

## Appendix R

---

*Crime Risk Assessment*



**Martins Crime  
Consultancy**

**Specialist in CPTED Crime Risk  
Assessments for DA Approvals**

ABN 82 653 067 008

Email [mcc@bigpond.net.au](mailto:mcc@bigpond.net.au)

[www.martinscrimeconsultancy.com.au](http://www.martinscrimeconsultancy.com.au)

*“Getting it Right the First Time”*

**CRIME RISK ASSESSMENT  
REPORT**

**SUBJECT EA:** TOUKLEY SENIORS LIVING  
DEVELOPMENT

**CLIENT:** RUSTRUM PTY LTD



Martins Crime Consultancy Ph +61 02 65825458 Fax +61 0265827578 Mob +61 0402807538

**Martins Crime  
Consultancy**  
Specialist in CPTED Crime Risk  
Assessments for DA Approvals

ABN 82 653 067 008  
Email [mcc@bigpond.net.au](mailto:mcc@bigpond.net.au)  
[www.martinscrimeconsultancy.com.au](http://www.martinscrimeconsultancy.com.au)

***“Getting it Right the First Time”***

**CRIME PREVENTION REPORT:**

**Proposed Toukley Seniors Living 216 – 222 Main Rd, Toukley & Rowland Terrace, Toukley NSW.**

Martins Crime Consultancy has prepared this report after being engaged by Mr Terry Roche, project manager from Sterlings Pty Limited and on the behalf of Rustrum Pty Ltd to carry out a CPTED (Crime Prevention through Environmental Design) analysis of a proposed Seniors Living development Main Street Toukley in accordance with the Department of Infrastructure Planning and Natural Resources guidelines titled Crime Prevention and the Assessment of the Development Applications (2001).

**PURPOSE OF THE CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN ANALYSIS.**

The purpose of this CPTED analysis is to investigate the proposed development site with the assessment process aimed at preventing opportunities for crime. It is important to note at this time that there are some limitations within the system. Initially, the layout and design of the building are not solely responsible for the commission of a crime and are not the only contributing factors. The application of CPTED strategies to the design and layout of the development are only part of the solution to reduce the incidence of crime overall.

However, the implementation and application of CPTED Strategies are well established, and are now globally accepted as an important tool that can be successfully applied to the design and layout of buildings, commercial centres and residential sectors, that do have an impact on crime reduction.

- |                    |  |
|--------------------|--|
| <b>Part One.</b>   | Provides an introduction into the legislative guidelines of S79C of the Environmental Planning and Assessment Act, 1979. |
| <b>Part Two.</b>   | Crime Analysis.  |
| <b>Part Three.</b> | CPTED Analysis to identify any issues and measures to mitigate any crime potential arising from the proposed design.     |

## METHODOLOGY

From plans supplied by Mr Terry Roche Sterling Pty Ltd & Mr Jason Goggi of Ancher/Mortlock/Woolley Architects, MCC has carried out a pre submission inspection and analysis of the proposed development, using CPTED principles & strategies. A site visit provided inspection & analysis of the current land usages affecting the proposal. MCC has undertaken consultation process (by telephone) with Senior Sergeant John Booth, local Police and other stakeholders (architects & planners) for the project.

### CPTED Principles

- Surveillance
- Access Control
- Territorial Reinforcement
- Space Management

PRINCIPLE	SUMMARY
Surveillance	Surveillance basically relates to people being able to see and interact with others in a public or private area. Landscaping, lighting, the type, height & placement of trees, buildings, corridors, roof soffits can either promote or hinder surveillance. To achieve natural surveillance clear & effective sightlines between public and private space need to be created, installation of windows(glazed), the use of security personnel, CCTV and other electronic devices can be used to improve surveillance.
Access control	Physical and symbolic barriers can be designed to entice, channel or restrict pedestrian & vehicle movement towards certain courtyards, areas, entrances or exits. They minimise the opportunity while increasing the effort required to commit offences. Fencing, prefabricated walls, paving, railings and landscaping techniques are all strategies used to gain effective access control.
Territorial reinforcement	Effective design, planning and space management stimulate the community into performing roles of natural guardians, signage, direction and admission rules clearly illustrate to the public that there are moving from a public to a private/restricted domain.
Space Management	Linked to territorial reinforcement, ensuring the domain is well used & maintained. Site maintenance programs to immediately remove/replace/repair any incidents of vandalism, failed lighting or failed physical features.

Whilst operational security measures of the Toukley Senior Living are not discussed here, final plans and procedures will need to be completed closer to the opening of the development.

