CONSULTING PLANNERS

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN REPORT (CPTED)

Opal St Clair
Residential Care Facility

Lot 36 in DP 239502
94-100 Explorers Way
St Clair NSW 2759

Prepared for
Opal HealthCare

By
BBC Consulting Planners

Job 19-121
CPTED - Aged Care - Opal St Clair.docx
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1. Introduction

1.1 Purpose of Assessment

This Crime Prevention Through Environmental Design (CPTED) assessment has been prepared on behalf of Opal Health Care to accompany a Development Application (DA) lodged pursuant to Section 4.12 of the Environmental Planning and Assessment Act 1979 for the construction of a residential aged care facility on a site identified for this purpose at 94-100 Explorers Way, St Clair (Lot 36 in DP 239502). The CPTED assessment reviews the proposed development against the performance criteria to ensure that the CPTED principles have been considered in preparation of the DA in accordance with the general matters for consideration in Section 4.15 of the Environmental Planning and Assessment Act 1979.

The review identifies elements of the design which require special consideration and outlines proposed measures in an endeavour to minimize the risk of a crime being committed or minimise a threat to the safety of any of the residents.

The Crime Risk Assessment has been undertaken with reference to the Crime Prevention Guidelines, issued under section 4.15 of the Environmental Planning and Assessment Act, 1979. Given that the design process is at the development application stage, where necessary for particular issues, principles to guide the detailed design process are identified in this report.

Reference has also been made to the Safer By Design Evaluation program to measure the likelihood of crime and socio-economic conditions and crime opportunities to ensure the design of the facility provides a safe and secure environment to residents and the community.

1.2 Overview of Key Principles

The primary objectives of the proposed development are to:

- meet the growing needs for aged care services in the area through the provision of a residential aged care facility;
- provide a high quality residential aged care facility to meet contemporary residential standards; and
- provide a development that is compatible with the amenity of the site and with the adjoining area.

A review of the Development Application Plans has been undertaken and assessed against the four main Crime Prevention Through Environmental Design principles. These being:

- Surveillance, including natural, formal and technical surveillance measures;
- Access control, to ensure physical and symbolic barriers reduce the incentive for crime;
- Territorial reinforcement, to increase community ownership of the public space through actual and symbolic boundary markers, and;
- Space management to ensure formal supervision, control and care of the development is considered to maintain natural community control.

The design demonstrates generally good visibility and casual surveillance opportunities with general clarity for access control. The design of the site also seeks to create legible spaces and encourages legitimate use of appropriate spaces. Some additional features and strategies have been recommended in the report to control for any perceived or actual crime risk. It is envisaged that the overall design and additional strategies recommended will be discussed with NSW Police, and implemented at the final construction and operational stages.

1.3 Analysis of the Site

1.3.1 The Site

The land to which the development application relates is Lot 36 in DP239502 at 94-100 Explorers Way, St Clair having an area of 1.057 hectares. It is rectangular in shape and orientated north south with a frontage of approximately 79.5 metres to Explorers Way (including partially unformed section of road) (**Figures 1** and **2**).

The topography of the site slopes downwards from a high point of RL 56.66m AHD (along the south-western boundary to Explorers Way) to a low point of RL 52.8m AHD (along the north-eastern boundary of the site (towards the M4 Motorway) resulting in a gentle 1 in 40 slope.

The site currently has two access driveways from Explorers Way, one in the centre of the frontage and one on the eastern edge.

Access is proposed from Explorers Way with the exit only located on the eastern edge of the frontage to Explorers Way.

Immediately to the north of the site is land zone SP2 Infrastructure (the M4 Motorway) which also includes a nature strip adjacent to the site. Further north, on the other side of the M4 Motorway is the suburb of Colyton.

Immediately to the west of the site are residential dwellings and vacant land fronting Ashwick Circuit. Further west are more low density residential dwellings. The Council owned land to the west of the site has some potential for redevelopment which is likely to take the form of detached dwellings as a continuation of the subdivision pattern in the area. This is subject to managing the overland flow path and drainage infrastructure crossing this land.

Adjoining the site to the south is Explorers Way and a road reserve area and two small lots understood to be owned by Council. Further south, are more low density residential dwellings.

Immediately to the east of the site are low density residential dwelling houses and a vacant parcel of land zoned RE1 Public Recreation which contains drainage infrastructure. Further east is Erskine Park Road which provides direct access to the M4 Motorway.

1.3.2 Surrounding Built Form

The urban structure and built form of the area is predominantly single and two storey detached dwelling houses that are 20-40 years old with evidence of some urban renewal.

Urban structure is influenced by the location of collector and sub-arterial roads that provide access from the precinct to surrounding areas. The site is located on Explorers Way which feeds onto Erskine Park Road which provides direct access to the M4 Motorway, providing a high level of accessibility and an appropriate location for a residential care facility.

The residential suburb of St Clair includes a number of other land uses set in a detached residential environment including churches (St Clair Anglican, St Clair Uniting, Holy Spirit Catholic), schools (St Clair public and high schools, Clairgate public, Blackwell public, Holy Spirit), child care centres (Stepping Stones, Little Smarties, Academy, Kindana) and the shopping centres. These more institutional forms also influence the character and diversity of built form in the area.

1.3.3 Access to Services and Facilities

Currently the nearest bus service (route 776) to the site is located on Colorado Drive (approximately a 650m walk south-east of the site). This bus route provides services between Mount Druitt Station and Penrith Station (via St Marys). It is considered this would provide public transport access to the site for some staff and visitors.

The proposal involves the construction of a high care residential aged facility with 24 hour care. All services reasonably required by residents will be provided to them on site.

Residents will not be in a position to (independently) access outside services and facilities given their physical or mental state.

1.4 The proposal

As detailed in the Statement of Environmental Effects ("the SEE") the proposal is for the construction of a new residential aged care facility and an internal Allied Health facility. The proposal includes:

- The construction of a residential aged care facility comprising 154 aged care beds (high care & dementia specific);
- Parking for 37 cars, plus ambulance and courtesy bus parking;
- New vehicular access to the site from the existing road;
- Back of house facilities to support the aged care facility including kitchen and laundry;
- Ancillary Allied Health facility; and
- Landscaping, signage and ancillary works including stormwater management works and civil works.

The proposal incorporates setbacks that have been designed to reduce the perceived bulk and overshadowing, with the form and configuration sympathetic to the character of the area.

