ACCESS REPORT

CONCEPT PLAN & PROJECT APPLICATIONS

128 HERRING ROAD MACQUARIE PARK

MIXED MULTI-UNIT RESIDENTIAL, DEVELOPMENT

Prepared By Mark Relf

5th May 2010



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Introduction

This report has been prepared to provide an Accessibility Report for a proposed mixed multi-unit residential development on a site at 128 Herring Road Macquarie Park for Lipman Properties Pty Ltd.

This report is presented in three sections as outlined below;

- 1. Concept Plan (for the entire Development Site).
- 2. Project Application for The Staged Subdivision (Stage 1, 1A and 2 entire Development Site subdivision).
- 3. Project Application for Building A on Lot 1.

Assessment Criteria

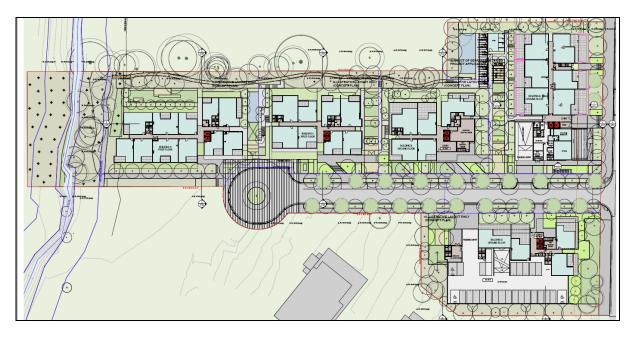
This assessment considers the following legislation, planning instruments and standards pertaining to access for people with disabilities:

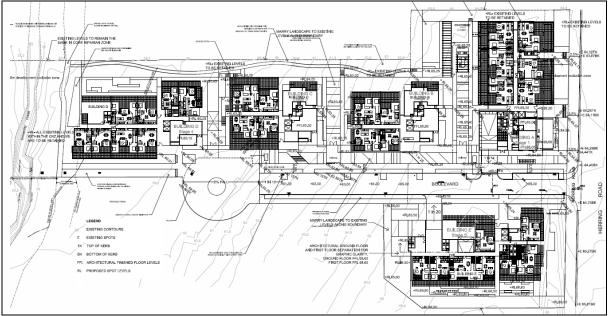
- (I) Part D3 of the Building Code of Australia (BCA).
- (2) SEPP 65 Design Quality of Residential Flat Development.
- (3) SEPP 65 Residential Flat Building Design Code (SEPP 65 Design Code).
- (4) Ryde DCP 2006 Section 9.2 C Access for People with Disabilities
- (5) Ryde DCP 2006 Section 9.2 D Adaptable Housing
- (6) Australian Standard AS1428 Design for Access and Mobility and referenced standards.
- (7) Australian Standard AS4299 Adaptable Housing.
- (8) Australian Standard AS2890 part I Off-Street Parking.



Section A - Concept Plan

The development site proposes a subdivision and construction of a New Road with five (5) residential flat buildings adjoining the New Road.







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Accessibility Assessment

With respect to access for people with disabilities the New Road shall provide;

- Footpaths along both sides of the New Road which will facilitate wheelchair accessible pathways into each building in a direct and equitable manner.
- The plans indicate the footpaths shall be at least 2000mm width and provide as 1:40 maximum crossfall to the kerb consistent with AS1428.1.
- Kerb ramps shall be constructed at the intersection of New Road and Herring Road to enable a continuous accessible path of travel along Herring Road.
- On-street parallel parking shall be provided on New Road and it is recommended that one
 (1) designated accessible space be installed, adjacent to Building A driveway where the
 longitudinal slope is very moderate as not exceeding 1:40. The detailed design should
 incorporate a kerb ramp for rear loading wheelchair accessible vehicles and have regard to
 AS2890.6.

Additionally the development proposes;

- Two Common domain swimming pools and gymnasiums; one adjoining Buildings A and B; and a second pool adjoining Buildings C and D. in both cases the plans indicate these amenities will be accessible to people with disabilities including the provision of unisex accessible bathrooms.
- Each building indicates the installation of lifts which facilitate visitable access from the ground floor entry lobbies to all apartments.

The plans also indicate an accessway along the northern boundary of the development site linking Buildings A, B, C, D, which is understood to be for maintenance access and not intend for general use by residents.