I understand these measures may include,

- Security Fencing.
- Security Screen doors to all apartments.
- Key locked windows and sliding doors.
- Peep holes inserted in all apartment doors.

## **PART 1.**

In April 2001, the NSW Government released legislative guidelines to S79C of the Environmental Planning and Assessment Act, 1979. The guidelines provide authorities with direction on how Section 79C is to be interpreted and applied directly relating to the identification and minimisation of crime risk.

1. The likely impacts of that development, including environmental impacts on the natural and built environments, and the social and economic impacts on the locality.
2. The public interest.

Crime Prevention falls under these subsections of section 79C. Councils have an obligation to ensure that developments provide safety and security to all users and the community.

If a development presents a crime risk these guidelines can be used to justify,

1. Modification of the development to minimise the risk of crime or,
2. Refusal of the development on the grounds that the crime risks could not be minimised.

In Preparing this Crime Risk Assessment Report, consideration has been given to

- Wyong City Council Development Control Plan 2007.
- Section 79C Environmental Planning & Assessment Act 1979.
- The NSW Bureau of Crime Statistics & Research (BOCSAR)
- Seniors living policy-urban design guidelines

## **PART 2 (Crime Analysis)**

### **CRIME ANALYSIS.**

The Bureau of Crime Statistics and Research in New South Wales (BOCSAR), is the source of the crime statistics referred to in this report. BOCSAR provides crime data for local government areas (LGA's) throughout New South Wales. The data is a tool that can be useful in determining or demonstrating crime trends in a particular location or local Government area.

Annexure 1: contains crime data from the Wyong Local Government area for the 5 year period between October 2003 and September 2008. The data has been broken down into monthly figures for reported incidents in fourteen major crime categories.

For the purposes of this report, this crime data relates to the entire Wyong LGA and does NOT specifically relate to the Toukley precinct. Specific location data is at this stage unavailable from BOCSAR and these figures are used in conjunction with information on local crime trends specific to the Toukley precinct obtained through a consultation with Sen Sgt John Booth, The Entrance Local Area Command Crime Management Units Intelligence officer.

From this data it is apparent that during the selected time frames most of the crime categories remained stable, with reductions of 6.3% in Motor Vehicle Theft, a 3.6% reduction in stealing from dwellings and an 8.9% reduction in stealing from person offences.

Stealing from Motor vehicle is the only category to display a marked increase up by 10.4%.

Table 1 shows the number of reported incidents of crime in the key crime categories for the Wyong LGA between October 2003 and September 2008.

Table 1: Reported incidents of crime in selected crime categories Wyong LGA 2003 - 2008

<b>OFFENCE</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Assault – Domestic violence related</b>	763	717	774	841	736
<b>Assault – Non Domestic violence related</b>	953	950	1009	1075	942
<b>Sexual assault</b>	126	116	110	110	110
<b>Robbery</b>	33	44	35	45	40
<b>Robbery with Firearm</b>	9	16	7	3	4
<b>Break, Enter &amp; Steal</b>	1056	1200	1094	941	1068
<b>Motor Vehicle Theft</b>	748	813	652	552	576
<b>Steal from M/Vehicle</b>	1046	1107	1024	1056	1555
<b>Steal from Retail Store</b>	354	341	333	370	437
<b>Steal from Person</b>	138	152	111	105	95
<b>Malicious Damage</b>	3025	2650	2698	2907	3110

Source: BOCSAR On-line Data Tools

The figures from Table 1 show that in the major crime categories there has been a varied level of fluctuation across all areas in the time frames selected. The largest increases have been with incidents of stealing from motor vehicles and a steady increase in the incidents of malicious damage & Graffiti. Figures contained in the monthly break down of incidents (annexure 1) during the selected time frames, clearly reveal that the “hot” times are school holidays, November, December & January, also the Easter break period ranking high across all fields.

While the data shows that overall the incidence of crime has remained stable it does not disclose how this compares with other locations or local government areas across New

South Wales. Making a comparison between other LGA's using this data, does not clearly indicate how a particular area performs, in relation to the incidents of reported crime, and can be difficult to measure. However, BOCSAR has a capability to deliver information that can provide some insight by utilising the LGA ranking tool.

This process allows for a comparison to be made across LGA's that have a population over 3000 people. The rates of crime (reported crimes per 100,000 persons) are analysed across all LGA's throughout New South Wales.

Table 2 shows a comparison between the Wyong LGA and other local government areas in NSW.