A number of specialist reports have been prepared to assess the impact of the proposal including an access and acoustic assessment. Overall it is anticipated that the carefully planned proposal will provide for a high quality residential aged care facility.

2. Community Safety Issues

2.1 Local Community Safety Issues

NSW Bureau of Crime, Statistics and Research (BOCSAR) produce density and hotspot maps to identify areas of high crime density relative to crime concentrations across NSW. Crime density analysis provides a measurement of the number of crime incidents within a specified area, providing an indication of the level of clustering and dispersion of crime incidents. In interpreting crime hotspot area maps it is important to note that hotspots reflect the density of incidents in a specific area, and not the number of incidents in an entire LGA. They also do not necessarily reflect areas where people have a higher than average risk of victimisation as they are not adjusted for the number of people residing or visiting the LGA. If a suburb or LGA contains a hotspot, it does not mean that the area has a high count of incidents relative to other suburbs or LGAs in NSW.

Crime statistics for St Clair and Penrith are provided in the following table.

NSW Crime Statistics: St Clair; Penrith LGA; and NSW				
Type of Crime	St Clair Rate per 100,000 population	Penrith LGA Rate per 100,000 population	NSW Rate per 100,000 population	Status
Assault	656.5	1203.4	791.5	Below average
Homicide	0.0	1.9	1.2	Below average
Robbery	9.7	39.9	26.2	Below average
Sexual Offences	97.3	217.9	185.6	Below average
Theft	1332.4	2701.2	2204.9	Below average
Drug Offences	107.0	489.3	641.1	Below average

Based on BOCSAR (January 2020 to December 2020)

Crime rates are significantly below the LGA and NSW averages and reflect the established residential character of the area. It is important that new development does not create or contribute to the levels of crime, or transfer issues from one area to another.

3. Assessment of Design Elements

The Crime Risk Assessment has been undertaken with reference to the Crime Prevention Guidelines, issued under section 4.15 of the Environmental Planning and Assessment Act 1979. Given that the design process is at the development application stage, where necessary, for particular issues, principles to guide the detailed design process are identified in this report.

The site has a frontage to Explorers Way and has a regular shape to assist in surveillance and territorial reinforcement. Access to the building is controlled to a central main entry with clear paths of travel from car parking areas and the street.

3.1 Overview

In understanding that the built environment does not cause criminal behaviour, consideration of design elements has been undertaken with the view that some aspects of development may influence behaviour. As an important crime prevention tool, CPTED seeks to influence offender decision making by creating the reality or perception that the cost of committing a crime outweigh the benefits. Therefore the assessment has taken into account the design of the proposal against the CPTED principles in order to establish features that have been proposed or can be introduced in order to influence behaviour and reduce the risk of crime and anti- social behaviour in and around the premises.

The design demonstrates:

- Surveillance – casual surveillance can be maximised from the building and public spaces with visibility seen to be generally good.
- Access Control – it is generally clear where people are permitted to go. Access points are centralised clearly defined and controlled.
- Territorial Reinforcement – the design seeks to create a defined legible space, and encourage legitimate use of appropriate areas.
- Space Management – proposed spaces provide for good visual control. Management staff will play a pivotal role to ensure the proper management and maintenance of the site.

3.2 Surveillance

The use of surveillance on site, both passive and active, can assist with deterring criminal behaviour. The development provides a high degree of passive surveillance from resident rooms and terraces, common areas such as sitting rooms and associated balconies addressing both street frontages.

Further measures are discussed in the following below.

Measures	Comments
Landscaping 1. Trees planted within street frontage setback allow for passive surveillance of the street. 2. Car parking landscaping allows passive surveillance of the street. 3. Resident accessible courtyards are visible from within the building enabling surveillance of residents at all times.	Landscaping should not screen natural lines of sight. Tree planting is proposed through the development and allows street surveillance. Car parking areas allow visibility of the street and are also visible from within the building. All courtyards to be visible from either residential rooms, communal spaces, and/or administration areas.
Lighting 4. Lighting shall be installed within the car park, along pedestrian pathways in accordance with AS 1158.1.	Lighting is necessary to provide surveillance during the early morning and night time hours. As the site is to operate 24 hours per day (staff present), the car park and pedestrian areas will be appropriately illuminated to provide surveillance through the site as required. The colour and type of lighting should be reviewed during the CC stage. Lighting should emit a white light to provide clearer surveillance.
CCTV 5. CCTV to be installed at site including within car park areas, bin enclosures, building entry points, and pedestrian pathways around the building.	CCTV provides mechanical surveillance and while does not prevent crime, can deter people from committing crime if they know there is a chance of being caught. CCTV will be provided.
Building Design 6. Clearly defined access points with surveillance from within the building. 7. Signage located near main entrances .	Pedestrian entries from Explorers Way are clearly defined with visibility of the entrance from reception and public areas. Signage is proposed to reinforce entry points. Landscaping acts as a natural funnel indicating access points for pedestrians and vehicles. Buildings have been designed with minimal recesses to limit opportunities for people to

	hide within. There are two recess points near the main entrance to provide enhanced landscape opportunities and the articulate the façade. These are visible from the external pathway and from within the building. The building design enables clear site lines to the building entrance from areas with 24 hour staffing.

3.3 Access Control

Through the implementation of effective access control measures, as per the table below access control is used to attract and channel visitors to the appropriate areas and entrances. Restrictions on vehicle and pedestrian movements will enable a safer environment across the site.

Recommendation	Comments
Signage 1. Clear signage shall be erected to identify areas of restricted access on the site and throughout the facility. 2. Signage shall be installed at pedestrian access points and road crossings to emphasise pedestrian priority.	This provides clear information to any persons who may inadvertently enter the site. It may also act as a deterrent. Clear delineation between pedestrian access and vehicular access has been incorporated into the design. Clear signage and physical indicators such as pathways have been employed to direct visitors to the front pedestrian entrance from the carpark and externally. The porte cochere awning structure clearly identifies the main entry to the facility.
Landscaping 3. Fencing should be incorporated into the landscaped area of the site to minimise entry to the rear landscaped areas from the north and east.	Fencing is proposed through the Landscape Plan with screen planting behind the fence. This creates an effect of clearly delineating private from public space along all boundaries.
Perimeter Control 4. Fencing, gates and landscaping provides effective perimeter control.	Fencing, in conjunction with perimeter planting, create a clear delineation between public and private space, and allows for effect perimeter control.

