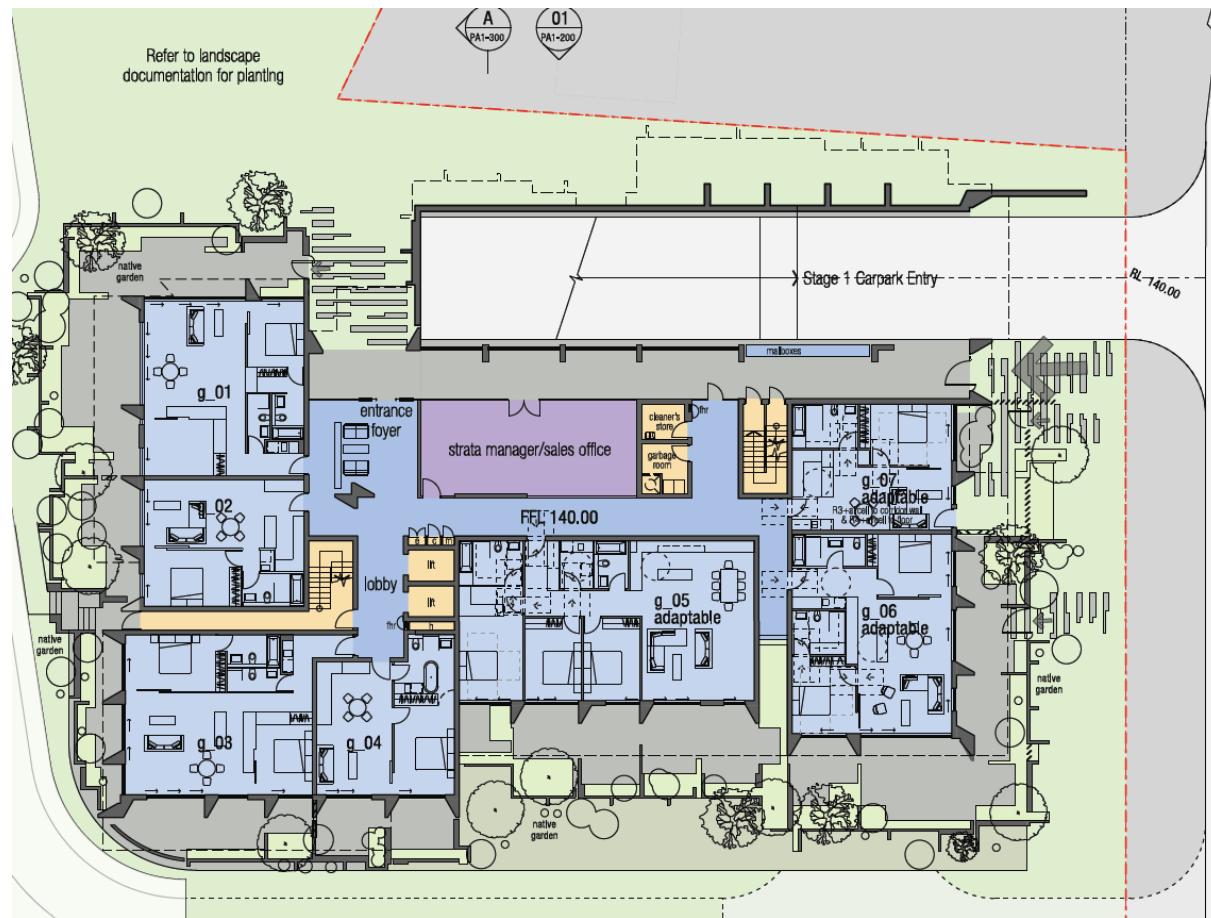
### ***SEPP 65 Design Code***

The following assessment findings are provided to demonstrate compliance or otherwise with the relevant visitability and adaptability requirements of the SEPP 65 Design Code.