**Table 2:** LGA ranking for Wyong in selected crime categories 2004 - 2008

<b>OFFENCE</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Assault- Domestic Violence related</b>	73	50	56	55	46
<b>Assault- Non Domestic Violence</b>	33	38	33	40	32
<b>Sexual Assault</b>	66	49	50	48	77
<b>Robbery</b>	54	54	42	63	61
<b>Break, Enter &amp; Steal</b>	79	59	33	56	56
<b>Motor Vehicle Theft</b>	29	29	25	35	37
<b>Steal from M/Vehicle</b>	61	49	44	51	48
<b>Steal from Retail Store</b>	44	51	47	44	28
<b>Steal from Dwelling</b>	74	83	75	58	80
<b>Steal from Person</b>	52	43	39	50	55
<b>Malicious Damage to Property</b>	26	24	41	47	37

Source: BOCSAR On-Line Data Tools

The closer the ranking is to 1, the higher the rate of crime is for that particular category during the specified time frame compared to all other LGA's in NSW.

While the rankings indicate figures above 50% in 5 of the eleven categories, it is apparent that the Wyong LGA's ranks moderately high in relation to assaults, motor vehicle theft, retail theft, steal from motor vehicles, malicious damage and graffiti offences.

For the purposes of the Toukley Seniors living development, stealing from motor vehicles presents a potential problem with vehicles in the basement car parks if unauthorised entry can not be prevented. Access control strategies and the use of reliable keyed or card entry systems will have an immediate impact on the chance of unauthorised access & break, enter & steal offences from the complex and conversely, visitors to the facility could be alerted with signage in the streets to properly secure all valuable before leaving vehicles.

In so far as, minimising the opportunity for an assault to occur around the complex, this could be achieved through the appropriate use lighting in the public domain & entrances and all exits, combined with capable guardians and natural surveillance from offices at the entrance to the Toukley Seniors Living Development. Concrete walls aligning the entrances into the undercover car parking off the main road & Rowland terrace, will be a target for graffiti and as such, the use of anti graffiti surfaces should be employed on all external walls and complemented with security sensor lighting and an immediate removal maintenance program.

In a meeting with Senior Sgt John Booth (Crime Statistics and Intelligence officer, Crime Management Unit, The Entrance Local Area Command, NSW Police Force) he stated “the types of crimes occurring around this proposed development site primarily relate to underage drinking, antisocial behaviour, malicious damage, graffiti & stealing offences. The offences mainly occur along Canton Beach Rd, the Toukley caravan park and in the public parks and mostly occur after dark and on the weekends and school holidays. A lot of problems come from the secondary supply of alcohol to minors purchased from the Beachcomber Hotel”.

### **The Beachcomber Hotel.**

There is ample evidence that alcohol is a contributing factor to crime. The Beachcomber Hotel will be one of the neighbouring properties to this development. A single level dwelling on this developments western boundary is the hotel manager’s residence. The data obtained from BOCSAR shows the recorded crime statistics in the period from January 2007 to September 2007. This data lists the locations of licensed premises where incidents of assault were most common and delivers a ranking out of 100. The Beachcomber hotel is ranked at No 15.

While there is increasing evidence of the role of alcohol in crime, assaults, property related offences and malicious damage caused by intoxicated persons leaving the licensed premises. It is difficult to impact on the incidence of assaults by solely using design strategies. However, property related offences are directly linked to residential premises and events can be minimised by using safer by design techniques. Building designs that display clear ownership and guardianship, good natural surveillance, target hardening of the entry points to upper levels of the buildings, promote neighbour interaction and identification of who is who, has in place effective access control impacting on loitering excuses and utilises robust and damage resistant well lit streetscapes all work together to minimise the opportunity for offences to be committed.

In reviewing the site design plans for the Toukley Seniors Living it is apparent that these strategies have been incorporated into the development at the design stage.

### **SURVEILLANCE:**

People feel safe in public areas when they can see and interact with other members of the community, specifically people who are connected with that domain, such as other residents and adjoining neighbours. Offenders are often deterred from committing crime in places that are well supervised. Natural surveillance is achieved by creating effective sight lines between public and private space; strategic positioning of buildings, driveways, entrances and exits. The proposed Development is to be located on vacant land on Main Road Toukley. This development will adjoin a public park and neighbour a large licensed premises the Beachcomber Hotel & Resort.

There are no historical restrictions that effect the development and the placement of this facility will provide increased surveillance to this precinct.



MCC has reviewed the plans and it is clear the following design features promote surveillance.

The allocated car spaces are sectioned and are well defined. They have the capacity to provide clear sight lines in between the rows. The orientation of the specific entry area, maximises the opportunities for natural supervision by residents. The strategic placement of the building reduces concealment opportunities and entrapment locations.