	Gates separate public and private areas, and delineate areas within developments that are secure for resident safety.

3.4 Territorial Reinforcement

Territorial reinforcement is vital in identifying ownership of a space, especially as a deterrent for members of the public to unintentionally enter the site. Criminals are typically deterred from entering a site or undertaking illegal activities by the presence of people who are connected to the site such as employees and site/facilities managers. Territorial reinforcement can be achieved through adequate and clear signage identifying the site and all relevant entry and exit points and authorised personnel only zones etc.

Measures	Comments
Signage 1. Clear signage shall be erected to identify areas of restricted access on the site and throughout the facility. 2. Signage shall be installed at pedestrian access points and road crossings to emphasise pedestrian priority.	Internal and external signage will be employed across the site to clearly define areas of public and restricted access.
Landscaping 3. Fencing should be incorporated into the landscaped area of the site to minimise entry to the rear landscaped areas from the north and east.	Existing fencing is to be retained where possible with landscaping within the site boundary will increase boundary width deterring easy access/egress via fencing.

3.5 Space Management

Spaces that are underutilised are often the same spaces that are vandalised and abused. It is important unused spaces to be minimised in the design process to ensure crime and vandalism are less likely to happen on the site.

Measures	Comments
Site Management 1. Staff and management will undertake constant site inspections to ensure the site is kept clean and vandalism free. Site inspections can identify	Staff members will be present at all times with regular site maintenance and inspections expected to take place.

areas of concern as well as evidence of unwanted persons on site. 2. Waste and loading dock areas are to be kept clean and well lit.	Appropriate lighting is to be employed across the site. Waste management areas and loading dock are will be well maintained.
Signage 3. Directional signage should be obvious and clear to direct people around the site efficiently. 4. Hours of operation should be clearly identified at the entry of the facility.	Clear signage assists people to navigate the site and identify clearly and easily how certain spaces should be used. Clearly stating hours of operation minimises the risk of confusion and having people enter the site after hours when staff levels may be lower. This will be confirmed in the design documentation development phase.

4. Penrith Development Control Plan

Penrith Development Control Plan 2014 ("the DCP") contains controls and guidelines that relate to safety and security. Below is an assessment of the proposal against the Penrith DCP Principles of Crime Prevention through Environmental Design.

RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
Part C – Controls Applying to all Land Uses		
C1 – Site Planning and Design Principles		
1.2.5. Safety and Security (Principles of Crime Prevention through Environmental Design)		
2) Natural Surveillance a) Locating public services in areas of high activity; b) Providing clear sightlines between public and private places; c) Avoiding blind corners in pathways, stairwells, hallways and car parks; d) Ensuring that the range of land uses within a building increases opportunities for natural surveillance; e)Providing natural surveillance into communal and public areas; f) Locating entries that are clearly visible from the street; g) Designing fences that maximise natural surveillance from the street to the building and from the building to the street, and minimise opportunities for intruders to hide; h) Installing security grilles, shutters and doors that allows natural observation of the street; i) Installing effective lighting in public places that does not produce glare or dark shadows; and j) Ensuring that landscaping does not obstruct natural surveillance or provides a place to hide or entrap victims	The design enables natural surveillance from both administration and resident areas into public spaces including Explorers Way and the public open space on the east and west boundaries. Multiple uses within the building such as residential, communal, ancillary allied and administration allow for increased surveillance. The entrance to the facility is clearly identified through the building design. Extensive landscaping along the front of the site will act as fencing allowing for clear sight lines with minimal recessed areas. Appropriate lighting will be installed in the carpark with consideration of the adjoining residential dwellings. Landscaping is employed across the site and will be designed to enable natural surveillance.	Y
2) Fencing a) Fence design should maximise natural surveillance from the street to the building and from the building to the street, and minimise the opportunities for intruders to hide.	There is to be no fencing to Explorers Way, instead landscaping and planting will be used to create a clear boundary between public and private land. Pathways are clearly	

RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
b) Front fences should preferably be no higher than 1.2m. Where a higher fence is proposed, it will only be considered if it is constructed of open materials e.g. spaced pickets, wrought iron etc. Fences greater than 1.2m will require the consent of Council. c) If noise insulation is required, install double-glazing at the front of the building rather than a high solid fence (greater than 1m).	delineated with landscaping softening the appearance of the building and drop off and parking from the street. The design enables surveillance from the building to the street. Noise insulation not required. No fence at the front of the building.	
3) Car parking a) Car parks, aisles and manoeuvring areas shall be: i) designed with safety and function in mind, and ii) have dimensions in conformity with Australian Standards 2890 - Parking Facilities. Relevant parts of this standard are: • AS2890. 1 - Off-street parking. • AS2890.2 - Commercial vehicle facilities. • AS2890.3 - Bicycle parking facilities. b) Where parking spaces are to be provided for people with disabilities, these spaces are to: i) be suitably located near entrances to the building and lifts/ access ramps, if required; ii) be provided in accordance with Australian Standards 1428.1 - Design for access and mobility; and iii) have appropriate signage and tactile pavement treatments, where required. c) The design of car parking areas should incorporate the following elements: i) provision of a safe and convenient vehicle entry and exit that avoids traffic/pedestrian conflict and impacts on the surrounding road; and ii) the internal (vehicular) circulation network is free of disruption to circulating traffic and ensures pedestrian safety.	See Traffic Assessment for parking details.	Y

RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
d) The movement of pedestrians throughout the car park should be clearly delineated by all users of the car park and minimises conflict with vehicles.		
e) The design of the car park should ensure that passive surveillance is possible and where appropriate, incorporate active measures such as cameras and security patrols. Car parks should be designed to minimise dark areas through the provision of appropriate lighting.	Appropriate lighting will be employed in the parking area to increase visibility. The car park is visible from internal public areas and private rooms promoting passive surveillance. Lighting will be designed having regard to the location of dwellings on adjoining sites.	
f) Large car parks should incorporate communication devices such as: i) Intercoms ii) Public address systems iii) Telephones iv) Emergency alarms.	The carpark is relatively small and within line of sight from residential and communal rooms.	
g) To ensure users of large car parks are easily able to determine their location, exit and access points, security intercoms and the like, appropriate signage is to be included.	Wayfinding signage will be implemented across the site as required.	
h) All surfaces in the car park should be painted in light coloured paint or finished in light grey concrete to reflect as much light as possible.	This will be reviewed at detailed design stage.	
i) All potential entrapment points should be avoided, e.g. under stairs, blind corners and wide columns. Adequate lighting and mirrors should be used when certain design features are unavoidable.	This will be reviewed at detailed design stage.	
4) Entrapment spots and blind corners a) Pathways should be direct. All barriers along pathways should be permeable including landscaping, fencing etc. b) Consider the installation of mirrors to allow users to see ahead and around corners. The installation of glass or	Internal pathways run along the eastern side of the building and within the courtyards and rear garden in a landscaped setting. Access to pathways is controlled and supervised. Courtyards are secured by gates and fences integrated into the landscape design.	Y

RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
stainless steel panels in stairwells can also assist in this regard. c) Entrapment spots adjacent to main pedestrian routes such as a storage area or small alley should be eliminated from all designs. d) If entrapment spots are unavoidable they should be well lit with aids to visibility such as convex mirrors and locked after hours. e) To eliminate excuse making for individuals to loiter, avoid placement of seating near or adjacent to ATM's, public phone boxes, toilets, corridors and isolated locations.	Storage areas and waste rooms are accessed internally with the loading dock visible from adjoining rooms. Pedestrian movement on the western side and rear of the building will be restricted. Lighting will be confirmed in detailed design phase. All such facilities will be located within the facility which will be access controlled.	
5) Landscaping a) Avoid medium height vegetation with concentrated top to bottom foliage. Plants such as low hedges and shrubs, creepers, ground covers and high-canopied vegetation are good for natural surveillance. b) Trees with dense low growth foliage should be spaced or crown raised to avoid a continuous barrier. c) Use low ground cover or high-canopied trees with clean trunks. d) Avoid vegetation, which conceals the building entrance from the street. e) Avoid vegetation screening of all public use toilets. f) Avoid vegetation that impedes the effectiveness of public and private space lighting. Use "green screens" (wall hugging vegetation that cannot be hidden behind) if screening large expanses of fencing to minimise graffiti.	No medium height planting is proposed. Planting has been planned to allow surveillance of the street and entries, the car parking area on the western side of the building and the park to the north east of the site. Compliant. Compliant. n/a Compliant.	
6) Communal/Public Areas a) Position active uses or habitable rooms with windows adjacent to main communal/public areas e.g. playgrounds, swimming pools, gardens, car parks etc.	All internal communal/public areas have outward facing windows allowing for passive surveillance of adjoining public areas.	Y

RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
b) Communal areas and utilities e.g. laundries and garbage bays should be easily seen and well lit. c) Where elevators or stairwells are provided, open style or transparent materials are encouraged on doors and/or walls of elevators/stairwells. d) Waiting areas and entries to elevators/stairwells should be close to areas of active uses, and should be visible from the building entry. e) Seating should be located in areas of active uses.	Back of House facilities are located securely within the facility. Stairs will not be used for day-to-day vertical movement and access will be limited. Access to the facility will be controlled. Lift access is visible from main entry lobby and administration areas which will be staffed 24/7.	
7) Movement predictors a) Pedestrian underpasses should not be included in new developments. Where existing developments, which include underpasses, are being redeveloped all efforts should be made to remove them. b) Where movement predictors are used the users of it should have clear site lines so they can see what is ahead and behind at all times. c) Lighting of movement predictors is essential. Natural lighting should be used where possible with consideration given to wall and ceiling materials to help reflect light. d) Emergency intercoms, telephones and security videos should be included in the design of movement predictors. Adequate consideration should be given to who will be monitoring such equipment. e) No entrapment spots should be included in any movement predictor.	 N/A N/A N/A N/A N/A	N/A
8) Entrances a) Entrances should be at prominent positions and clearly visible and legible to the users. b) Design entrances to allow users to see into the building before entering. c) Entrances should be easily recognisable through design features and directional signage.	 The entrance to the facility is central to its frontage to the street with clear signage. The front entrance doors will be automated glass. The building design focuses pedestrians to the entrance.	Y

RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
d) Minimise the number of entry points – no more than 10 dwellings should share a common building entry. e) If staff entrances must be separated from the main entrance, they should maximise opportunities for natural surveillance from the street. f) Avoid blank walls fronting the street. g) In industrial developments, administration/offices should be located at the front of the building.	N/A Staff enter through main entry. There are no blank walls to the frontage (with the exception of a small plant room) with windows facing directly to the frontage N/A	
9) Site Building and Layout a) For single dwellings and dual occupancies, orientate the main entrance towards the street or both streets if located on a corner. b) For townhouses/villas/multiple units, ensure that part of the building addresses the street or both streets if located on a corner. c) Position habitable rooms with windows at the front of the dwelling. d) Garages and carports should not dominate the front façade of the building. e) Access to dwellings or other uses above commercial/retail development should not be from rear lanes. f) Offset windows, doorways and balconies to allow for natural observation while protecting privacy.	N/A N/A N/A N/A N/A N/A	Y
11) Security a) Install intercom, code or card locks or similar for main entries to buildings including car parks. b) Main entry doors for apartment buildings should be displayed requesting residents not to leave doors wedged open. c) Australian Standard 220 - door and window locks should be installed in all dwellings. d) Consider installing user/sensor electronic security gates at car park	Security systems and CCTV will be implemented throughout. N/A Can comply.	Y

RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
entrances, garbage areas and laundry areas etc, or provide alternative access controls. e) Entry to basement parking should be through security access via the main building. f) External storage areas should be well secured and well lit. g) Install viewers on entry doors to allow residents to see who is at the door before it is opened. h) If security grilles are used on windows they should be operable from inside in case of emergencies. i) Ensure skylights and/or roof tiles cannot be readily removed or opened from outside. j) Consider monitored alarm systems. k) Provide lockable gates on side and rear access. l) Consider building supervisors or security guards.	TBC N/A N/A N/A N/A N/A Security Systems will be used throughout the facility. No side or rear gates are proposed. Can comply.	
12) Ownership and Space Management a) Ensure that dwellings or groups of dwellings are readily recognizable by the residents through the use of design features such as colouring, roof forms, vegetation, paving, artworks, fencing, furniture etc. b) Physical and/or psychological barriers, e.g. fences, gardens, lawn strips, varying textured surfaces can be used to define different spaces. c) Ensure the speedy repair or cleaning of damaged or vandalised property. d) Provide for the swift removal of graffiti. e) Provide information advising where to go for help and how to report maintenance or vandalism problems. f) Council, through its Community Safety Partnership Initiatives can provide residents with Community Safety advice on how to enhance property and personal	N/A The proposed development is one building with internal wayfinding signage. Proposed perimeter landscaping creates a clear boundary to the site, incorporating multiple natural and physical elements. Can comply. Can comply. Appropriate signage will be used across the site. Noted.	Y

