



**lindsay perry**  
access + architecture

52 walumbi avenue  
tingira heights 2290

044 724 5234

[lindsay@lindsayperry.com.au](mailto:lindsay@lindsayperry.com.au)  
[www.lindsayperry.com.au](http://www.lindsayperry.com.au)

nominated architect:  
lindsay perry  
NSW reg. no. 7021

26 October 2012

## DISABILITY ACCESS REPORT Issue D

Proposed Aged Care Development  
135a Marmong Street  
MARMONG POINT NSW

For:  
Empowered Living Support Services

Our ref:  
1035



## 1. Introduction

---

This Access Report considers the Development Application for the Proposed Aged Care Development located at 135a Marmong Street Marmong Point, against the requirements of Lake Macquarie Council DCP No. 1, Clause 2.6.12 Non-Discriminatory Access and Use, The Building Code of Australia, The Disability Discrimination Act 1992 and SEPP – Housing for Seniors and Persons with a Disability 2004 (SEPP).

The proposed retirement village comprises 94 self contained dwellings which will be a two bedroom and study arrangement. Each dwelling is provided with a double garage. A community facility housing gym, pool, and maintenance area are provided within the site. There are a total of 5 dwelling types – Types A, B, C, D and E, all over a single level.

This Access Report reviews drawings provided by ELSS, project architects Peter Dalton Architects Pty Ltd, dated April 2012 as follows.

- A100 Rev. 2 Site Plan
- A102 Rev. 2 Site Plan
- A200 Rev 1 Community Centre Level 1
- A201 Rev 1 Community Centre Level 2
- A300 Rev. A Building Type A
- A310 Rev. A Building Type B
- A320 Rev. A Building Type C
- A330 Rev. A Building Type D
- A340 Rev. A Building Type E

It is estimated that one in five people in Australia have a long-term disability (Australian Bureau of Statistics – 2003). This includes physical disability, intellectual disability, and sensory impairments such as vision and hearing. It does not include those with a short-term (temporary) disability or the continuing aging population.

Lindsay Perry Access + Architecture have adopted a best practice, performance based approach to access. Assessment is based on project specifics and takes into account various factors such as site topography, heritage and existing site conditions.



## 2. Legislation

---

The requirements of State Environmental Planning Policy – Housing for Seniors and Persons with a Disability 2004 (SEPP) and BCA 2011 have been adopted in the preparation of this access report

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- The Building Code of Australia 2011 (BCA) Section D3 – Access for People with Disabilities
- State Environmental Planning Policy – Housing for Seniors and Persons with a Disability 2004 (SEPP), Current Amendment – 6 March 2009.
- Australian Standards AS1428.1, AS1428.2, AS1428.4 – Design for Access and Mobility
- Australian Standard AS4299 – Adaptable Housing
- Australian Standard AS2890.6 – Parking Facilities – Off street carparking 1993.

The DDA is a complaint based law. Compliance with the BCA alone will not offer protection from a complaint made under the DDA.

The report considers current developments in access legislation such as the Access to Premises Standard. This document aims to overcome current inconsistencies between the BCA and DDA. The final document was released in conjunction with the 2011 amendment of the BCA.

The accessibility of the proposed development has been considered in regard to the relevant access legislation. A summary of the requirements of relevant legislation follows.

- The **DDA** requires independent, equitable, dignified access to all parts of the building for all building users regardless of disability. The DDA makes it unlawful to discriminate against a person on the grounds of disability. The DDA is a complaint based law and is administered by the Human Rights and Equal Opportunities Commission.
- The **BCA** requires access for people with disabilities to and within all areas usually used by the occupants.
- **SEPP** Housing for Seniors and People with a Disability encourages the provision of housing for seniors and persons with a disability. It accommodates the requirements of AS1428, AS4299 and AS2890.1.
- **AS1428 – Design for Access and Mobility** requires the inclusion of a continuous accessible path of travel from the street footpaths and carparking areas to the entry and facilities within the building. It also includes requirements for doorways, stairs, toilets, etc.

Part 1 (2009) of this standard contains access requirements that are mandatory for the provision of access for persons with a disability and is referred to by the BCA.

Part 2 (1992) provides enhanced and best practice requirements. While AS1428.2 is not mandatory, the inclusion of its requirements such as accessible reception counters reduce the risk of a complaint made under the DDA. AS1428.2 is referenced by the Human Rights and Equal Opportunities Commission Advisory Notes for Access to Premises that accompanies the DDA.