Summary

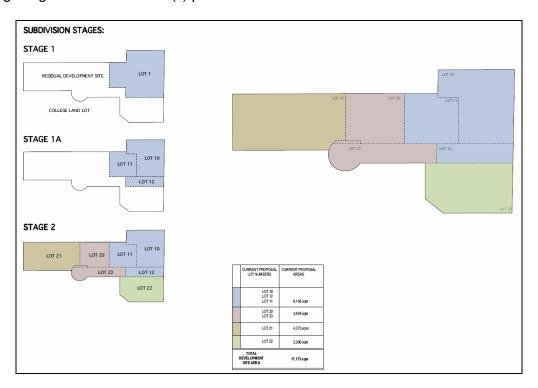
In summary, it is apparent from the Masterplan documentation that the development will provide appropriate access for people with disabilities to and within all buildings and amenities in a manner that can meet the objectives of the Disability Discrimination act and Council's DCP Accessibility and Adaptability requirements as set out in section 9.2 of the DCP.

Mark Relf, Access Consultant



Section B - Staged Subdivision

The development site proposes a subdivision and construction of a New Road with five (5) residential flat buildings adjoining the New Road, which will be developed in seven (7) stages, although Stage I consists of three (3) parts.



The plans relied upon for this review include:

Drawing No.	Issue	Description
09047 - A 301	В	Subdivision Context Plan
09047 - A 311	В	Subdivision Strategy
09047 - A 321	D	Stage Subdivision – Stage 1 Subdivision
09047 - A 322	D	Stage Subdivision – Stage 1A Subdivision & Building A
09047 - A 323	D	Stage Subdivision – Building B
09047 - A 324	D	Stage Subdivision – Stage 2 Subdivision & Building C
09047 - A 325	D	Stage Subdivision – Building D
09047 - A 326	D	Stage Subdivision – Building E
09047 - A 327	D	Stage Subdivision – Completion of Staging

Accessibility Assessment

With respect to access for people with disabilities the New Road shall provide the same accessibility as described in Section A of this report but made available of a stage by stage basis synonymous with the staging arrangements.

Mark Relf, Access Consultant



Section C - Building A Lot 1

Development Summary

The development proposes a predominantly multi-unit residential development with a small retail area at ground floor consisting of 123 apartments and a small retail store on the ground floor with basement parking for 174 cars.

With regard to accessibility and adaptability the development proposes:

- A 1:20 gradient accessway from the Plaza @RL65.00 to the ground floor entry and lift lobby @RL65.30.
- With respect to visitability the development proposes wheelchair access to all 123 apartments, which are all single.
- With regard to Adaptable Housing the development proposes at least 13 apartments to Category A of AS4299, which represents 10% and satisfies Council's DCP Section 9.2 -D1.2 and SEPP 65.
- The basement carparking provides 174 spaces, including 13 X 3800mm width spaces for the adaptable apartments and 1 X 3500mm width accessible visitor space and 1 X 3500mm width accessible space for the retail store.

Development Application Plans

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

Drawing No.	Issue	Description
09047 - A 201	D	Building A – Site Context Plan
09047 - A 202	D	Building A – Site Analysis Plan
09047 - A 211	G	Building A – Car Park Level 3 Plan
09047 - A 212	G	Building A – Car Park Level 2 Plan
09047 - A 213	G	Building A – Car Park Level I Plan
09047 - A 214	L	Building A – Ground Floor Plan
09047 - A 215	G	Building A – First Floor Plan
09047 - A 216	D	Building A – Second Floor Plan
09047 - A 217	E	Building A – Third Floor Plan
09047 - A 218	F	Building A – Fourth Floor Plan
09047 - A 219	E	Building A – Fifth Floor Plan
09047 - A 220	E	Building A – Sixth Floor Plan
09047 - A 221	E	Building A – Seventh Floor Plan
09047 - A 222	F	Building A – Eight Floor Plan
09047 - A 223	E	Building A - Ninth Floor Plan
09047 - A 224	G	Building A – Tenth Floor Plan



128 HERRING ROAD, MACQUARIE PARK

Drawing No.	Issue	Description
09047 - A 225	Н	Building A – Eleventh Floor Plan
09047 - A 226	F	Building A - Roof Plan
09047 - A 241	I	Building A – East Elevation
09047 - A 242	G	Building A – North Elevation
09047 - A 243	Н	Building A – West Elevation
09047 - A 244	Н	Building A – South Elevation



Accessibility & Adaptability Assessment

To determine whether the proposed development will be consistent with the objectives of SEPP 65 and Council's DCP Section 9.2 C and D Access and Adaptability, which reference Australian Standards AS1428 / AS4299, the review provides the following functional definitions of "visitability", "adaptability" 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 – 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 A.**