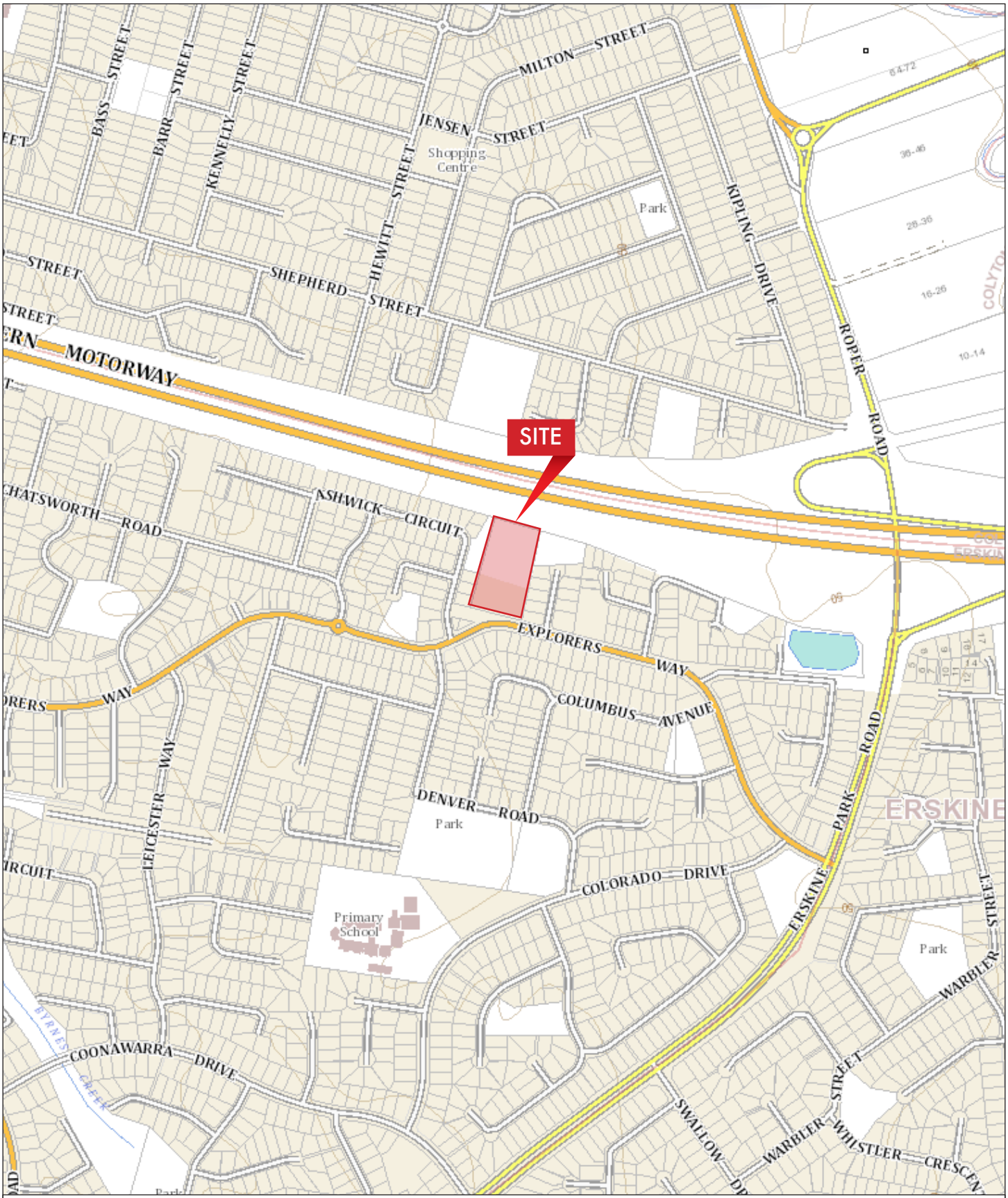
RELEVANT REQUIREMENTS	COMMENT	COMPLIANCE
safety and how to promptly report criminal or inappropriate behaviour to relevant authorities.		
13) Way finding/ finding help a) Signs should be large and legible, with strong colours, standard symbols (e.g. for washrooms) and simple graphics. They should indicate where to go for help or assistance. b) Signs should be strategically located at entrances and near activity nodes such as intersections of corridors or paths. c) Signs should indicate how to report maintenance problems in the complex. d) The main pedestrian route through a large building, sets of building or areas of open public space should be indicated as such with appropriate signage. e) Where exits to pedestrian routs are closed after hours this should be indicated at the entrance to the route and information on alternative routes should clearly advised. f) Signs that provide way finding information should not be relied upon solely, the overall legibility of the design needs to be well considered. Users of the space need to be able to intuitively understand where they are within the complex or area and how they can get away.	Wayfidning signage will be used throughout the facility for both residents and visitors.	Y

5. Conclusion

This report has been prepared to review the design of a residential aged care facility at 94-100 Explorers Way, St Clair in Sydney's west. Consideration has been given to how the proposal achieves and is consistent with the CPTED Principals and the reduction of crime.

Overall, the development is a carefully designed development, configured to suit the needs of residents and staff and is appropriately located in a residential area. There is clear delineation between public and private spaces through the implementation of building design and landscaping, and opportunities for crime are minimised.