The design and streetscapes, pathways and tactile areas clearly delineate the boundaries of this development with all entrances & exits being easily identifiable & provide concise directions to the residents and public looking to enter or exit the village.

In reviewing the landscape plans for the installation of gardens beds & decorative beautification, their locations, type, height and styles of vegetation to be utilised in this development appear to be compliant.

**Lighting:** - Lighting type, spread will be allocated to enhance surveillance opportunities over the external entry and exit points to the car park as well internally in both levels of the undercover/basement car park.

The use of lighting to flood up or down any of the solid walls that encompass the village complex, on the northern & the eastern aspects of the village centre, including all car park entrances & exits, will enhance silhouetting and surveillance capabilities and is a preferred option.

Effective lighting is the key ingredient to public safety as it increases visibility, surveillance. Consideration should be given to increasing the lux levels outside the building and around the entrances to the undercover car parks to a higher level than the Australian standards (AS1158). Given this development is for seniors the lighting deployed should be higher than the standards.

Increased lux levels to the fluorescent lighting will bring clarity to pedestrian waypoints, discourage inappropriate behaviour; improve surveillance capabilities for persons entering the building & car parks after dark, as well as enhancing visual identification of their vehicles and other users.

### **ACCESS CONTROL:**

MCC has reviewed the plans supplied and it is apparent the following access control features have been considered.

The design of this Seniors Living Development & featured landscaping will channel residents & visitors towards the entry points and provide limited cover and concealment opportunities. There is clarity between public and private domains and this minimises excuses for persons being in restricted or unauthorised areas.

The underground car parking vehicular entrances/exits are security gate controlled and appear clear and well defined. These areas need to be kept clear of large clumps of vegetation and signage, this will act to remove graffiti opportunities and provide hindrance to vandalism and larceny crimes from unattended parked vehicles close to entrances/exits. Consideration could also be given to complimenting this strategy with adequate lighting & CCTV.

Fencing, of a type that is visually permeable, difficult to scale, but not cyclone fencing, is to be erected along the western perimeter and also along the eastern boundary with the public park and to then continue along the north eastern boundary down to the high-water mark of Budgewoi Lake. There is a real need to prevent persons using the Senior Living Development as a “short cut” for persons attempting to access or egress the Beachcomber hotel and the erection of these fences should prevent this.

### **Pedestrians**

Consideration has been provided for clear signage, vegetation/landscaping & directional markers for marshalling pedestrian access into the village. Clear signage will need to be deployed in and around the car park ramps which will clearly separate the vehicular and pedestrian traffic. It is my understanding that these will be included in the final construction stage of the development.

### **TERRITORIAL REINFORCEMENT:**

Based on the plans reviewed by MCC it is apparent that the following territorial reinforcement measures have been applied.

The design and orientation of the building to the streetscapes, pathways and paved areas clearly delineate the boundaries of the retirement village. There is clarity between public and private domains and this minimises excuses for persons being in restricted or unauthorised areas.

The development's entrances are easily identifiable & provide clear & concise indicators to the general public looking to enter or exit the Seniors Living Development. Signage indicated on the plans supplied appear compliant and are not “confusing” which removes the opportunity for excuses to make by opportunistic criminals attempting to legitimise exploration or trespassing.

There is distinct use of tactile surfaces and landscaping in the development clearly identifying the areas perception of a controlled and owned space.

The boundaries and the building's elevations demonstrate the areas ownership and clearly exhibit the purpose of the development to all users. The design and layout of the development is open and uncompromised, clear vehicular entry/exit point from the Main Rd & Rowland terrace.

The Senior Living Development site & landscape plans demonstrate that there is very good surveillance of public areas with limited blank spaces and concealment opportunities.

Territorial responsibility for ownership of security related issues can be achieved through resident's communication and perhaps a working "house policy" on internal security measures. This can create a holistic responsibility of preventing crime by securely locking vehicles, windows and sliding glass verandah doors & keeping valuables out of sight if left in motor vehicles.

### **Car park/s**

The layout and design of the parking bays appears to service all the needs and intentions of the development and traditionally, car parks are viewed by criminals as easy targets for opportunistic crime. There are enough crime statistics available for the proposed development area to suggest that the car parks will be targeted by thieves. Security card or key access to these car parks will only be effective if it is complemented by key or card access to stairwells and lifts to prevent unauthorised persons entering through the timed security gates and leaving via the front of the premises.

The surrounding residential areas have a large proportion of middle to senior aged residents, with a large juvenile population. The immediate neighbouring locations are rated as an intermediate middle class location in the Wyong Local Government Area.

