Combined Projects (Westmead) Pty Ltd

Crime Prevention through Environmental Design Assessment

Residential Flat Building

158-164 Hawkesbury Road & 2a Darcy Road, Westmead (Lot 4)

December 2016

Project No.	SY160028
Author	CM
Checked	IS
Approved	IS

Rev No.	Status	Date	Comments
1	Draft	21/11/2016	
2	Final	14/12/2016	

TABLE OF CONTENTS

Appendix A – Architectural Plans
Appendix B – Landscaping Plans

1   Introduction

1.1   Overview

The purpose of this report is to consider the potential crime risk caused by the proposed residential flat building and to identify proactive and preventative building design measures to minimise opportunities for crime.

The report has been prepared in accordance with the Crime Prevention Through Environmental Design (CPTED) guidelines prepared by the NSW Police in conjunction with the Department of Planning.

Crime Prevention through Environmental Design (CPTED) provides a clear approach to crime prevention and focus on the *'planning, design and structure of cities and neighbourhoods'*. The main aims of the policy are to:

- increase the perception of risk to criminals by increasing the possibility of detection, challenge and capture;
- increase the effort required to commit crime by increasing the time, energy or resources which need to be expended;
- reduce the potential rewards of crime by minimising, removing or concealing 'crime benefits'; and
- remove conditions that create confusion about required norms of behaviour.

The NSW Police guidelines provide four key principles in limiting crime through design. These are:

1. Surveillance;
2. Access control;
3. Territorial re-enforcement; and
4. Space/activity management.

We have inspected the site and undertaken a preliminary assessment of the architectural plans against the above guidelines. This report recommends design principles for the residential flat building to reduce the potential for crime.

1.2   Locality

The subject site is located at Westmead in the Parramatta local government area. The immediate area is characterised by a mix of residential development, educational and health establishments and a small commercial area.

The site is located at the corner of Darcy Road and Hawkesbury Road. The site is located within close proximity to the Westmead Train Station and the Westmead medical precinct.

Figure 1 is an aerial photograph of the site and immediate area. Figure 2 is an extract from the Parramatta LEP map, which identifies that the site is within a B4 mixed use zone, with SP2 Educational Establishment to the west, SP2 Health Services Facility to the north, B4 and R4 High Density Residential to the east and R2 General Residential in Holroyd LEP to the south of the railway line.