FIGURES



Source: http://maps.six.nsw.gov.au

N

0 200m

STATEMENT OF ENVIRONMENTAL EFFECTS
94-100 Explorers Way, St Clair

FIGURE 1
Location

Prepared For - Opal Aged Care

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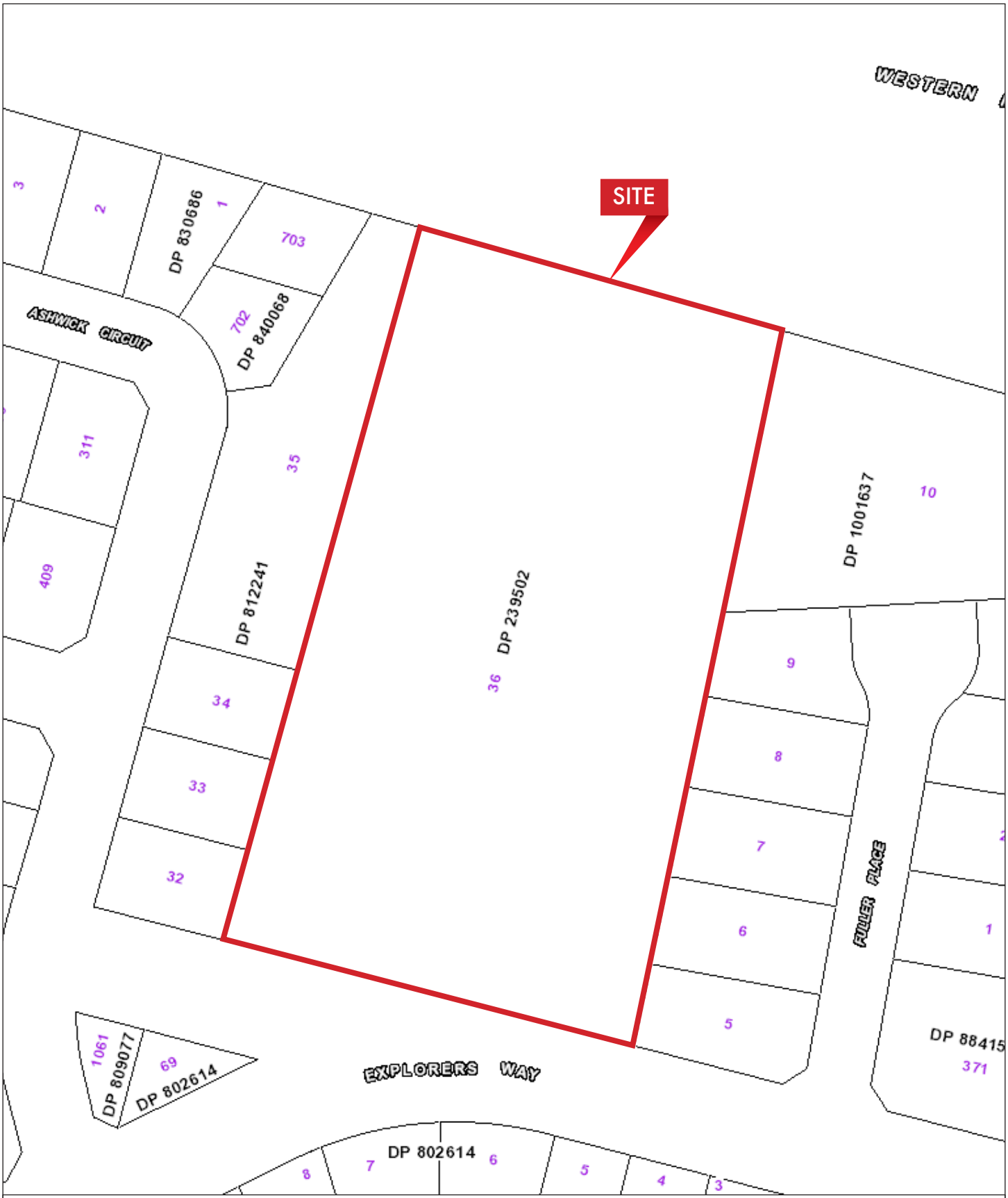

Source: http://maps.six.nsw.gov.au

STATEMENT OF ENVIRONMENTAL EFFECTS
94-100 Explorers Way, St Clair

FIGURE 2
Site

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Source: NearMap 7 April 2019

STATEMENT OF ENVIRONMENTAL EFFECTS
94-100 Explorers Way, St Clair

FIGURE 3A
Aerial Photo - Detail

Prepared For - Opal Aged Care

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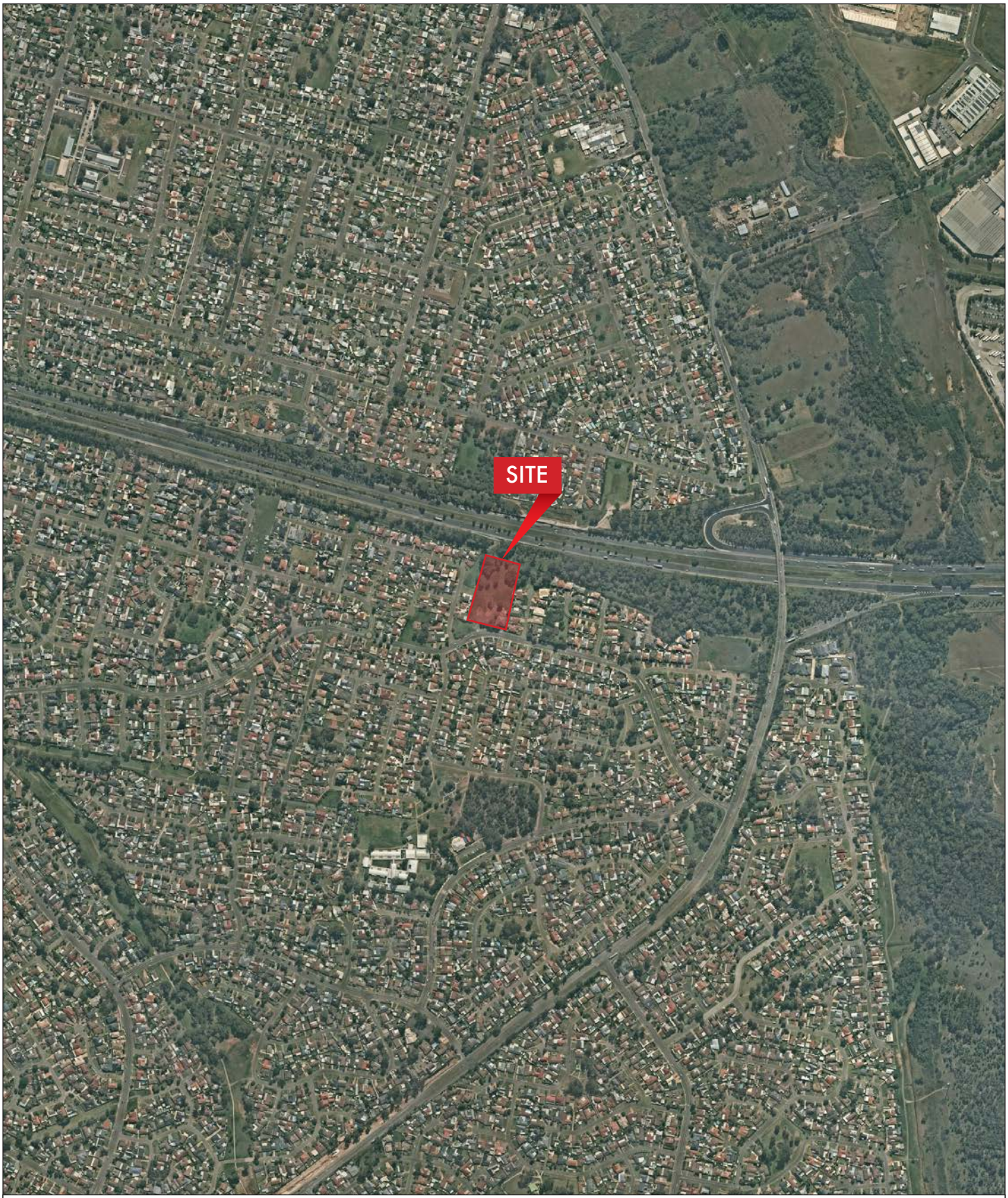