Part 3 (1992) – Requirements for Children and Adolescents with Physical Disabilities is applicable to purpose built developments and therefore has not been considered within this development.

Requirements for tactile indicators are included in Part 4 (2009) of this standard..

- **AS4299 – Adaptable Housing** provides housing for different community groups with different needs. It involves a move away from special accommodation for persons with a disability, avoiding social dislocation.
- **AS2890.6** applies to the carparking areas generally.



### 3. Site Works Generally

---

The overall gradient of the site is conducive to the provision of housing for seniors and persons with a disability. An internal roadway system is provided so that all dwellings have direct access to the roadway. A pedestrian pathway network has also been designed that links all facilities on the site such as the Community Centre and the communal areas at the rear of the site.

#### 3.1 Pathways

There is a pedestrian network throughout the development that provides access from dwellings to areas on the site such as the Community Centre and other communal areas. All dwellings on the site are connected to a pathway network that links all facilities on the site. The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428.

For compliance with AS1428.1, the following access requirements apply to the pathways and should be implemented in the preparation of the construction certificate documentation.

- a. The minimum unobstructed width of all pathways is to be 1000mm (AS1428.1(2001), Clause 5.1.2). A width of 1200mm is preferred for compliance with AS1428.2.
- b. All pathways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 5mm is allowable).
- c. The maximum allowable crossfall of pathways is to be 1:40.
- d. The ground abutting the sides of the pathways should follow the grade of the pathway and extend horizontally for 600mm. We note that this is not required where there is a kerb or handrail provided to the side of the pathway.

**We have been advised that these requirements have been considered in the design of the pathway network and will be developed during the construction certificate stage.**

#### 3.2 Pedestrian Crossings

There are marked pedestrian crossings within the site. Kerb ramps are to be provided at these locations to provide an accessible path of travel for persons with a disability within the meaning of AS1428.

Access requirements for these kerb ramps are as follows and should be implemented in the preparation of the construction certificate documentation:

- a. Kerb ramps to have a maximum gradient of 1:8 and be aligned across the roadway to assist persons with a vision impairment with orientation issues.
- b. Provide "wings" to both sides of kerb ramps as illustrated in AS1428.1 (2001), Figure 8. Angle of the "wings" is to be 45°.
- c. Provide minimum 30% luminance contrast between the kerb ramp and the surrounding pavement colour to assist persons with a vision impairment. Refer to AS1428.2, Clause 8.4.5. We note that LMCC generally promotes this practice in the construction of their kerb ramps.
- d. Provide slip resistant surface to kerb ramps – refer to AS1428.1(2001), Clause 5.8.3.



### **3.3 Visitor Carparking**

Visitor carparking is provided throughout the site and is equitably distributed. Accessible visitor carparking will need to be included within these areas.

Access requirements for the accessible visitor carparking are as follows and should be addressed during preparation of the construction certificate documentation.

- a. Accessible carparking to be a minimum of 2400mm wide with a shared area to one side of the space 2400mm wide. Circulation space can be shared between adjacent accessible carparks. For a single space, a total width of 4800mm is required.
- b. Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2.
- c. The maximum allowable crossfall of accessible carparking area to be, 1:33 (for outdoor spaces). This crossfall applies both parallel and perpendicular to the angle of parking.
- d. For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7.
- e. Designated accessible carparking is to be identified using the International Symbol for Access (ISA) –ground and vertical signage is required. Signage is to comply with AS1428.1.



## 4. SEPP – Siting Requirements

---

The proposed development is subject to the requirements of the SEPP and the Australian Standards nominated in this document including AS1428 and AS4299. This development is comprised of self contained dwellings and is therefore subject to SEPP Clause 26: Location and Access to Facilities, Clause 38: Accessibility.

### 4.1 SEPP Clause 26

#### Location & Access to Facilities

A SEPP development must offer access to services such as shops, banks, retail services, commercial services, recreational facilities, community facilities and doctors. These facilities are to be located within 400m of the site via a pathway that provides an accessible path of travel.

For development outside the Sydney Statistical Division, these services can be located at a distance greater than 400m from the site if there is a transport service available. The transport service is required to take residents to a place that is located at a distance of not more than 400m from the relevant facilities or services and is to be available to and from the proposed development during daylight hours at least once each day from Monday to Friday.