Given the range of uses within the area, close proximity to Westmead Train Station, medical precinct and school, the area has a high level of passive surveillance, pedestrian and vehicular activity, both during the day and in the evenings.
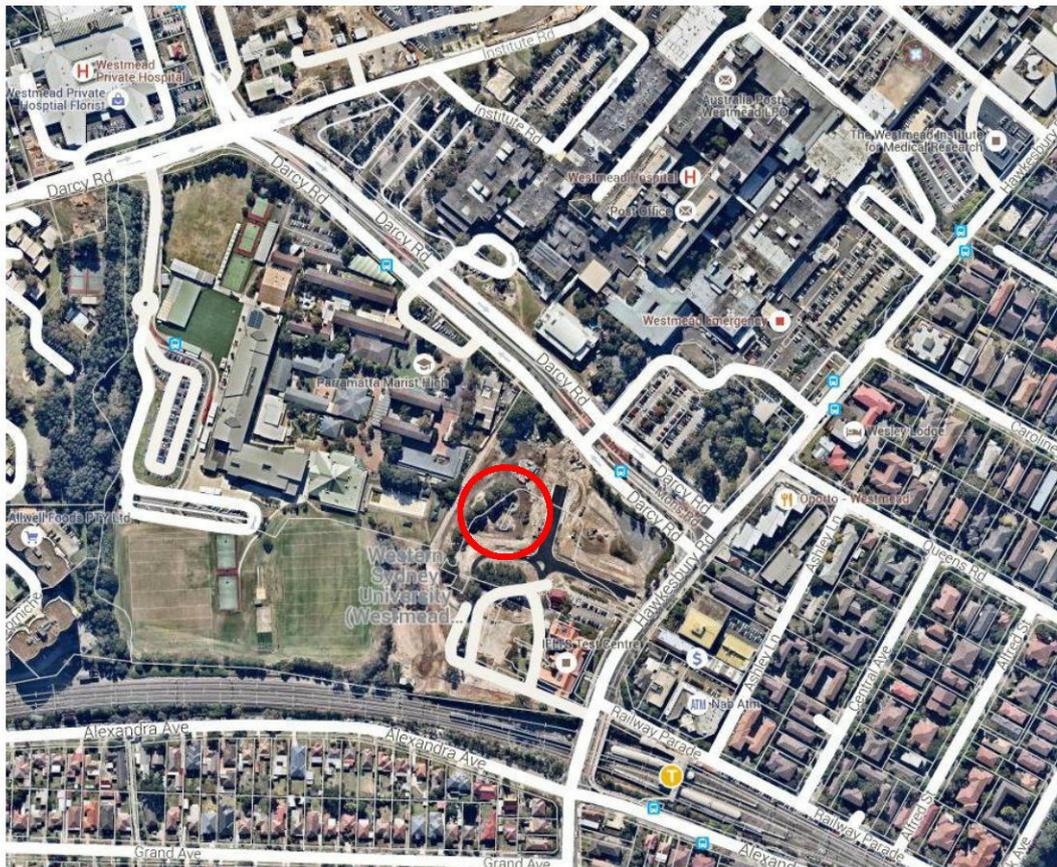
Figure 1: Aerial map of locality, Near Maps.
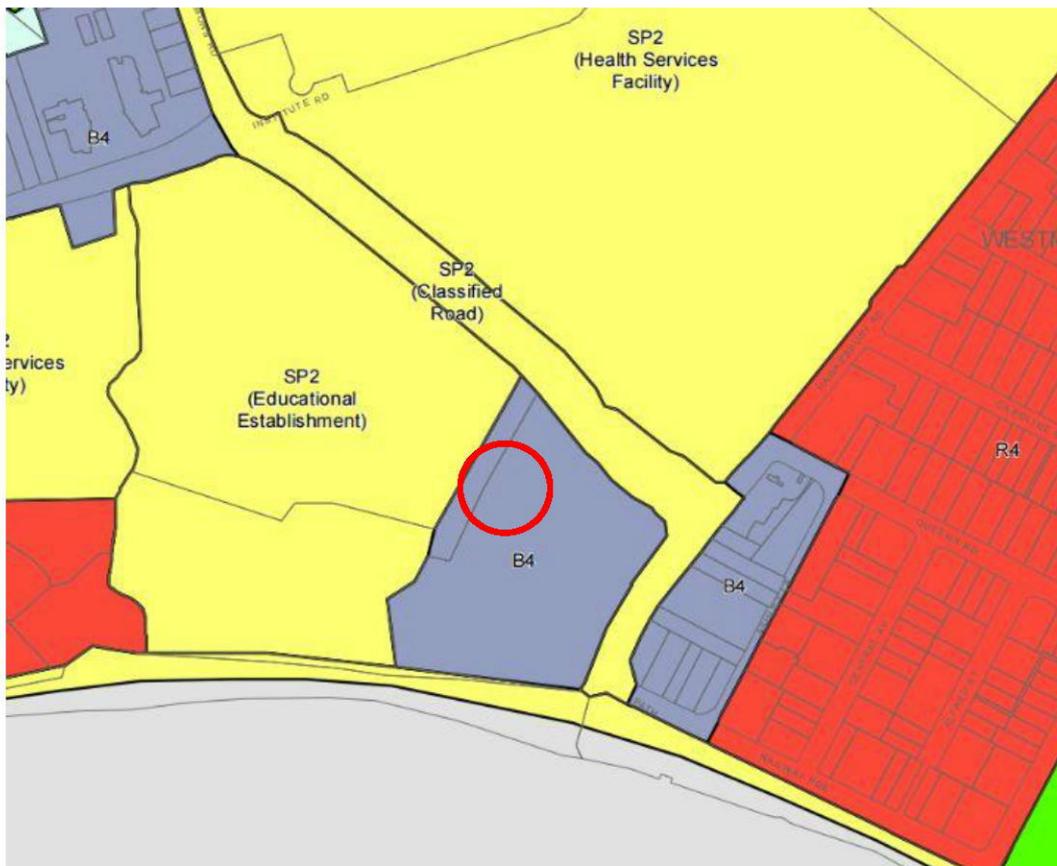
Figure 2: Extract from the Parramatta LEP 2011 Land Zoning Map.