### **ACTIVITY & SPACE MANAGEMENT.**

My instructions are that an appropriate maintenance/security patrol program is catered for that will impact on the replacement of failed lighting, prompt removal of any graffiti and the utilisation of graffiti inhibiting surface coatings are to be used on the extremities of the development.

Landscaping and employment of beautification features to be employed in this development is compliant. Care with the use of dense vegetation placement in close proximity to pathways needs attention; overall, in my opinion the development will re invigorate the area.

An active vegetation maintenance program should to be initiated, which will routinely carry out pruning of any overgrown vegetation & beautification works around the site which will attract users and create a natural guardianship theme and increase surveillance.

There are no other conflicting applications or ambiguous land usages identified within this development that could adversely impact on personal safety.

The development has clear legibility and ownership and I conclude that the Seniors Living Development has the potential to contribute positively to the Toukley area. The strategies in this report in my opinion, will impact on the incidents of these crimes, if properly implemented and maintained.

In conclusion, the Seniors Living Development will have the potential to contribute in a positive manner to the area & the community. The current land usage is undeterminable, the site plans and the Crime Data analysed & collected shows there is a pre existing crime problems in the area. The proposed development will increase public activity, enhance surveillance and provide oversight of its public domain. This development will also remove, but virtue of its construction and building orientations, place more eyes on the street, park and lake frontage that were not previously available, the development will prevent persons traversing from Rowland Terrace through to the Beachcomber hotel and back again.

### **RECOMMENDATIONS:**

1. The Car park has unobscured sightlines which encourage natural surveillance into inner areas by residents and visitors. Lighting lux levels should be increased to a higher level than the Australian Standard (AS1158) improving visibility and public safety for the mature residents as well as in the front of the building and throughout the basement car parking areas.
2. The development has an enhanced capability that allows for unrestricted natural surveillance of its domain and will impact on persons loitering. Residents and visitors in the retirement village will have the capacity to have natural sightlines out into the pool and park areas and as such perform a service as capable guardians.
3. Landscape/Planter boxes/Vegetation  
The locations and dimensions of these items when installed should not provide cover and concealment opportunities, any vegetation employed here should be maintained at a height/type that does not exceed 0.5m. Any trees used should maintain a clear visual corridor with no limbs below a height of 2M.
4. Installation of peep holes into all residents doors so that may see who is at their door before they open it, conversely, fitting appropriately rated, security screen doors to the individual units entry doors.
5. All fire access & egress doorways & stairs on the site should be key coded & alarmed. Details supplied in the design development stage.
6. Large glass windows and glazed external doors should be encouraged where appropriate. This will achieve both a heightened level of surveillance capabilities by residents looking out into the pool area & parks.
7. The erection of fencing as described in this report.

## **Conclusion**

The CPTED (Crime Prevention through Environmental Design) recommendations made in this assessment are designed to make the area appear open and clear, safe and secure for residents whilst being as resistant to crime as possible. It is not possible to completely eliminate all crime from every situation and the findings in this report if implemented will, in my opinion, have a favourable impact on the incidence of crime and promote safety & confidence amongst residents living in this development.

The strategies, comments, photographs and solutions in this report remain the property of MCC and cannot be reproduced, copied or re used by any person, company, developer, builder, planner or council or used for any purpose without the express written permission of Brett Martin t/a MCC.

Yours Faithfully

*Brett Martin*

Crime Prevention Consultant

## Appendix S

---

*Disabled Access Report*



**lindsay perry**  
access + architecture

52 walumbi avenue  
tingira heights 2290

p+f. 02 4948 7039  
m. 044 724 5234

e. lp52@bigpond.net.au

nominated architect:  
lindsay perry RAlA  
NSW reg. no. 7021

7 April 2009

Issue B

## **DISABILITY ACCESS REPORT**

**Toukley Seniors Living**

**222 Main Road**

**TOUKLEY NSW**

for  
**Rustrum Pty Ltd**

our ref:  
**9016**



## 1. Introduction

---

This Access Report considers the proposed Toukley Seniors Living Development, located at 222 Main Road Toukley, with regard to SEPP Housing for Seniors and People with a Disability, The Building Code of Australia and The Disability Discriminations Act.

There are 53 apartment style units provided within the development. Carparking is provided at the ground and first floor levels of the development. Pedestrian access is provided to the development from both Main Road and Rowland Terrace. Common areas such as gym, community room and administration are provided centrally within the development.

This Access Report reviews drawings prepared by Ancher/Mortlock/Woolley as follows.