SEPP 65 Design Code – Accessibility, Visitability and Adaptability design requirements	ASSESSMENT FINDINGS
<p><b>Site Configuration</b> Landscape Design (p 47)</p> <p><i>Improve the amenity of open space with landscape design which: by Providing accessible routes through the open spaces and between buildings.</i></p>	<p>The development proposes a single principal site entrance from the Avon Road frontage with an almost level pedestrian pathway @RL170.00 to the building entrance.</p> <p>The entrance pathway will provide 1000mm minimum width and at least 1600mm X 1350mm level (up to 1:40 slope) landing area at the building doorway entrance and subject to the construction of level doorway threshold and door providing 850mm clear opening width the development will comply with the detailed design requirements of AS4299/1428.</p> <p>In addition to the above mentioned pedestrian access paths into the site the development proposes 1800-2400mm minimum width internal lobby entrances and lift landings with building entry doors providing appropriate doorway circulation space to comply with AS1428.1.</p> <p>The entrance lobby incorporates lifts that travel to all levels enabling wheelchair access to 100% of apartments (50) and accessible parking in the basement.</p>

**SEPP 65 Design Code –  
Accessibility, Visitability and  
Adaptability design requirements**

**ASSESSMENT FINDINGS**



**Site Access**

**Pedestrian Access (p 64)**

*To ensure that residents, including users of strollers and wheelchairs and people with bicycles, are able to reach and enter their apartment and use communal areas via minimum grade ramps, paths, accessways or lifts.*

*Provide high quality accessible routes to public and semi-public areas of the building and the site, including major entries, lobbies, communal open space, site facilities, parking areas, public streets and internal roads.*

**Maximize number of accessible, visitable, adaptable apartments in the**

With regard to Visitability the development provides visitable wheelchair accessible access from the street frontage to 50 single level apartments by way of walkway and lift access, which represents 100% of the apartments.

The 50 visitable apartments (100%) comply with the 20% minimum provisions of SEPP 65.

**Adaptable Housing**

With respect to the provision of “Adaptable” apartments please refer to the following Adaptability assessment criteria of;

- 1 X 1 bedroom apartments G07.
- 1 X 2 bedroom apartments G06.
- 4 X 3 bedroom apartments G05, 1.05, 2.05, 3.05.

Consistent with the Ku-Ring-Gai Access DCP 31 and DCP 55 the development proposes 10% of the 50 apartments that being at least 5 (provision for 6) will be “adaptable housing” and “manageable housing”.

The development proposes a common area at the rear of the site which will be accessible via ramp and stairway platform lift on the stairway consistent with the objectives of SEPP 65.

SEPP 65 Design Code – Accessibility, Visitability and Adaptability design requirements	ASSESSMENT FINDINGS
<b>building. (References ASI428, AS4299, BCA).</b>	
<p><b>Building Configuration</b></p> <p>Apartment Mix (p 70)</p> <p>Ground Floor Units (p 77-78)</p> <p><i>Locate a mix of one, two and three bedroom apartments on the <b>ground level</b> where <b>accessibility</b> is more easily achieved for <b>disabled</b>, elderly people or families with children.</i></p> <p><b>Optimise</b> the number of <b>accessible</b> and <b>adaptable</b> apartments to cater for a wider range of occupants (Australian Standards are only a minimum).</p>	<p>The apartment mix comprises;</p> <p>21 X 1 bedroom apartments, 21 X 2 bedroom apartments, 8 X 3 bedroom apartments.</p> <p>The ground level provides 3 X 1 bedroom; 2 X 2 bedroom and 1 X 3 bedroom apartments, with all 7 ground floor apartments providing wheelchair accessible pathways from the street.</p> <p>3 of the 7 ground floor apartments are adaptable and representative of the <i>Apartment Mix</i> and thereby comply with SEPP 65.</p>
<p><b>Building Configuration</b></p> <p>Flexibility (p 75)</p> <p><i>Provide accessibility and adaptability by ensuring:</i></p> <ul style="list-style-type: none"> <li>▪ The number of <b>accessible</b> and <b>visitable</b> apartments is <b>optimized</b>.</li> <li>▪ Adequate pedestrian mobility and access is provided.</li> </ul> <p><i>Promote housing choice by: Maximizing the number of <b>accessible</b> and <b>visitable</b> apartments on the <b>ground floor</b>.</i></p>	<p>With regard to “adaptability” the development provides 6 (12%) designated “adaptable” units with a floor plan layout for 1, 2 and 3 bedroom unit types.</p> <p>Therefore in my opinion the development provides an appropriate degree of adaptability and flexibility in terms of access for people with disabilities, which is consistent with the objectives of SEPP 65.</p> <p>The following section provides a detailed review at section B of this report of the unit floor plans and associated resident parking for the 6 designated adaptable apartments.</p>