1.3   Crime Rates

The NSW Bureau of Crime Statistics and Research provides an overview of the crime profile during the previous calendar year. The data can assist in identifying specific crimes prevalent in an area and guide design to limit the recurrence of anti-social behaviour.

Table 1 shows the threat levels in Westmead, for crimes relevant to the proposed residential flat building. BOCSAR data ranks crime rates out of 5 levels, from lowest to highest. Table 1 identifies the relevant crimes and indicates that the majority of crimes are within the lowest level, with the exception of break and enter and steal from a dwelling and steal from a motor vehicle.

Table 1: Rate of relevant crimes within Westmead.

HIGH LEVEL CRIME	MEDIUM LEVEL CRIME	LOW LEVEL CRIME	LOWEST LEVEL CRIME
Break and Enter (Dwelling)		Steal from Motor Vehicle Steal from Dwelling	Break and Enter (non-Dwelling) Motor Vehicle Theft Steal from retail store Steal from Person Malicious Damage to Property Assault (Non-Domestic Alcohol Related) Assault (Non-Domestic)

The below figures show "hotspot" crime mapping for the above relevant crimes in Westmead. They compare the crime rate occurrence between 2011 and 2016.

This form of crime mapping is useful as it shows where the high crime areas are and can be used to help understand the factors that affect the distribution and frequency of crime. The "hotspot" indicates where crime occurrences are clustered in particular areas, the cluster is identified from highest to lowest, indicated in red, orange and yellow.