Hunter Valley Buses route 269 + 270 run along Marmong Street. Buses run regularly throughout the day (approximately hourly). This bus route provides access between Toronto and Newcastle University via Glendale Supercentre. Each of these areas provides the facilities mentioned above. This information has been sourced from the Toronto Bus Service Website.

Informal trails existing between the site and suburban infrastructure. These trails will be upgraded to concrete which will formalize access to the Woodrising Shopping Village, public transport and local facilities.

**The proposed development meets the requirements of this clause being located within 400m of a transport service. Further, we have been advised that a private transport service will be provided within the development and informal trails will be formalized for access to Woodrising Shopping Centre.**

### 4.2 SEPP Clause 38 – Accessibility

A SEPP development should have obvious and safe pedestrian links from the site that provide access to public transport services or local facilities. A development should provide attractive, yet safe, environments for pedestrian and motorists with convenient access and parking for residents and visitors.

As described above, the proposed development is located within 400m of a transport service being Toronto Bus Service Route 271. This bus service is available on a regular basis throughout the day and offers access to facilities such as Toronto CBD and Glendale Supercentre.

**The proposed development meets the requirements of this Clause being located within 400m of a public transport service. Current bush trails will be upgraded to concrete which will formalize access to the Woodrising Shopping Village, public transport and local facilities.**

**It offers a safe environment for pedestrians via the pathway network on the site. Carparking is provided for residents attached to the dwellings with visitor carparking equitably distributed throughout the site.**



## **5. SEPP – Schedule 3 Standards Concerning Accessibility & Usability for Self Contained Dwellings**

---

The dwellings within the proposed development have been considered against SEPP-Housing for Seniors and People with Disabilities (SEPP) and the Australian Standards nominated in this document including AS1428 and AS4299.

Part 1: Self contained dwellings - standards concerning access and usability (Clauses 1 – 21) is applicable in this instance.

A “self contained dwelling” is defined as a dwelling or part of a building (other than a hostel), whether attached to another dwelling or not, housing seniors or people with a disability, where private facilities for significant cooking, sleeping and washing are included in the dwelling or part of the building, but where clothes washing facilities or other facilities for use in connection with the dwelling or part of the building may be provided on a shared basis.

### **5.1 SEPP Schedule 3, Clause 2 – Siting Standards**

This Clause contains 3 parts – two of which are applicable to this development. These are (1) wheelchair access and (3) common areas. Clause (2) applies to sites where the whole site does not have a gradient of less than 1:10.

#### **(1) Wheelchair Access**

Where the whole of the site has a gradient of less than 1:10, 100% of the dwellings must have wheelchair access by a continuous path of travel within the meaning of AS1428 to an adjoining public road.

**An accessible path of travel is provided to all dwellings within the development via the pedestrian pathway network – refer to Section 2.1 for further details.**

#### **(3) Common Areas**

Access must be provided in accordance with AS1428.1 so that a person using a wheelchair can use common areas and common facilities associated with the development.

**The pathway system provides an accessible path of travel to the common areas of the site including community centre and gym.**

### **5.2 SEPP Clause 3 – Security**

Pathway lighting is to be designed and located to avoid glare for pedestrians and adjacent dwellings. Lighting to be minimum 20 lux at ground level.

**The requirement for pathway lighting should be implemented during preparation of the construction certificate documentation.**

### **5.3 SEPP Clause 4 – Letterboxes**

Letterboxes are required to be lockable, in a central location and be accessible to persons using a wheelchair via an accessible path of travel.





**We assume that letterboxes are to be provided at individual dwellings. An accessible path of travel would therefore be available from each of the dwellings to letterboxes.**

**The provision of lockable letterboxes should be addressed during the preparation of the construction certificate documentation.**

**Letterboxes should be provided within the accessible height range of 900-1100mm above ground level to assist persons using a wheelchair / scooter.**

#### **5.4 SEPP Clause 5 – Private Car Accommodation**

If car parking (not being for employees) is provided,

Carparking spaces must comply with the requirements for parking for persons with a disability set out in AS2890.

and

5% of the total number of car parking spaces must be designed to enable the width of the spaces to be increased to 3.8m,

and

Any garage must have a power operated door.