- 0809 EA-100 P6            Ground Level Plan
- 0809 EA-101 P6            Level 1 Plan
- 0809 EA-102 P6            Level 2 Plan
- 0809 EA-103 P6            Level 3 Plan
- 0809 EA-104 P6            Level 4 Plan
- 0809 EA-105 P6            Roof Plan
- 0809 EA-400 P1            Elevations
- 0809 EA-401 P1            Elevations

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- The Building Code of Australia 2008 (BCA) Section D3 – Access for People with Disabilities
- State Environmental Planning Policy – Housing for Seniors and Persons with a Disability 2004 (SEPP), Amendment 3 – 18 January 2008.
- Australian Standards AS1428.1, AS1428.2, AS1428.4 – Design for Access and Mobility
- Australian Standard AS4299 – Adaptable Housing
- Australian Standard AS2890.1 – Parking Facilities – Off street carparking 1993.
- Australian Standard AS1735.12 – Lifts, escalators and moving walks: Facilities for persons with disabilities.

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 and proposed changes in access legislation such as the draft Access to Premises Standard released in 2004. This document aims to overcome current inconsistencies between the BCA and DDA. The final document is scheduled to be released in the near future.

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 has 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.





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 the entrance floor; and any other floor to which vertical access is provided by way of a ramp, step ramp or kerb ramp complying with AS1428.1 or a passenger lift is provided (Class 5,6,7,& 8 buildings). It contains no specific requirements for Class 2 buildings. However, to meet the intent of the DDA and SEPP, access for persons to the common areas of the development has been considered as per the requirements for Class 5,6,7 & 8 buildings.
- **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 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 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.

Requirements for tactile indicators are included in part 4 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.
- **AS2890.1** applies to the carparking areas generally. The current amendment of AS2890.1 released last year – 2004 – does not include parking for persons with a disability. AS2890.6 is pending publication and will include specific requirements for accessible carparking. The release of Part 6 is subject to the proposed Disability Standard for Access to Premises, currently in draft form. Prior to the release of Part 6, AS2890.1 – 1993 is to be observed for accessible carparking facilities.
- **Draft Access to Premises Standard** – this standard, currently in draft form, was released in February 2004 to overcome inconsistencies between the BCA and DDA.



## **2. Access + Approach**

---

The approach to the building needs to be considered when assessing 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.

In this instance, the approach to the buildings has been considered from the street footpaths along Main Road and Rowland Terrace and from the carparking areas located at the ground and first floors.

### **2.1 Pathways Generally**

An accessible path of travel is available into and around the site from both Main Road and Rowland Terrace.

Access requirements for the accessible path of travel are as follows and should be implemented during preparation of the construction certificate documentation.

- a. Pathway network to comply with AS1428.1, Clause 5.1.2.
- b. Accessible path of travel to be minimum 1000mm wide, have a maximum gradient of 1:20 and a maximum crossfall of 1:40. A crossfall of 1:40 is to be maintained at driveway crossings.
- c. Accessible path of travel to be level at joints. Maximum allowable construction tolerance is 5mm or compliance with AS1428.1.
- d. Pathway lighting, where provided, should meet the requirements of AS4299, Clause 3.6.1. An even degree of light should be provided along the pathway at a low level; to reduce glare. Minimum lighting level of 50lux should be provided at ground level.

### **2.2 Kerb Ramps**

Where kerb ramps are provided as a part of the accessible path of travel – such as at the driveway crossing along Main Road– the following access requirements apply and should be implemented during preparation of the construction documentation.

- a. Kerb ramps to comply with AS1428.1, Clause 5.8.
- b. Maximum gradient of the kerb ramp to be 1:8 and maximum length to be 1520mm (providing a maximum height of 190mm).
- c. Kerb ramp to have a non-slip surface as required by AS1428.
- d. Where kerb ramps are provided with a gradient of 1:8, tactile indicators are not essential as this gradient is detectable to persons with a vision impairment.



### **3. SEPP –Siting Requirements**

SEPP Housing for Seniors and People With Disabilities has requirements with regard to siting standards.

#### **3.1 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 within the Sydney Statistical Division, these services can be located at a distance greater than 400m from the site if there is a public transport service available that is located not more than 400m from the site of the proposed development and the distance is accessible by means of a suitable access pathway.

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.

The development is located within 400m of services at Main Road Toukley including retail, commercial and medical. Bus services operate along Main Road six days a week offering access to Bay Village and Wyong Hospital.

***The proposed development is located appropriately to meet the intent of this clause.***

#### **3.2 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 within walking distance to facilities along Main Road Toukley including bus services.

***The proposed development meets the intent of this Clause. It offers a safe environment for pedestrians via the pathway network on the site. Carparking is provided for residents and visitors.***



## 4. Common Areas

---

Common areas of the development – including Community Room, Gym, Courtyard and Offices – are located centrally. An accessible path of travel is available to all apartments from the common areas.