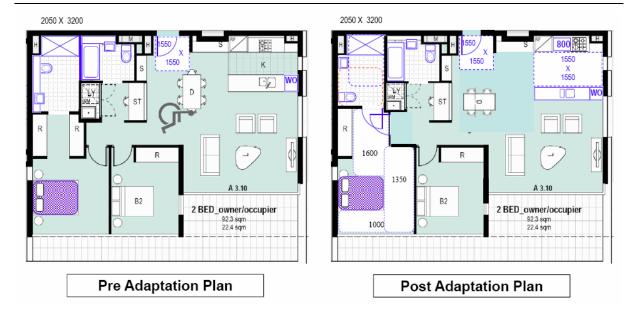
Adaptability Assessment

The following provides an assessment of the designated "adaptable" apartments in accordance with Category A of the Adaptable Housing Standard – AS4299. The apartment types include the following:

- 7 X I Bedroom Units Nos. A1.6, A2.6, A3.6, A4.5, A5.5, A6.5, 7.5
- 6 X 2 Bedroom Units Nos. A08, A1.13, A2.13, A3.12, A.06, A3.10







The following provides an overview of the common domain building elements.

Clause	Adaptability Assessment -Common Domain areas	Compliance
ВСА	Retail Store	
Part D3	The plans show a 1:20 gradient accessway from the plaza @RL65.00 the main lobby entrance @RL65.30, which will be further detailed a future design stage to ensure the accessway complies with AS1428 satisfy Part D3.2 of the BCA and Council's DCP 9.2C, including a leddoorway threshold and accessible doors.	t a YES
	The open plan interior of the store over a single level presents no acceparriers for the base building design and will comply with Part D3.3 the BCA and Council's DCP 9.2C.	
	The Store layout illustrates a unisex accessible toilet which will further detailed at a future design stage to ensure the accessw complies with AS1428.2 to satisfy Part F2.4 of the BCA and Counc DCP 9.2C.	ay VEC
	With respect to accessible parking the basement car park shall provide X 3500mm width accessible space with lift access from ground basement levels to satisfy Parts D3.5, D3.3 and D3.2 of the BCA a Council's DCP 9.2C.	to YES
AS4299 Clauses 3.3 and 3.5	Building Entrances The plans show an at-grade 1:20 gradient accessway from the Pla@RL65.00 to the ground floor entry and lift lobby @RL65.30.	aza YES
	The common lift lobby provides 2 lifts, which facilitate easy access to the basement/ground floor carpark levels and upper floor levels to access the designated adaptable apartments.	
	With regard to lift landings and unit entrances the 2500mm width 6500mm length lift landing and 1550mm width common corridorachieve the 1500mm X 1550mm minimum area required for doorw circulation space at apartment entrances to comply with AS1428.1.	ors VEC



Clause		ompliance
AS4299 Clause 3.8	Letterboxes The development will provide the letter boxes within the ground floor lift lobby and will provide at least 1550mm X 1550mm level landing area for circulation and access to comply with AS4299.	
AS4299 Cls 3.3.3	Swimming Pool & Gymnasium The development proposes swimming pool and gym that will incorporate a 1:20 accessway to the pool deck level from the New Road to enable equitable access.	
	Subject to the confirmation of 920mm minimum width doors, level doorway thresholds, ramp details and accessible bathroom (adjoining the pool) in accordance with AS1428.1 it is apparent that these common facilities will be accessible to residents and thereby comply with Council's DCP Section 9.2D, AS4299 and SEPP 65.	
AS4299 Cls 3.3.3 & AS2890.5	Car Parking The development provides 174 parking spaces consisting of 31 visitor spaces, 4 retail/café spaces and 139 resident spaces.	YES
	With regard to the requirements for accessible and adaptable parking spaces the development proposes 15 accessible/adaptable parking spaces;	
	 I3 X 3800mm width for the adaptable apartments to satisfy AS4299 and Council's DCP 2006 9.2D. 	
	 2 X 3500mm width for the retail and visitors to satisfy AS2890.1 and Part D3.5 of the BCA. 	
AS4299	Car Parking	
Clause 3.7	The designated accessible spaces are evenly spread across the basement parking areas on generally level areas not exceeding 1:40 slope/crossfall in close proximity to the lifts to facilitate easy access to the lift and adaptable units.	
	The 2300mm minimum height clearance within the basement levels and minimum 2500mm height clearance over the designated accessible/adaptable parking spaces shall comply with AS4299.	
AS1735.2	Lift Access The plans indicate the lift cars will be approximately 1400mm X 1700mm which will comply with the minimum 1400mm X 1100mm specified by AS1735.2 and AS1735.12 – Lifts For People With Disabilities and AS1428.2.	