With regard to carparking with SEPP developments, we note that the requirements of AS2890.6 are considered excessive for single garages requiring a minimum width of 4800mm. This requirement contradicts the SEPP that requires a percentage of the spaces to be capable of being increased to 3800mm. AS2890.6 is intended for development of a public nature. Therefore, we consider that the requirements of AS4299 Adaptable Housing can be implemented in this development being more appropriate to private dwelling garaging. This standard requires garages to be a minimum width of 3800mm. The design of the garages within this development meets this requirement.

**Garages to the dwellings are generally provided with a width of 5.5m (double garages). The requirement for 5% of the carparking spaces to be capable of being increased to 3.8m is met.**

**The requirement for power operated doors should be addressed during preparation of the construction certificate documentation.**

#### **5.5 SEPP Clause 6 – Accessible Entry**

Every entrance to each residence, whether it be the front entry or not, must comply with Clauses 4.3.1 and 4.3.2 of AS4299. Clauses 4.3.1 and 4.3.2 of AS4299 require the entry door to comply with AS1428.2 – the minimum clear opening width of the doorway is to be 850mm and allow for wheelchair maneuverability (provide minimum 1550mm long area in front of the doorway).

Door hardware is to comply with AS1428. In this regard, entry door hardware is to be in the accessible height range of 900-1100mm above finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

**Each dwelling type is provided with an area conducive to an accessible entry within the meaning of AS4299. Refer to Item 5.6 for details regarding circulation areas at doorways**



**Door leaf sizes are not provided on the development application drawings. In this regard, a standard 820mm door leaf will not achieve adequate clear width for compliance. A 920mm door leaf is recommended as a minimum to achieve clear width of 850mm.**

**The requirement for door hardware should be implemented during preparation of the construction certificate documentation.**

## **5.6 SEPP Clause 7 – Interior**

Widths of internal corridors and circulation at internal doorways must comply with AS1428.1.

**Internal corridors are generally of adequate width for compliance.**

**Circulation at doorways generally provides circulation areas in accordance with AS1428.1.**

## **5.7 SEPP Clause 8 – Main Bedroom**

At least one bedroom is required to have adequate space for a wardrobe and a queen size bed with minimum 1200mm wide circulation at the foot of the bed, 1000mm between the bed and wall / wardrobe or any other obstruction. There are also requirements for locations of GPOs and telephone outlets and illumination levels.

**The main bedroom within each dwelling type has an area that satisfies these circulation requirements.**

**Additional requirements listed above to be implemented during preparation of the construction certificate documentation.**

## **5.8 SEPP Clause 9 – Bathroom**

At least one bathroom must be located on the entry level and have an area that complies with AS1428, slip resistant floor, shower minimum 1100x1160mm with future provision for accessible features, washbasin capable of adaption to comply with AS4299 and a wall cabinet with illumination levels as described.

**At least one bathroom (or ensuite) within each of the dwelling types has adequate floor areas to achieve the abovementioned criteria.**

**We note that the SEPP allows for future adaption of bathroom areas that reflect the individual needs of the residents.**

**Preparation of the construction certificate drawings should address requirements for showers, flooring, wall cabinet, mirror and illumination levels – refer to the SEPP for full list of requirements.**

## **5.9 SEPP Clause 10 – Toilet**

A self contained residence is required to have a toilet on the ground (or main) floor that complies with the requirements for sanitary facilities of AS4299. That is, a visitable toilet.

**There is a visitable toilet provide within each of the dwelling types.**



#### **5.10 SEPP Clause 11 – Surface Finishes**

Balconies and external paved areas must have slip resistant surfaces

**The requirement for surface finishes should be implemented during preparation of the construction certificate documentation.**

#### **5.11 SEPP Clause 12 – Door Hardware**

Door handles and hardware for all doors must be provided in accordance with AS4299.

Door hardware is to be operable with one hand and in the height range of 900-1100mm above the floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

**The requirement for door hardware should be implemented during preparation of the construction certificate documentation.**

#### **5.12 SEPP Clause 13 – Ancillary Items**

Switches such as light switches must be located within the accessible height range of 900-1100mm above the floor level as required by AS4299.

**The requirement for ancillary items should be implemented preparation of the construction certificate documentation.**

#### **5.13 SEPP Clause 15 – Living and Dining Room**

Living areas within each residence are required to have circulation areas in accordance with AS4299, Clause 4.7. In this regard, an area with 2250mm diameter is required, clear of furniture.