Break & Enter Dwelling
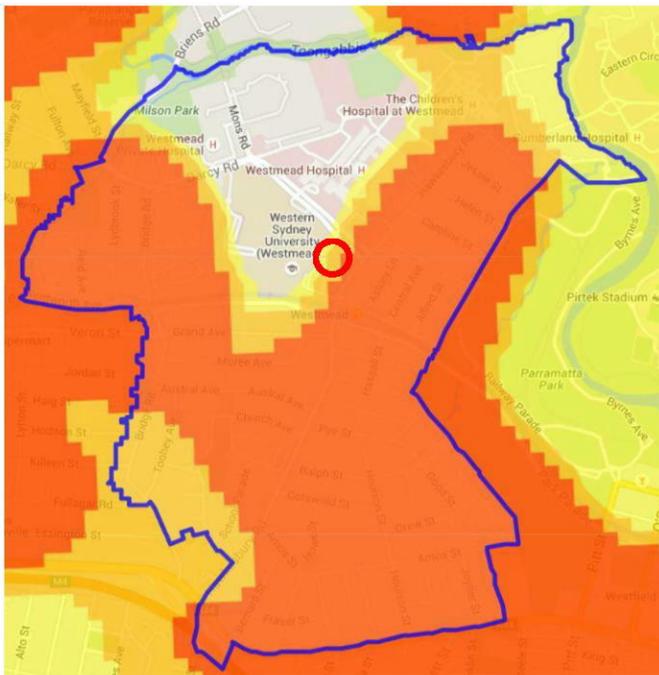
Figure 3: Break & Enter Dwelling 2011
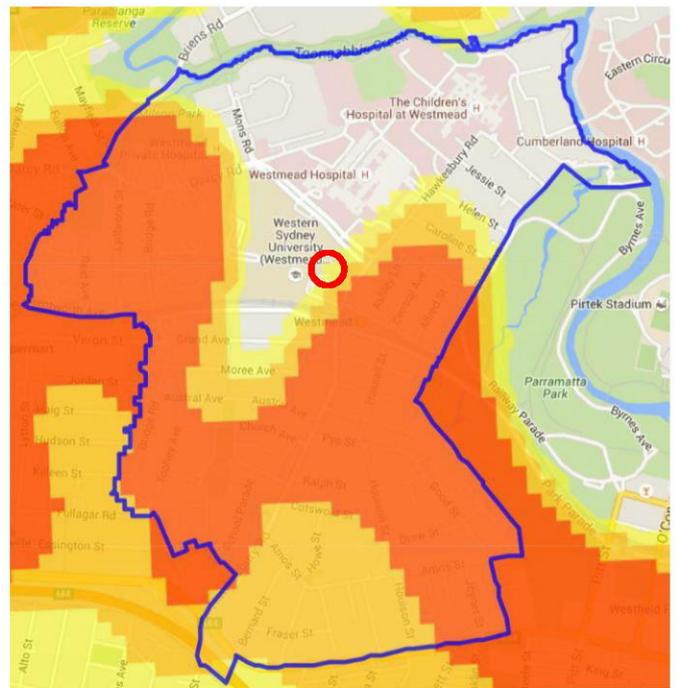
Figure 4: Break & Enter Dwelling 2016
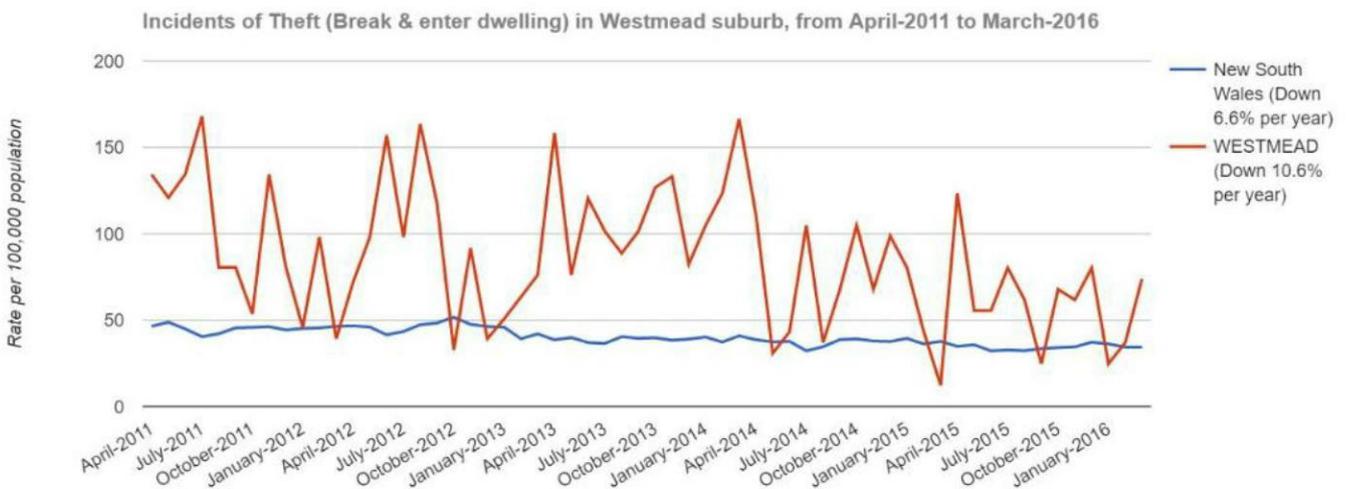
Figure 5: Break & Enter Dwelling 2011 - 2016

Figures 3 and 4 show changes to the rates of breaking and entering a dwelling in Westmead. The figures indicate that the crime rate within the immediate vicinity has decreased slightly to the south-east and increased to the north-west between 2011 and 2016. The subject site currently has a medium rating within the hotspot area.

Figure 5 is a graph of the rates of breaking and entering a dwelling, with comparisons between NSW and Westmead. The graph indicates that between 2011 and 2016 the crime rate within Westmead has decreased by 10.6%, while NSW has decreased by 6.6%.