Source: NearMap 7 April 2019

STATEMENT OF ENVIRONMENTAL EFFECTS
94-100 Explorers Way, St Clair

FIGURE 3B
Aerial Photo - Wider Area

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APPENDICES

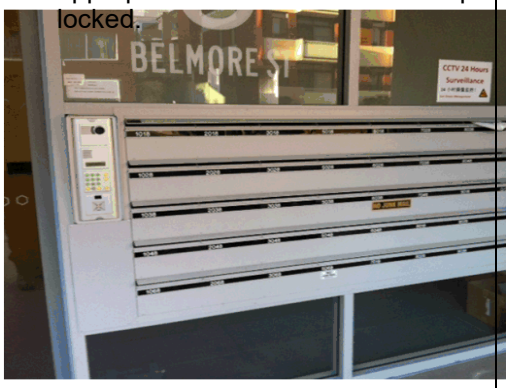
APPENDIX 1

NSW Police CPTED Checklist

Crime Prevention through Environmental Design (CPTED) - Checklist

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
*** Where relevant, each item is to be shown on the architectural plans. A description of how the development complies, together with the corresponding plan reference number, should also be provided.** *** This checklist is designed to assist the Developer to introduce these CPTED measures into a final Safer By Design Report.**			
1. STREET NUMBER / WAY FINDING SIGNAGE	1.1 The street number must be clearly visible from the street. 1.2 The street number must be visible at night. 1.3 Unit block identification signage must be visible from the street frontage.	Yes	Building identification signage will be placed at the frontage to identify the site. Street numbering is considered to be replaced by building identification.
2. SIGNAGE	2.1 There must be directional signage located at the entry to the estate/complex clearly indicating location of estate mangers office, building names and unit numbers. 2.2 There must be warning signs displayed. 2.3 The warning signs must be appropriate. 2.4 A map must be displayed of the complex.	Yes	
3. FENCES AND GATES	3.1 Alcoves or recesses must be monitored by CCTV. 3.2 Garbage bays must be locked to	Yes	

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
	restrict unauthorised entry. 3.3 There must be a 'Rapid Removal' policy for graffiti. 3.4 There must be graffiti resistant materials utilised in the design of the building. For example painted on masonry garden walls, fencing. 3.5 There must be perimeter fences erected around the property. 3.6 Access must not be restricted by large garbage bins or other objects. 3.7 Fences must be fitted with locks. 3.8 Fences and gates must be in good condition. 3.9 Fences must be constructed of appropriate materials. 3.10 Gates must be secured. 3.11 If the estate complex is a gated complex local Ambulance, Fire Brigade and Police must have keys/swipe cards etc for access in an emergency. 3.12 Gate locking mechanisms must be at a distance unable to be reached by a human arm. 3.13 Fences need to be at a height that does not allow jump access. 3.14 Box lights, garden beds or any other fixed objects must not be built near fence lines and used as a ladder.		3.3 Graffiti will be identified and removed by onsite management 3.5 perimeter fences will be utilised where appropriate. Landscaping and fencing will be used to create a clear barrier between public domain and private property.
4. LANDSCAPING	4.1 People must be able to see your unit/premises clearly from the street. 4.2 Landscaping must be regularly maintained. 4.3 No person should be able to conceal themselves behind vegetation or gardens.	Yes	

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
5. SECURITY LIGHTING	5.1 Security lighting must be installed. 5.2 Security lighting must be operating. 5.3 The entry and exit points must be adequately lit. 5.4 Lighting must be positioned in a way to reduce opportunities for vandalism? 5.5 The lighting must be sufficient to support images obtained from CCTV footage. 5.6 Light switches for all lights must be located in a secure area within the premises. 5.7 There must be light timers.	Yes	
6. POWER BOARD & LETTERBOX	6.1 The power board must be enclosed in a cabinet or room. 6.2 The cabinet or room must be fitted with a lock set approved by the local authority. 6.3 The cabinet or room must be kept locked? 6.4 The letter box must be fitted with an appropriate lock set and kept locked.  *This is a strongly recommended method on how to secure the letter box collection facility in a unit complex.* 6.5 The letter box collection facility must be enclosed in the foyer window of the property that has street frontage. 6.6 The letter box collection facility must be in view of video surveillance.	Yes.	Due to the nature of the RACF, mail will be collated at a central location i.e. reception office, where it will then be distributed to residents.