A telephone outlet adjacent to a general power outlet and illumination level of 300 lux is also a requirement for living areas.

**The open plan arrangement of living / dining areas within each of the dwelling types provides sufficient area to satisfy SEPP requirements for circulation spaces within living and dining rooms.**

**The requirement for telephone outlet, general purpose outlet and lux levels should be implemented during preparation of the construction certificate documentation.**

#### **5.14 SEPP Clause 16 – Kitchen**

A kitchen in a self contained dwelling must have:

Circulation space in accordance with AS4299, Clause 4.5.2

A width at door approaches complying with Clause 7 of this schedule

Fittings and fittings in accordance with the relevant sub clauses of AS4299, Clause 4.5.

**Dimensions provided on the drawings indicate complying circulation areas to provide compliance with AS4299.**

**Additional requirements for kitchens as listed above, should be implemented during preparation of the construction certificate documentation.**



#### **5.15 SEPP Clause 17 – Access to kitchen, main bedroom, bathroom and toilet**

In multi-storey residences, the kitchen, main bedroom, bathroom and toilet must be located on the entry level.

**Each dwelling type achieves compliance with this clause being over a single level.**

#### **5.16 SEPP Clause 18 – Lifts in multi-storey developments**

In a multi storey building containing self-contained dwellings, lift access must be provided to dwellings above the ground level by way of a lift complying with Clause E3.6 of the BCA.

**Not applicable to this development.**

#### **5.17 SEPP Clause 19 – Laundry**

A self contained dwelling must have a laundry that has:

- A width at door approaches that complies with Clause 7 of this schedule.
- Provision for the installation of an automatic washing machine and a clothes dryer.
- A clear space in front of appliances of at least 1300mm
- Slip resistant floor
- An accessible path of travel to any clothes line.

**Laundries in each of the dwelling types achieve the above circulation requirements.**

**Requirements such as floor finish and access to clothes lines to be implemented during preparation of the construction certificate documentation.**

#### **5.18 SEPP Clause 20 – Storage**

A self contained dwelling must be provided with a linen cupboard in accordance with AS4299, Clause 4,1,1,5. It should be at least 600mm wide that have adjustable shelving.

**Linen cupboards are provided in each of the dwelling types that meet the size requirements listed above.**

**The requirement for adjustable shelving is to be implemented during preparation of the construction certificate documentation.**

#### **5.19 SEPP Clause 21 – Garbage**

A garbage storage area must be provided in an accessible location.

**Kerbside collection will be provided for each dwelling within the development.**



## 6. Community Centre

---

The Community Centre is provided adjacent to other communal facilities. Carparking is provided adjacent to the Community Centre – refer to previous sections of this report for details regarding visitor carparking. The Community Centre is over a single level and provides lounge areas, library, common area, kitchen, amenities and storage areas.

### 6.1 Approach

The approach to the building needs to be considered when considering access for persons with a disability. The BCA has three requirements for the approach to the building for persons with a disability. An accessible path of travel is required to the building entrance from the allotment boundary at the main points of entry, from accessible carparking areas and from any adjacent and associated accessible building.

**We consider the at the approach to the Community Centre meets the requirements of the BCA as discussed in previous sections of this access report.**

### 6.2 Accessible Ramp

A pedestrian ramp is provided at the front of the building to provide an accessible path of travel from entrance lobby.

Access requirements for the ramp are as follows and should be addressed during construction to ensure compliance.

- a. Ramp to comply with AS1428.1, Clause 10.3.
- b. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm and maximum length between landings to be 9m (for 1:14 gradient).  
**General configuration of the ramp meets these requirements.**
- c. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right handed disabilities.
- d. Where ramp is not enclosed, provide kerb rails in accordance with AS1428.1. The height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.
- e. Provide tactile indicators at the top and bottom of the ramps to comply with BCA Clause D3.8 and AS1428.4. Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the ramps to be 600-800mm deep across the width of the ramp and set back 300mm from the edge of the ramp (refer AS1428.4, Figure A1).

Tactile indicators are not required at mid-landings where the handrails are continuous.



### 6.3 Stairs

Stairs are provided as a part of the pedestrian access to the building and are located adjacent to the ramp. AS1428.1 has access requirements for all public access stairs and is applicable in this instance. Access requirements for stairs are as follows and should be implemented during construction.