Steal from Motor Vehicle
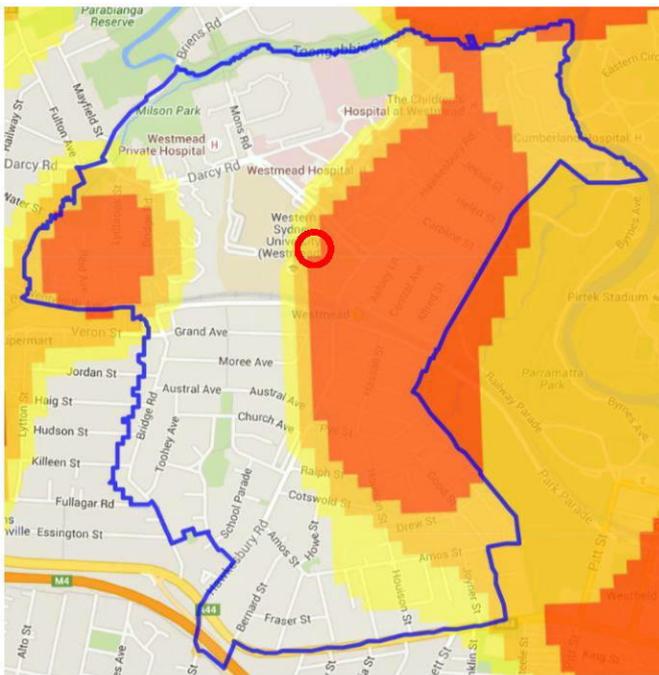
Figure 6: Steal from Motor Vehicle 2011
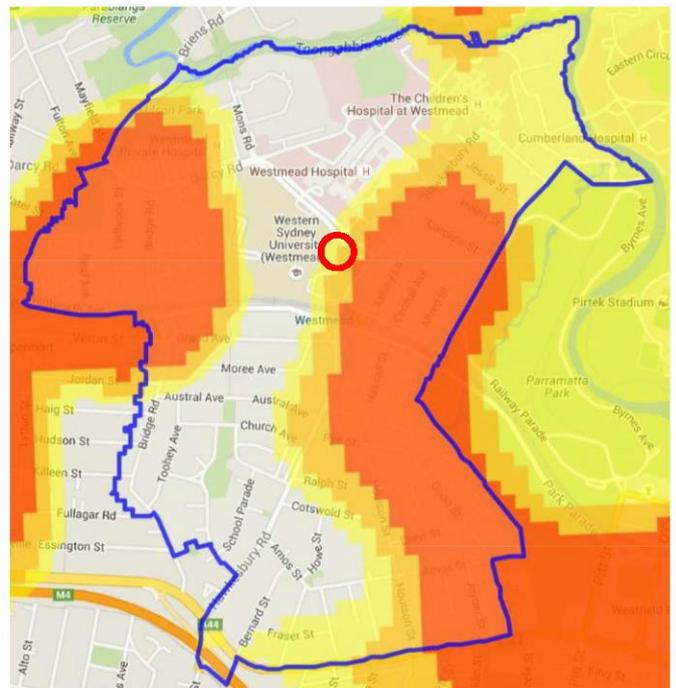
Figure 7: Steal from Motor Vehicle 2016
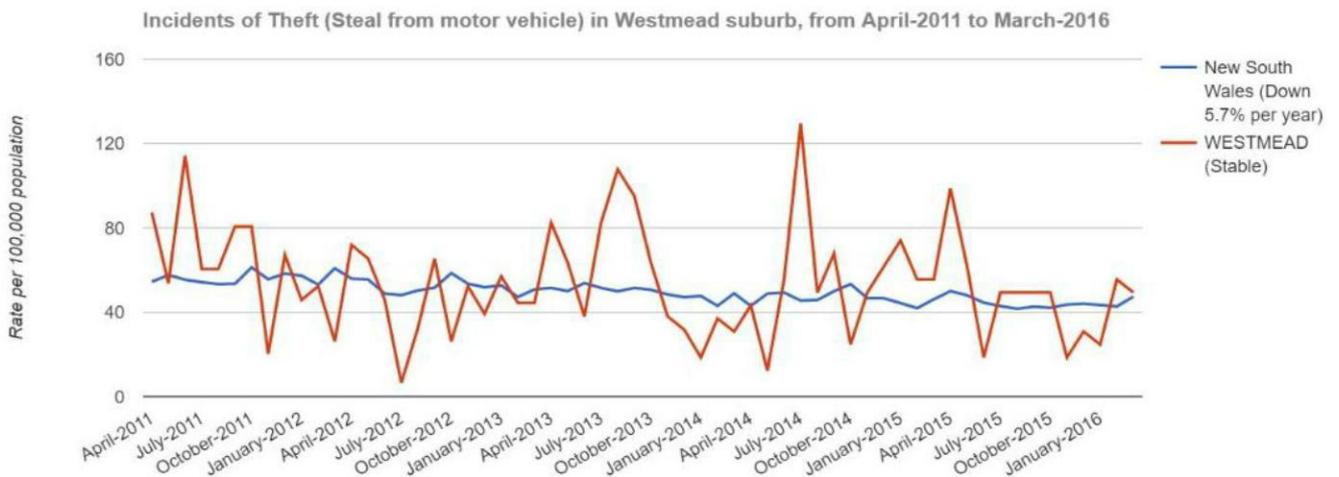
Figure 8: Steal from Motor Vehicle 2011 - 2016