### ***Ku-Ring-Gai LEP 194 and DCP 55 – Multi-Unit Housing***

In accordance with Section 25N of the LEP 194 and Section 3.8 of DCP 55 – Multi-Unit Housing (draft) the assessment considers the requirements to provide:

- 70% of apartments in buildings of more than 3 habitable storeys to be visitable; and
- 10% (minimum) of apartments to be “manageable housing” or adaptable housing to category C of A4299.

#### **Visitable Housing**

With regard to Visitability the development provides visitable wheelchair access from the street frontage to 50 single level apartments by way of pathway and lift access, which represents 100% of the apartments to satisfy the provisions of ***Clause C-4 of Section 3.8 – Social Dimensions***.

With respect to the provision of visitable toilets the construction documentation shall require several bathrooms and ensuites within some units to incorporate sliding or outward swing doors to achieve an unobstructed 1250mm clearance in front of the toilet pan.

#### **Adaptable Housing**

With respect to the provision of “Adaptable” apartments please refer to the following Adaptability assessment for the designated “manageable” and “adaptable” apartments;

- 1 X 1 bedroom apartments G07.
- 1 X 2 bedroom apartments G06.
- 4 X 3 bedroom apartments G05, 1.05, 2.05, 3.05.

Consistent with the Ku-Ring-Gai Access DCP 31 and ***Clause C-1 of Section 3.8 – Social Dimensions of DCP 55*** the development proposes 12% or 6 of the apartments will be “adaptable housing” and “manageable housing”.