- a. Stairs to comply with AS1428.1(2009), Clause 11.2.
- b. Stairs are required to be set back a minimum 900mm from the property boundary (Clause 10.3 (f)). This allows tactile indicators and handrail extensions to occur within the boundary and not protrude into the footpath area.
- c. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open riser.
- d. Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009), Clause 11.2). Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis.

Handrails are required on both sides of the stair to cater for left and right handed disabilities. A central handrail is also an acceptable solution where adequate width is available.

- e. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.
- f. Stair nosings shall not project beyond the face of the riser.
- g. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D3.8 and AS1428.4.

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the stair to be 600-800mm deep across the width of the stair set back 300mm from the edge of the stair.

### 6.4 Entrance

The entrance to the building will be provided with double swinging doors. The following access requirements apply to the entrance doors and should be addressed during construction.

- a. Entrances to comply with AS1428.1(2009), Clause 13 as part of the accessible path of travel.
- b. Doors are to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel. For double doors, each leaf should achieve this clearance to allow for single leaf operation.
- c. Door thresholds to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces – refer to Figure 6.



- d. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5)
- e. Provide decals to glass doors to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid. AS1428.1, Clause 6.6.
- f. For the airlock, provide a minimum 1450mm between doorways to allow for wheelchair circulation – refer to AS1428.1(2009), Clause 13.4

### **6.5 Doorways Generally**

AS1428 has requirements for doorways within the accessible path of travel. Access requirements for doorways within the accessible path of travel are as follows and should be adopted in the preparation of the construction certificate documentation. We note that doorways throughout the proposed building offer circulation areas conducive to compliance with the following.

- a. Doorways within the accessible path of travel to have a minimum clear opening width of 850mm (AS1428.1(2009), Clause 13.2).
- b. All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1(2009), Figure 31. Circulation areas to have a maximum crossfall of 1:40.
- c. Doorways to have minimum 30% luminance contrast as described in AS1428.1(2009), Clause 13.1.
- d. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5)

### **6.6 Accessible Sanitary Facilities**

Accessible toilet facilities are provided within the building. A unisex accessible facility is provided within each of the male and female toilets adjacent to the pool with a unisex facility provided at the first floor level.

The overall dimensions of the room appear to comply with AS1428, subject to the arrangement of fixtures and adequate circulation areas being achieved.

Access requirements for the accessible sanitary facility are as follows and should be implemented during preparation of the construction certificate documentation. For compliance with AS1428.1(2009), the minimum room dimensions of the accessible toilet are to be 1900x2300mm plus additional area for the handbasin.

- a. Accessible sanitary facility to be a unisex facility for compliance with the BCA.
- b. Unisex accessible facility to comply with AS1428.1(2009), Clause 15 including set-out of fittings and fixtures, circulation areas and doorways.

Crucial dimensions for the toilet are 450mm from centreline of pan to side wall, 800mm from front of pan to rear wall and a seat height of 470mm.



A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see figure 43).

For the basin, a minimum dimension of 425mm is required from the centreline of the basin to the side wall and height of basin to be between 800 and 830mm.

Grabrails to be provided at the side and rear of the toilet in compliance with AS1428.1 at a height of 800mm.

- c. Taps to have lever handles, sensor plates or similar controls. For lever taps, a minimum 50mm clearance to be provided to adjacent surfaces.
- d. Toilet seat shall be of the full round type, be securely fixed in position when in use and have fixings that create lateral stability. They should be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (eg pan, wall or floor) and remain in the upright position when fully raised.
- e. Provide a backrest to accessible toilets to comply with AS1428.1, Clause 15.2.4.
- f. Shower is to comply with AS 1428.1, Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range.

The minimum dimension of an accessible shower to be 1160 x 1000mm. A folding seat, at a height of 470mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.

Circulation space in front of the shower is to be provided as illustrated in AS1428.1, Figure 47.

- g. Accessible toilet to be identified using the International Symbol for Access. Pictograms / lettering to have a minimum 30% luminance contrast to the background colour. Signage is to comply with AS1428.1, Clause 8 and include information in tactile and Braille formats (as required by the BCA).
- h. Doorways to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel. Adequate circulation area at the latch side of the doorway is required to allow independent access to the facility – for details refer to AS1428.1, Figure 31.
- i. Door hardware to be located within the accessible height range of 900-1100mm above the finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.
- j. Controls such as light switches within the accessible toilet facilities to be in the accessible height range of 900-1100mm above the finished floor level to comply with AS1428.1(2009), Clause 14. Controls should be located not less than 500mm to a corner.