Figures 6 and 7 show changes to the rates of stealing from a motor vehicle in Westmead. The figures indicate that the crime rate within the immediate vicinity has decreased to the east and increased to the west between 2011 and 2016. The subject site currently has a medium to medium rating within the hotspot area.

Figure 8 is a graph of the rates of stealing from a motor vehicle with comparisons between NSW and Westmead. The graph indicates that between 2011 and 2016 the crime rate within Westmead has fluctuated but remained stable, while NSW has decreased by 5.7%.

Steal from Dwelling
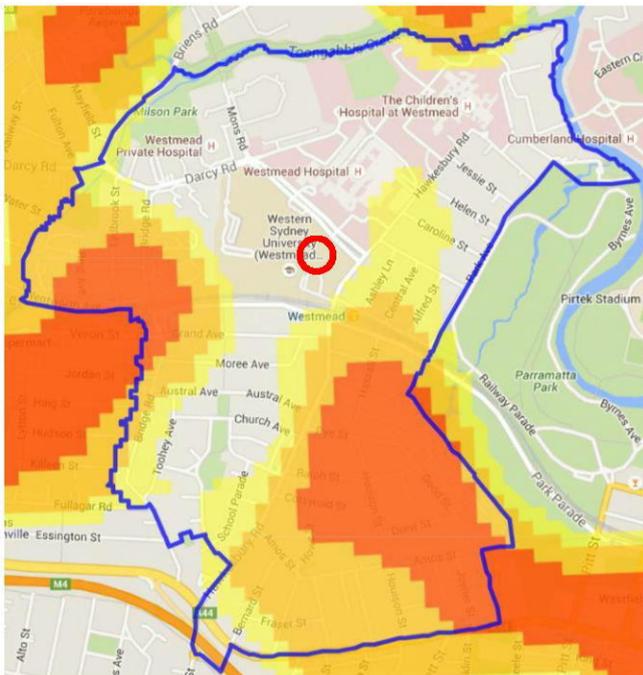
Figure 9: Steal from Dwelling 2011
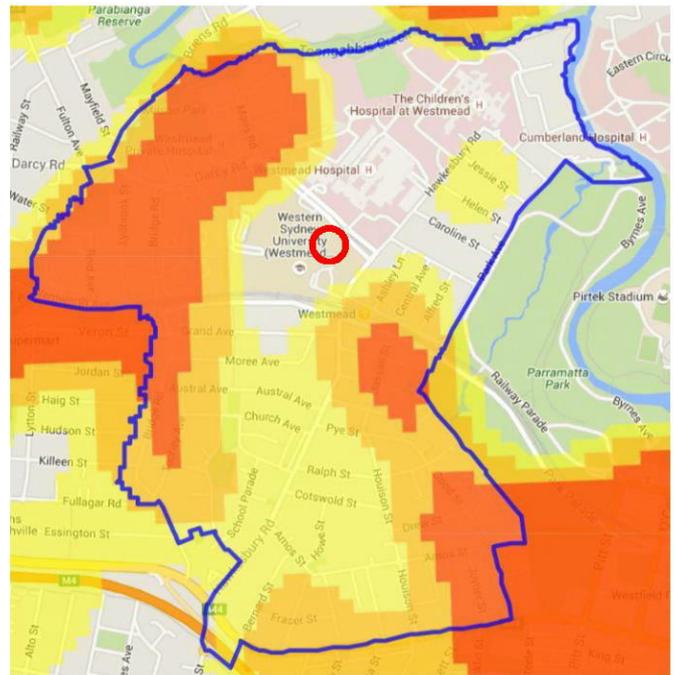
Figure 10: Steal from Dwelling 2016
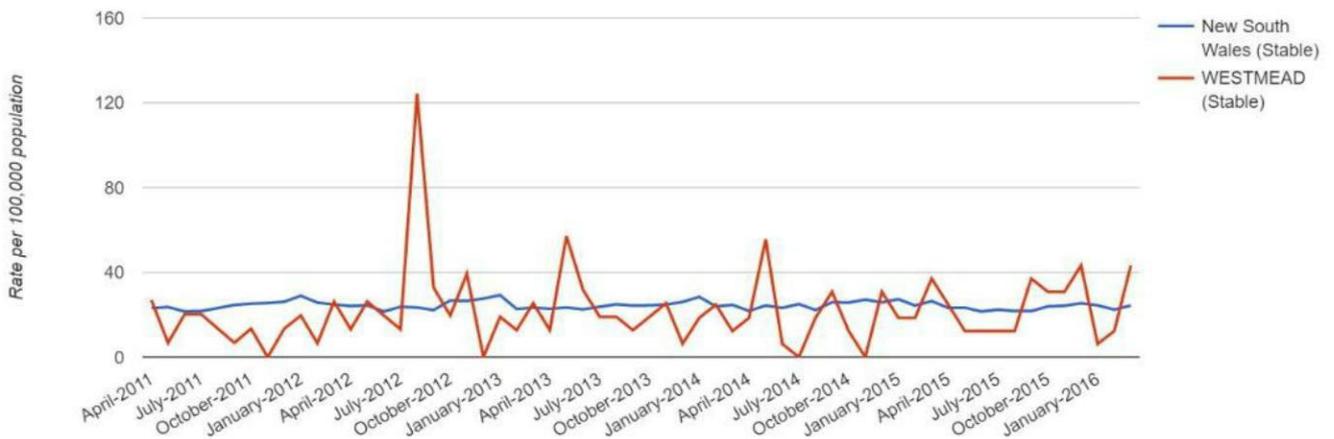
Figure 11: Steal from Dwelling 2011 - 2016