### 4.1 Entry Doors

Entrances to the development are provided from Main Road at Level 2 and from Rowland Terrace at Level 1. Swinging doors are provided in each location.

Access requirements for entrances are as follows and should be implemented during preparation of the construction certificate documentation.

- a. Entrances to comply with AS1428.1, Clause 7.1 as part of the accessible path of travel and the additional requirements of AS1428.2 / AS4299.
- b. Doors to have a minimum clear opening width of 850mm. For double swinging doors, each leaf must comply with this requirement to facilitate single leaf operation.

**We have been advised that all doors are provided with 850mm clear width.**

- c. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1, Clause 11.1). The use of lever handles is encouraged to assist persons with a manual disability such as arthritis. Door handles to have a minimum 30% luminance contrast to the door colour to assist persons with a vision impairment (AS1428.2, Clause 23.3(b)).

The accessible height range also applies to items such as card swipes, intercoms, doorbells, etc.

- d. Door threshold to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 5mm.

### 4.2 Doorways Generally

Doorways within the accessible path of travel are required to have clear opening widths and circulation areas in compliance with AS1428.1. Areas that **do not** form a part of the accessible path of travel include conventional toilets, cleaner's stores and other service areas.

Access requirements for doorways within the accessible path of travel are as follows and should be implemented on the preparation of the construction certificate documentation.

- a. Doorways to have a minimum clear opening width of 800mm to comply AS1428.1, Clause 7.2 as part of the accessible path of travel. The use of a standard 820mm door leaf does not usually provide adequate clear width and recommend the use of an 870mm door leaf as a minimum.

**We have been advised that all doors are provided with 850mm clear width.**

For double swinging doors, each leaf must comply with this requirement to facilitate single leaf operation (AS1428.2, Clause 11.5.3).

For bifold doors, we recommend that the end leaf provide adequate width for when the door is operating in the closed position.



- b. Doors are required to have circulation areas as shown in AS1428.1, Figure 12 to allow independent access for persons using a wheelchair.
- c. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1, Clause 11.1). The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.
- d. For doorways to external areas, door thresholds to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 5mm.

### **4.3 Accessible Toilet Facilities**

Three accessible toilets are provided within the common areas of the development – one at each level. The general arrangement of each facility is conducive to compliance with AS1428.

Access requirements for accessible toilet facilities are as follows and should be implemented in the preparation of the construction certificate documentation.

- a. Unisex accessible toilet facilities to comply with AS1428.1, Clause 10 including set-out of fittings and fixtures, circulation areas and doorways.

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

Basin height to be between 770 – 800mm high.

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

- b. Accessible sanitary facilities 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 14 and include information in tactile and Braille formats (as required by the BCA).
- c. Doorways to have a minimum clear opening width of 800mm to comply AS1428.1, Clause 7.2 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 12. 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.
- d. 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, Clause 11.2.



#### **4.4 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 5mm as part of the accessible path of travel.

#### **4.5 Controls**

New controls such as light switches, GPOs, alarm keypads, card swipes, intercoms, etc are to be located within the accessible height range of 900-1100mm above the floor level to comply with AS1428.1, Clause 11.2.

#### **4.6 Lifts**

Lifts are provided for access between levels of the building, facilitating an accessible path of travel for persons with a disability. Access requirements for the lifts are as follows and should be implemented during selection of the lift and preparation of the construction documentation. The following requirements apply to access for persons with a disability. Additional requirements may apply to access for stretchers.

- a. Lifts to comply with AS1735.12 and be fully automatic as required by the BCA, Clause E3.6.
- b. Minimum internal dimensions of the lift cars to be 1100mm wide x 1400mm deep – AS1735.12, Section 2
- c. Clear opening of the lift doors to be minimum 800mm as a part of the accessible path of travel.
- d. 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.
- e. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment. This is critical in multistorey buildings for orientational purposes.

#### **4.7 Stairs**

Stairs are provided adjacent to lifts for alternative access being levels. AS1428.1 has access requirements for all public access stairs.

Access requirements for stairs are as follows and should be implemented during preparation of the construction certificate documentation.

- a. Stairs to comply with AS1428.1, Clause 9.1.
- b. 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 (AS1428.1).



- c. Provide handrails, with extensions, to both sides of the stair (AS1428.1, Clause 9.2 and Clause 6.1). 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 if adequate width is available.
- d. 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 (AS1428.1, Clause 9.1).
- e. 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 (refer AS1428.4, Figure A1).