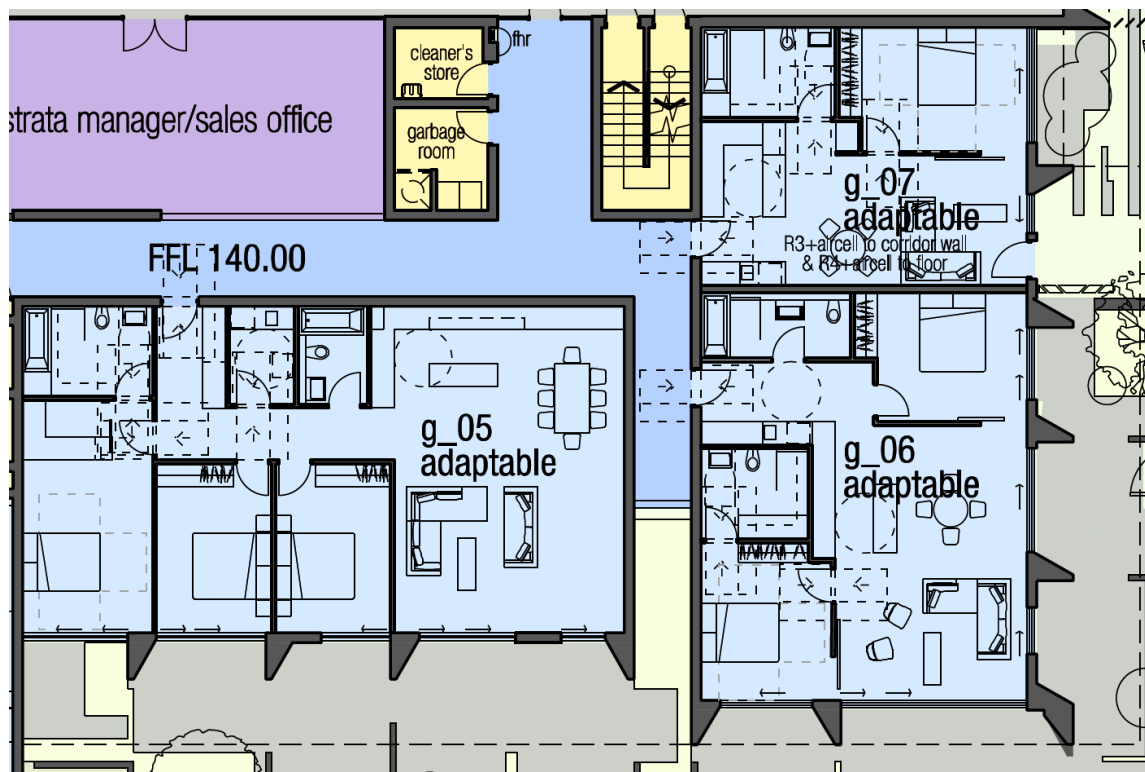
## Adaptability Assessment

The following provides an assessment of the designated “adaptable” and “manageable” apartments in accordance with Category C of the Adaptable Housing Standard – AS4299.

### Ku-Ring-Gai LEP 194 and DCP 55 – Multi-Unit Housing

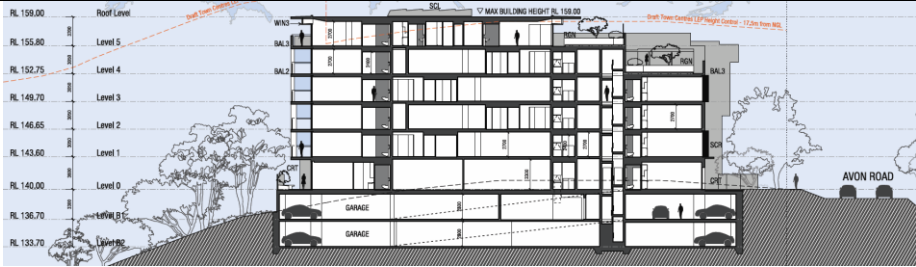
It is noted that Section 25N of the LEP 194 includes a requirement that lifts must be installed in all multi-unit housing buildings of more than 3 habitable storeys shall provide a lift and that at least 10% of dwellings shall be designed to be “Manageable Housing” which is defined by Council to housing designed to Category C of the Adaptable Housing Standard – AS4299.

Therefore the following assessment concurrently considers the adaptable and manageable housing requirements of SEPP 65 Design Code and Council’s DCP 55.



Clause	Adaptability Assessment	Compliance
The adaptability assessment has been applied to the following apartment types;		
<ul style="list-style-type: none"> <li>▪ 1 X 1 bedroom apartments G07.</li> <li>▪ 1 X 2 bedroom apartments G06.</li> <li>▪ 4 X 3 bedroom apartments G05, 1.05, 2.05, 3.05.</li> </ul>		
AS4299	<b>Letterboxes</b>	
Clause 3.8	The development will provide letter boxes adjacent the principal entrance on Avon Road and will confirm at least 1550mm X 1550mm level landing area directly adjacent for circulation and access to comply with AS4299 at construction certificate stage.	YES
AS4299	<b>Building Entrances</b>	
Clauses 3.3 and 3.5	The development proposes a single principal site entrance from the Avon Road frontage with an almost level pedestrian pathway access @RL140.00.	YES