## **6.7 Lift**

A lift is provided for access between levels. The size of the lifts appear to satisfy the requirements of AS1735.12. The following access requirements apply to the lifts.

- a. Lift is to comply with AS1735.12 and be fully automatic as required by the BCA, Clause E3.6.





- b. Minimum internal dimensions of the lift car to be 1400mm wide x 1600mm deep BCA 2012, Clause E3.6
- c. Clear opening of the lift door to be minimum 900mm.
- d. Provide a handrail complying with the provisions for a mandatory handrail in AS1735.12.
- e. All lift control buttons are to be in the accessible height range of 900-1100mm affl and have a minimum 30% luminance contrast to the background colour. This includes buttons within the lift car and at each public lift lobby. All buttons are to be provided with information in Braille and tactile formats.
- f. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment.
- g. Series of door opening devices that will detect a 75mm diameter rod across the door opening between 50 mm and 1550mm above the floor level.
- h. Emergency hands-free communication, including a button that alerts a call centre of a problem, a light to signal that the call has been received by the call centre and a light indicating assistance is being dispatched.

## **6.8 Floor Finishes**

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for bevelled edges) as part of the accessible path of travel. Refer to AS1428.1(2009), Clause 7.2 for further details.

## **6.9 Controls**

Controls are to be located within the accessible height range of 900-1100mm above the floor level to comply with AS1428.1(2009), Clause 14.

## **6.10 Signage**

AS1428 contains information for signage to assist persons with a disability. Signage acts as a way finding device and so should be easily read by all users of the development. Access requirements for signage are as follows and should be considered in the design of the signage. It is intended that signage be easily comprehended by all users of the building.

- a. Signage should comply meet the intent of AS1428.1, Clause 8.
- b. The size, type and layout of lettering on signs should be easily comprehensible. The use of pictograms is encouraged wherever possible.
- c. All lettering / pictograms to have a minimum 30% luminance contrast to the background colour to assist persons with a vision impairment.
- d. Signage should be located where directional decisions are made to enable the appropriate decisions to be made prior to the change of direction.
- e. Signage to be located within the height range of 1200-1600mm. Where a sign may be obscured, for example in a crowd situation, it should be placed at a height of minimum 2000mm.



### **6.11 Access to Pool**

A ramp is provided for access to the pool. The ramp should meet the following access requirements.

- a. Ramp to comply with AS1428.1, Clause 10.3.
- b. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm and maximum length between landings to be 9m (for 1:14 gradient).

Landings to be a minimum 1200mm in length (where there is no change in direction). For changes in direction of 180°, landings to be 1540mm in length – refer to AS1428.1(2009), Clause 10.8.

- c. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right handed disabilities.



## 7. Summary

---

The Proposed Aged Care Development located at 135a Marmong Street Marmong Point has been considered against the requirements of Lake Macquarie Council DCP No. 1, Clause 2.6.12 Non-Discriminatory Access and Use, The Building Code of Australia, The Disability Discrimination Act 1992 and SEPP – Housing for Seniors and Persons with a Disability 2004 (SEPP).

The proposed development generally meets the intent of Lake Macquarie Council DCP No. 1, Clause 2.6.12 Non-Discriminatory Access and Use. Access for persons with a disability has been addressed in the design of the development.

We consider that the requirements of the SEPP have also been met.

This report offers recommendations for inclusion in the construction documentation and should be considered in the preparation of these drawings.

**All dimensions quoted throughout this report and within Australian Standards are CLEAR dimensions, not structural. This needs to be considered in the preparation of the construction certificate documentation to account for wall linings and the like.**

Best practice options, as noted in the report, are not mandatory but will minimise the risk of a complaint made under the DDA.

Lindsay Perry is a qualified Access Advisor, being an accredited member of The Association of Consultants in Access, Australia – membership number 136. Lindsay Perry carries public liability insurance, professional indemnity insurance and income protection.

LINDSAY PERRY

Architect Reg. No. 7021

Accredited Access Consultant ACAA No. 136