## 5. Self Care Dwellings SEPP – Design Criteria

---

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

There are 53 apartments within the proposed development. These have been considered under SEPP Clause 26: Location and Access to Facilities, Clause 38: Accessibility and Schedule 3, Part 1: Self contained dwellings - standards concerning access and usability (Clauses 1 – 21).

Nine apartment types have been provided for assessment and reflect a range of options including number of bedrooms, location and orientation. All apartment layouts are in keeping with the requirements of the SEPP.

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.

#### (2) Wheelchair Access

Where the whole of the site does not have a gradient of less than 1:10, the percentage of dwellings that must have wheelchair access must equal the proportion of the site that has a gradient of less than 1:10, or 50%, whichever is the greater.

***An accessible path of travel is available to all the apartments from the main entrances, carparking areas and common areas on the site. A pathway network is provided.***

#### (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 common areas of the development have been designed to reflect the requirements of AS1428.1 as outlined in the preceding section of this access report.***





## **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.

Letterboxes are provided in a central location within the entrance area from Main Road at Level 2 of the building.

***The selection 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.

***Each of the apartments is provided with at least one carparking space. A total of 70 carparking spaces are provided within the development of which 7 are nominated as accessible and have a nominated width of 3800mm. Other carparking has a nominated width of 2700mm.***

***AS2890 requires that accessible carparking have a minimum clear width of 3200mm. Within the development, 10 carparking spaces are either 3200mm wide or can be widened to 3200mm as they are 2700mm wide and have a 500mm usable space beside them.***

***The requirement for 5% of the private carparking spaces being able to be increased to 3.8m has been achieved within the current carparking configuration. Seven carparking spaces are nominated as “accessible”. This exceeds the required 5% - based on 70 spaces, 10% of carparking meets this requirement.***

***We consider that the carparking arrangement within the proposed development meets the intent of the SEPP as all carparking spaces are wider than typical conventional spaces, being 2700mm wide. In addition, 7 spaces are provided that are 3800mm wide (10%) and 10 spaces are provided that are 3200mm wide (16%).***



## **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. 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.

For this development, these requirements are applicable to the main entry doors to each building and to individual units.

***Each entrance is generally provided with an area conducive to an accessible entry within the meaning of AS4299. Adequate circulation areas are provided.***

***Door leaf sizes are not provided on the development application drawings. In this regard, we note that 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.

***Doorways and internal corridors within each of the nine apartment types meet this requirement.***

## **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 apartment has an area that satisfies these circulation requirements. Wheelchair circulation spaces are indicated on the drawings.***

***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.

***Each apartment has a bathroom that offers areas conducive to the requirements described above that are capable of adaption to comply with AS4299.***

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

***Preparation of the construction documentation to 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.

***A toilet is provided within each of the apartments that meets the requirements as detailed above.***

### **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 during 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 apartments 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.

***The general layout of the kitchens for each unit type satisfies circulation AS4299. The minimum width of all kitchens is 2800mm which will achieve adequate circulation between benches for compliance.***

***Materials selection and construction certificate documentation should address additional requirements for kitchens as listed above.***

### **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.

***All apartments comply with this clause being over a single level.***

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

In a multi storey building containing separate self-contained dwellings on different storeys, lift access must be provided to dwellings above the ground level of the building by way of a lift complying with Clause E3.6 of The Building Code of Australia.

Requirements for lifts have been addressed in the preceding section of this access report.



### **5.17 SEPP Clause 19 – Laundry**

A self contained dwelling must have a laundry that has:

- A width at door approached 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.

***Laundry areas within each apartment type meet the requirements of this clause with regard to door and circulation areas.***

***Additional requirements such as floor finish 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.

***Location of linen cupboards is not evident in 2 Bed Apartment Type 1 with Study Nook or the 2 Bed Apartment Type 2 with Study Nook (SK-102, D). We recommend that linen cupboards be provided during preparation of the construction certificate documentation.***

***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.

***A central garbage storage area is provided within the building.***



## 6. Summary

---

The Proposed Toukley Seniors Living Development, located at 222 Main Road Toukley has been considered with regard to SEPP Housing for Seniors and People with a Disability, The Building Code of Australia and The Disability Discrimination Act.

A high level of accessibility is provided to and around the site through the inclusion of accessible carparking and accessible path of travel to building entrances.

We consider that the development generally meets the intent of SEPP Housing for Seniors and People with a Disability, subject to detailed design in accordance with the recommendations made in this report at the construction certificate stage.

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 and professional indemnity insurance.

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

Architect RAIA NSW Reg. No. 7021  
Accredited Access Consultant No. 136