Clause	Adaptability Assessment	Compliance
		
	<p>The lifts facilitate easy access to all levels, including access to the designated adaptable apartments.</p> <p>With regard to lift landings, corridors and unit entrances the plans show 1800mm X 1800mm minimum width lift landings and corridors, which provide adequate doorway circulation space to comply with AS1428.1.</p>	
AS4299 Clause 3.7	<p><b>Car Parking</b></p> <p>The basement carpark provides 6 <b>resident</b> parking spaces that enable 3800mm width X 5400mm length on a generally level surface with 2500mm minimum height clearance to comply with AS4299.</p> <p>The basement readily provides at least 2500mm height clearance over the parking spaces in accordance with AS4299 while the floor area of these spaces will not exceed 2.5% (1:40 slope) to comply with AS4299.</p> <p>The basement carpark also provides 2 X 3200mm width <b>visitor</b> spaces to comply with AS4299.</p>	YES
AS1735.2	<p><b>Lift Access</b></p> <p>The plans indicate the lift cars will be at least 1400mm X 1100mm as specified by AS1735.2 and AS1735.12 – <i>Lifts For People With Disabilities</i>.</p>	YES
AS4299 Clauses 4.3.1, 4.3.2 and 4.3.3	<p><b>Accessible entry</b> – The front entrances to these units provide at least 1550mm X 1550mm externally in the common corridors and with the potential internal foyer areas achieving a similar 1550 X 1500mm with 510mm minimum latch side clearance for front-on approach, which complies with the spatial requirements of AS4299.</p> <p>Internally the 1550mm wide entry foyer area provides the required 1550mm X 1550mm minimum circulation area and doorway circulation spaces.</p>	YES
AS4299 Cls 4.3.7	<p><b>Interior: general</b> – With respect to doorway circulation space to access a main bedroom the plans indicate unrestricted access to the bedroom doors from the living areas to comply with AS4299/1428.1.</p>	YES
	<p><b>Doors and Door Hardware</b></p> <p>While the plans do not indicate 920mm external door widths, 870mm internal door widths and lever handles these details shall be provided at construction drawing stage to confirm compliance.</p>	YES
AS4299 Clause 4.7	<p><b>Living and Dining rooms</b> – The plans show combined living and dining area on a single level with sufficient area to provide a 2250mm diameter turning area to comply with this clause.</p>	YES
AS4299	<p><b>Kitchen</b> – The kitchen plans illustrate L-shape and galley designs with island</p>	YES

Clause	Adaptability Assessment	Compliance
Clause 4.5	benches that can be modified to enable 1550mm between the benches which complies with AS4299 requirements.  With regard to the “adaptability” of the kitchen it is evident that the cupboards and layout provide adequate space to accommodate a wall oven, cooktop and 800mm width adjustable bench unit.  Therefore, subject to confirmation of the installation of kitchen cupboards, appliances and the like at the construction documentation stage it is apparent that the kitchen will comply with AS4299.	  <b>YES</b>  <b>YES</b>
AS4299 Clause 4.6	<b>Main bedroom</b> – The plans show the main bedrooms for the 1 and 3 bedroom apartments will provide 1000mm minimum on all sides and 1540mm X 2070mm circulation space adjacent the queen sized bed and the doorway to exit the bedroom to satisfy AS4299/1428. The 2 bedroom apartment provide adequate spatial arrangement to enable post adaptations to achieve the above criteria to comply with AS4299/1428.	<b>YES</b>
AS4299 Clause 4.7	<b>Bathroom</b> – The plans show the bathrooms will generally be 2200mm X 2800mm minimum and subject to detailed design of the internal layout of sanitary facilities each apartment will comply with AS1428/4299.	<b>YES</b>
AS4299 Cls 4.4.3	<b>Toilet</b> – The bathrooms will provide adequate size and layout to enable the toilet to provide 1250mm clearance in front of the pan to comply with AS4299.	<b>YES</b>
AS4299 Clause 4.8	<b>Laundry</b> – The laundry facilities are illustrate adjacent to hallways with adequate space for a washing machine, drier and basin while enabling at least 1550mm X 1550mm clear circulation space in front of the appliances to comply with AS4299.	<b>YES</b>
AS4299 Cls 3.5(b)	<b>Outdoor Private Open Space</b> – The plans show courtyard areas for the ground floor apartments and outdoor balcony terrace areas adjacent living areas for each of these units with sliding doors for convenient access.  While the ground floor courtyards readily provide ample circulation spaces the balconies on upper levels propose an approximate 2500mm X 1500mm area for the 3 bedroom unit, which is adequate to perform a 180 degree wheelchair manoeuvre.  With regard to doorway thresholds to balconies and terraces the details of finished floor levels (FFL) shall be confirmed at construction certificate stage to confirm 1:8 maximum gradient threshold ramps at doorways with a 50mm maximum rise to facilitate wheelchair access and thereby comply with AS1428/4299.	<b>YES</b>