Figures 9 and 10 show changes to the rates of stealing from a dwelling in Westmead. The figures indicate that the crime rate within the immediate vicinity has retracted in the south-east and increased in the north-west between 2011 and 2016. The subject site is not currently within a hotspot area.

Figure 11 is a graph of the rates of stealing from a dwelling, with comparisons between NSW and Westmead. The graph indicates that between 2011 and 2016 the crime rate remained stable for both Westmead and NSW.

1.4   Proposed Development

The proposal is for the construction a residential flat building comprising 355 units, five levels of basement car parking and a communal landscaped area.

The proposed development includes:

Residential
- Construction of 355 residential units, with a mix of studios, one, two and three bedroom apartments;
- A communal gym will be located on the ground floor; and
- Landscaped communal open space will be located on the rooftop.

Figure 12: Extract from Architectural Plans.

Car parking
- The development includes a single basement across five levels (including lower ground level);
- Five lift lobbies provide access from the basement to the residential towers; and
- Visitor car parking spaces are spread between Lower Ground and Basement 1, 2 and 3.

Landscaping (refer Appendix B)
- A communal landscaped area will be located at the centre of the building on the ground floor podium level; and
- The landscaped area will include a range of plantings and podium with barbeque area.

Figure 13: Extract from Landscape Plans.

Access & fencing

- Access to the lobbies will be restricted via an electronic swipe card and intercom system for visitors;
- Access to the car park will be restricted via an electronic swipe card and intercom system for visitors; and
- Ground floor courtyards will be surrounded by landscaping and a 1.8m fence.

2 CPTED Principles

2.1 Surveillance

The *Crime Prevention and the Assessment of Development Applications* states that *'the attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical'.*

From a design perspective, 'deterrence' can be achieved by:

- clear sightlines between public and private places;
- effective lighting of public places; and
- landscaping that makes places attractive, but does not provide offenders with a place to hide or entrap victims.

Positive surveillance features of the development include:

- The balconies and main living areas overlook the communal landscaped area and surrounding road network;
- Each lobby provides access to between 3 and 7 units, which provides an opportunity for residents to become familiar with their neighbours; and
- The communal areas have been designed with a mix of low and high vegetation to ensure surveillance across the communal area.

Table 2 lists potential 'surveillance' issues and recommended strategies to minimise crime risk.