Clause	Adaptability Assessment	Compliance
AS4299 Clauses 4.3.1, 4.3.2 and 4.3.3	Accessible entry – The front entrance to these units provides at least 1550mm X 1550mm externally in the common corridors and internal with 520mm minimum latch side clearance, which complies with the spatial requirements of AS4299.	ly YES ne
	Internally the 1550mm wide entry foyer area provides the require	ed YES



Clause	Adaptability Assessment Co	ompliance
AS4299 Cls 4.3.7	Interior : general – The post adaptation plan illustrates a minor modification to the bedroom/study wall which facilitates enhanced doorway circulation space to a <u>main bedroom</u> from the living area and within the main bedroom to comply with the minimum doorway circulation space requirements of AS1428/4299.	YES
	Doors and Door Hardware While the plans do not indicate 920mm external door widths, 870mm internal door widths and lever handles these details should be provided at construction drawing stage to confirm compliance.	YES
AS4299 Clause 4.7	Living and Dining rooms – 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.	YES
AS4299 Clause 4.5	Kitchen – The island kitchen designs inherently provides the opportunity to re-position the island to achieve the required 1550mm X 1550mm minimum circulation space adjacent the benches to comply with AS4299 requirements.	YES
	With regard to the "adaptability" of the kitchen the pre-adaptation plan provides an appropriate layout of sink, fridge, wall oven, cooktop and height adjustable workbench that is readily adaptable and satisfies the "ease of adaptation" guidelines outlined in section 2 – Performance Objectives of AS4299.	YES
	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.	
AS4299 Clause 4.6	Main bedroom – The post adaptation plan shows the main bedroom for these Units will be 3000mm X 4350mm, providing 1540mm X 2070mm circulation space adjacent and a 1000mm on either side of the queen sized bed to satisfy AS4299/1428.	YES
AS4299 Clause 4.7	Bathroom – The plans show the bathroom will be at least 2050mm X 2850mm with a layout of sanitary facilities that is readily adaptable to comply with AS1428/4299. I am also satisfied that the location of the WC pan, washbasin and shower/bath in pre and post adaptation satisfy the performance requirements of AS4299.	YES
AS4299 Cls 4.4.3	Toilet – The size and layout of the bathroom enables the toilet to comply with AS4299 by providing I 250mm X 900mm in front of the WC pan.	YES
AS4299 Clause 4.8	Laundry – The laundry closet provides adequate space for a washing machine, drier and basin, while the adjacent area facilitates the required minimum 1550mm X 1550mm clear circulation space in front of the appliances to comply with AS4299.	YES
AS4299 Cls 3.5(b)	Outdoor Private Open Space – The plans show outdoor balcony terrace areas adjacent living areas for each of these units with sliding doors for convenient access and an approximate 2000mm width X 4300mm length for the I bedrom layout and 3100mm X 4200mm, which	YES



Clause Adaptability Assessment Compliance

is ample to perform a 180 degree wheelchair manoeuvre.

While the plans do not indicate thresholds the construction drawings will confirm a 50mm maximum height difference between internal and external finished floor levels with the capability for threshold ramps to be installed to comply with ASI428/4299.

CLASS A Adaptable Housing

To satisfy Class A requirements of AS4299 the "adaptable" apartments shall provide the following in accordance with the AS4299 Checklist;

- Continuous accessible path of travel from the site frontages to the adaptable apartments.
- Common use facilities will be accessible.
- Letterboxes will be accessible.
- External pathway lighting will be provided.
- Entry porches are covered.
- Roofed parking with 2500mm height clearance and power operated garage door.
- Provision for a microwave oven 750-1200mm AFFL.
- Light switches 900-1100mm AFFL.
- Light over the kitchen sink will be provided.
- Potential illumination to 300 Lux in the entry, bedroom, bathroom, living room.
- Four double GPO's in living / dining area will be provided.
- Telephone outlet in kitchen / living areas adjacent to a GPO will be provided.
- Three double GPO's, TV and phone outlets in main bedroom will be provided.
- Sliding doors with mirror in the main bedroom will be provided.
- Adjustable kitchen cupboard shelving.
- Linen cupboard.
- Shelf in laundry 1200mm AFFL will be provided.
- Accessible garbage bin rooms will be provided.
- Electrical distribution sub-board within the unit in an accessible location.
- Provision for external wheelchair storage (storage rooms) and charging.
- Provision for guide dog accommodation.
- Slip resistant flooring in bathroom, laundry and external private deck/terrace.