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7. GARAGE	7.1 The garage must be lockable. 7.2 The garage 'tilta' door must have a bolt lock installed. 7.3 The garage facility must have floor to ceiling wall. For example strong mesh or masonry walls. 7.4 The garage ceiling and walls must be painted white or a light coloured concrete must be used. This will enhance the light in the basement. 7.5 The contents inside the garage facility must not be able to be visible from the outside. 7.6 The garage facilities must have CCTV coverage. 7.7 The garage facility area must be restricted to non-residents by way of security gates.	Yes	Garbage areas are within the building and will be managed by staff.
8. BALCONY	8.1 The balcony must be designed so as not to act as a natural ladder. 8.2 The balcony must be adequately designed so as not to allow hand and foot holds to potential offenders trying to scale up the outside of the building. 8.3 The railings must be designed so that foot or hand grips cannot be used by offenders. 8.4 The balcony must have a sensor light to automatically activate when motion is detected. 8.5 Sliding doors and windows adjacent to balconies must be re-enforced with adequate locks etc to restrict unauthorised access.	Yes	

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
9. DOORS AND FIRE EXITS	9.1 The external doors must be of solid construction. 9.2 The door frames must be of solid construction. 9.3 The doors must be fitted with quality lock sets to restrict access when not in use. 9.4 The locks must be in good working order. 9.5 A peep hole (door viewer) must be installed. 9.6 An Australian standard security/screen door must be installed on the front door or any glass sliding doors. 9.7 Security screen doors are recommended for ground to 3rd Floor unit complexes. 9.8 Balconies are to be designed with anti climb features. 9.9 Sliding doors must be fitted with a suitable lock sets. 9.10 Entry/exit points must be clearly identified by signage. 9.11 All fire exit doors must be self-closing. 9.12 All external door hinges must be mounted so they cannot be removed?	Yes	
10. WINDOWS	10.1 All external windows must be solidly constructed. 10.2 All windows must be fitted with quality lock sets. 10.3 All unused windows must be permanently closed & secured. 10.4 Windows must be able to be locked in a partially open position. For example with a bolt lock. 10.5 Skylights must be suitably secured. 10.6 Keys must be removed from locks when no persons are home.	Yes	

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
11. CARPARK	11.1 There must be security car parking facilities available. 11.2 Residents must have an individual secured garage spaces. 11.3 The access to residential car park must be restricted to residents only. 11.4 Access and control must be restricted to residents only by keypad, swipe card or remote system. 11.5 'Park Smarter' signage must be displayed within this area to warn motorists to secure their vehicle and property. 11.6 CCTV system must be installed and monitor inside the car park facility. 11.7 All residents must be supplied with additional storage facilities so that items are not left in areas where they can be seen or easily removed. 11.8 The car park must be well lit. 11.9 The ceiling of the car park must be painted white. 11.10 The car park entry must be restricted by a security roller shutter. 11.11 Access to the security roller shutter must have access control measures such as swipe card, key pad or remote system. 11.12 Bicycle racks must be positioned in visible areas from the street. 11.13 Emergency Services parking should be provided in a large unit complex.	Generally complies	Parking is accessed from the street and is for staff and visitors. Security measures will be employed across the outdoor carpark including lighting and CCTV, No resident parking is provided and none is required.

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
12. SURVEILLANCE SYSTEM	12.1 CCTV systems must be installed at vehicle entry points. 12.2 CCTV systems must be installed at all foyer entry points. 12.3 CCTV systems must be installed on the perimeter of the building. 12.4 CCTV systems must be installed near to letter box collection facilities. 12.5 CCTV systems must be installed near to waste facilities. 12.6 CCTV systems must be installed near to fire exits. 12.7 Footage must be recorded appropriately. 12.8 Footage must be kept for a minimum of 14 days. 12.9 The property must be free of dummy cameras. 12.10 The cameras must be placed in suitable locations to positively identify an individual from recorded images. 12.11 Information must be provide on where the CCTV system will be stored. 12.12 Information must be provided on who will be able to access the footage.	Can comply to the extent relevant	
13. FIRE SAFETY	13.1 Smoke detectors must be installed within foyer areas and garages of unit blocks to comply with the Building Code of Australia? 13.2 Smoke detector must be installed in the unit complex. 13.3 Gutters must be kept clean. 13.4 The unit complex must have a site plan displayed in a prominent position. 13.5 Waste bins must be stored in a secure place after hours.	Yes	The development will be required to comply with the requirements of the BCA.

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
14. Construction Stage	14.1 During construction stage all tools and building materials must be stored in strong rooms with tamper proof security systems. 14.2 Construction sites should be fenced with appropriate security fencing. 14.3 Security Guards should be used during high risk times. 14.4 CCTV should be used during construction stage. 14.5 Lighting should be installed on the grounds of the construction site. 14.6 Lighting should be installed near to containers/storage facilities.	Yes	
15. Rooftop	15.1 Are retaining walls/fencing/ barriers adequate to prevent accidental falls/ slips/suicide attempts 15.2 Are there protocols in place to monitor and regulate the times in which the roof common areas can be used by residents (to minimise noise issues)	Yes	
16. Security Consultant	16.1 With the large developments, it is advantageous to engage a Crime Prevention Through Environmental Design Consultant to compile a Safer by Design Report. 16.2 It is also advantageous to engage a Security Consultant to assist with the correct camera placements.		A Safer by Design Report is not considered necessary for this development. Security consultants will be engaged after DA approval to inform CCTV placement.

CPTED MEASURES	RECOMMENDATIONS	COMPLY YES ✓	IF NO, PLEASE PROVIDE JUSTIFICATION
17. Emergency Management	17.1 An Emergency Management / Evacuation Plan must be developed for the building prior to occupation and forwarded to Emergency Services. 17.2 Police recommend that there must be an inspection with a Town Planner and the Building Manager prior to Occupancy Certificate Stage.	Yes	Opal facilities are subject to emergency management plans. This will include a flood management plan for this facility.

Disclaimer

NSW Police Force has a vital interest in ensuring the safety of members of the community and their property. By using recommendations contained within this document, any person who does so acknowledges that:

- ☐ It is not possible to make areas evaluated by NSW Police Force absolutely safe for the community and their property.
- ☐ Recommendations are based upon information provided to, and observations made by NSW Police Force at the time the document was prepared.
- ☐ The evaluation/report is a confidential document and is for use by the person/organisation referred to at the start of this document.
- ☐ The contents of this evaluation/report are not to be copied or circulated otherwise than for the purposes of the person/organisation referred to at the start of this assessment.
- ☐ NSW Police Force hopes that by using the recommendations contained within the document, criminal activity will be reduced and the safety of the community will be increased.