In summary, I conclude that these apartments and associated common domain facilities will comply with fundamental spatial design criteria of AS4299 and consequently the SEPP 65 Design Code and Manageable Housing as defined by DCP 55.

## Conclusion

In summary this assessment confirms the following outcomes;

- The common domain pathways and areas of the development will provide appropriate access for people with disabilities consistent with SEPP 65, SEPP 65 Design Code and LEP 194 / DCP 55;
- The visitability is achieved through direct wheelchair accessible ramp from the street frontage to the principal building entrance and lift lobby, which provides visitable wheelchair access from to all 50 single level apartments (100%), consistent with SEPP 65, SEPP 65 Design Code and LEP 194 / DCP 55 requirement of 70%; and
- That 12% of apartments, that being six (6) will be adaptable to comply with AS4299, which is consistent with SEPP 65, SEPP 65 Design Code and LEP 194 / DCP 55 requirement of 10%.

Consequently it is evident that the development demonstrates significant compliance with the SEPP 65 Design Code, which includes a “rule of thumb” minimum of 20% visitability.

The access and adaptability review of the development demonstrates compliance with the relevant objectives and design code requirements of SEPP 65, which is consistent with Ku-Ring-Gai Council’s and LEP 194 / DCP 55; Access DCP 31 and DA Guide for multi-unit residential developments in terms of accessible pathways, visitable, adaptable and manageable housing for people with disabilities.



Mark Relf  
Access Consultant (ACAA)

## Appendix A – Statement of Expertise

### CONSULTANCY PROFILE & STATEMENT OF EXPERTISE

Accessibility Solutions consultancy offers a range of services to provide advice for clients to develop new and modify existing buildings, facilities and services to be accessible to people with disabilities to comply with legislation and regulations relevant to people with disabilities.

Relevant legislation and regulations that underpins advice includes the Disability Discrimination Act (DDA) Building Code of Australia, Australian Standards 1428, HREOC Advisory Notes on Premises, DDA Transport Standard, State Environment Planning Policy No. 5 Housing for Older People or People With a Disability (SEPP 5) / Seniors Living Policy, SEPP 65 – Residential Flat Buildings Design Code and various local government DCP's.

The scope of services provided by Accessibility Solutions includes:

- Plan Appraisals and design advice
- Access Reports for development applications and construction certificates
- Expert Reports for Court evidence
- Access Auditing of existing buildings, facilities, transport conveyances and infrastructure
- Policy and document reviews and development of Disability Action Plans
- Staff training in access auditing

The services consider issues concerning people with all types of disability including; physical; vision; hearing, intellectual and other cognitive impairments that may affect access for people with a disability consistent with the Disability Discrimination Act.

As principle consultant Mark Relf has considerable experience and expertise in a wide range of access related projects and is a recognised Access Adviser approved by the NSW Ageing and Disability Department and has attained accreditation with the Association of Consultants in Access Australia for the purposes of providing advice concerning access to the built environment and services for people with disabilities.

His expertise has been gained over 20 years working in management and advocacy roles within the disability sector and since 1994 providing advice to clients on access issues. Mark also participates on various key committees concerning access for people with disabilities. His qualifications and affiliations are:

- Accredited Member of the Association of Consultants in Access Australia.
- Member, Standards Australia ME/64 Committee responsible for the AS1428 suite and AS4299 – Adaptable Housing.
- Member, NSW Heritage Office's – Fire, Access and Services Advisory Panel.