The above listed items will be confirmed at construction certificate stage to ensure compliance with Class A requirements of AS4299 as specified by the Council's DCP 2006 – Section 9.2 D.

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 Council's DCP for Adaptable Housing.



SEPP 65 Design Code

The following is 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
Site Configuration Landscape Design (p 47) Improve the amenity of open space with landscape design which: by Providing accessible routes through the open spaces and between buildings.	The plans show an at-grade 1:20 gradient accessway from the plaza to the ground floor entry and lift lobby @RL65.30 to satisfy SEPP 65, Council's DCP and AS4299. In addition to the above mentioned site entrance the accessible lifts also facilitate access to the upper and lower levels and subsequently to 100% of the apartments. To access the communal swimming pool the New Road shall provide a moderate grade of approximately 1:30 with a 1:20 gradient accessway to the pool enclosure.
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 building. (References AS I 428, AS 4299, BCA and Access to Premises).	Visitable Housing The development provides visitable access to 123 apartments which are all single level and readily satisfies the SEPP 65 "Rule of Thumb" regarding 20% minimum visitability. Adaptable Housing With respect to the provision of "Adaptable" apartments please refer to the following Adaptability assessment criteria of; • 7 X I Bedroom Units • 6 X 2 Bedroom Units The thirteen (13) adaptable apartments or 10% of the 123 apartments also satisfies Council's DCP 2006 Section 9.2D and SEPP 65.
Premises). Building Configuration Apartment Mix (p 70) Locate a mix of one, two and three bedroom apartments on the ground level where accessibility is more easily achieved for disabled, elderly	The overall apartment mix comprises (123 apartments); 68 X I bedroom apartments, 47 X 2 bedroom apartments, 7 X 3 bedroom apartments I X 4 bedroom apartments.



SEPP 65 Design Code – Accessibility, Visitability and Adaptability design requirements	ASSESSMENT FINDINGS						
Optimise the number of accessible and adaptable apartments to cater for a wider range of occupants (Australian Standards are only a minimum).							
Flexibility (p 75)	With regard to "adaptability" the development provides several options for adaptable apartments designs in I and 2 bedroom						
Provide accessibility and adaptability by ensuring:	configurations (as above) thereby facilitating an appropriate m of adaptability and flexibility in terms of access for people with the literature of CERR (5						
 The number of accessible and visitable apartments is optimized. 	disabilities, which is consistent with the objectives of SEPP 65.						
 Adequate pedestrian mobility and access is provided. 							
Ground Floor Units (p 77-78) Promote housing choice by:	All apartments on the ground floor are wheelchair accessible from the Herring Road / New Road footpath representing						
Maximizing the number of accessible and visitable apartments on the ground floor.	100% to satisfy the intent of SEPP 65.						



Conclusion

In summary this assessment confirms the following outcomes;

- The common domain ramped plaza to the retail store with associated ramped accessway on the ground floor to the residential main entry, lift lobby, lift and designated parking will provide appropriate access for people with disabilities in accordance with Part D3 of the BCA and Council's DCP 2006 Section 9.2 – C; and
- The various lifts provide access between all building levels in a manner that will satisfy Part D3.3 of the BCA and Council's DCP 2006 Section 9.2 D; and
- The 3800mm width accessible parking spaces or 3200mm plus 600mm of an adjoining walkway will facilitate easy access for dual transfers or vehicles with side-loading ramps and hoists which complies with Council's DCP 2006 Sections 9.2 D; and
- 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 Council's DCP 2006 Sections 9.2 – D; and
- There will be 100% visitability to 123, which are single level is consistent with SEPP 65 and SEPP
 65 Design Code, and
- That 10% of apartments thirteen (13) will be adaptable to comply with AS4299, which is consistent with SEPP 65, SEPP 65 Design Code and Council's DCP 2006 Sections 9.2 – D -Adaptability.

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 the Ryde DCP 2006 Sections D for adaptable housing within residential apartment developments.

Therefore, given the degree of access to the retail store, common domain residential amenities, visitability to 100% of apartments and adaptability of 10% of apartments I conclude that the development satisfies the accessibility provisions of the BCA and relevant Council DCP Sections 9.2 C and D and SEPP 65 requirements pertaining to accessible pathways, visitable and adaptable 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 to 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.