Table 2: Surveillance issues and recommendations.

SURVEILLANCE ISSUES	RECOMMENDATION
Perimeter	- Perimeters should be well lit at night. - Vegetation should be maintained to allow for clear sightlines.
Entrances	- All entrances should be well lit at night especially alcoves and corners. - Entrances should be well defined and clearly sign posted for pedestrians and vehicles.
Communal landscaped area & pedestrian paths	- Ensure these areas are sufficiently lit at night. Lighting will encourage residents to use the communal facilities and travel through the area, in-turn increasing passive surveillance. Appropriate lighting also limits opportunities for perpetrators to hide. - Ensure lighting is evenly spread along pathways. - Ensure the plantings are well maintained to allow for clear sightlines.
Car Parking	- The car park should be well lit. - Consideration should be given to the installation of Close Circuit TV (CCTV) at the car park entrance.
CCTV cameras	- Position CCTV at places where the offender/s is most likely to have to pass or want to access, such as building entry/exit points, storerooms or areas where high value items are kept. - CCTV should be clearly visible to deter potential offenders. - Placed at a height that captures a full view of the offenders face whilst not being obscured by other interferences. - In areas where image capture will not be compromised by insufficient lighting.

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General Recommendations	- Lighting should be vandal resistant. - Lighting should satisfy the relevant Australian Standard. - Signs should be erected in areas which are restricted prohibited or under surveillance to discourage criminal or anti-social activity. - Engage a security firm to undertake regular inspections of the site and surrounds at night. - Prune all trees and shrubs around buildings to enable clear visibility.

2.2   Access Control

Access Control can be defined as physical and symbolic barriers that are used to *'attract, channel or restrict the movement of people'*.

Effective access control can be achieved by creating:

- landscapes and physical locations that channel and group pedestrians into target areas;
- public spaces which attract, rather than discourage people from gathering; and
- restricted access to internal areas or high-risk areas (like car parks or other visited areas). This is often achieved through the use of physical barriers.

Positive access control aspects of the design include:

- The ground floor balconies/terraces will be surrounded by a 1.8m fence. Some will also be surrounded by planter boxes;
- Glazed doors are proposed for the lobby entrance. This will allow residents to see into and out of the lobby;
- A swipe card and intercom system will be installed at the entrance of each lobby;
- Access to the car park will be restricted via a swing gate controlled by an electronic swipe card and intercom system for visitors.

Table 3 lists potential 'access control' issues and recommended strategies to minimise crime risk.

Table 3: Access control issues and recommendations.

ACCESS CONTROL ISSUES	RECOMMENDATIONS
Perimeter	- Secure fencing should be constructed to prevent access from neighbouring property, Parramatta Marist High School.
Landscaping	- Avoid planting large trees adjacent to buildings to prevent use of "natural ladders" for access to roofs and balconies.
General Matters for Consideration	- Fully secure all external doors and windows with good quality locking devices. Make sure they are regularly maintained. All doors should be of solid construction and well fitted. - Make use of signage and stickers promoting security measures such as: security alarms, video surveillance and security contractors. - Install a monitored security alarm system.

2.3   Territorial Reinforcement

Territorial reinforcement can be achieved by enhancing 'community ownership of public space' as it sends positive signals and reduces opportunities for crime.

Effective territorial reinforcement and community ownership can be achieved by creating:

- design that encourages people to gather in public space and to feel some responsibility for its use and condition;
- design with clear transitions and boundaries between public and private space; and
- clear design cues on who is to use space and what it is to be used for.

Care is needed to ensure that territorial reinforcement is not achieved by making public spaces private spaces, through gates and enclosures.

Positive territorial reinforcement aspects of the proposal include:

- The communal areas are well landscaped and provide an enjoyable communal space for residents to gather. The use of these areas will foster a sense of ownership amongst residents; and
- The landscaping and paving provide a clear transition between the public and semi-private communal areas.

Table 4 lists potential 'territorial reinforcement' issues and recommended strategies to minimise crime risk.

Table 4: Territorial reinforcement issues and recommendations.

TERRITORIAL REINFORCEMENT ISSUES	RECOMMENDATIONS
Creating a sense of place/ownership	• Ensure the communal landscaped area is well maintained to foster a sense of ownership amongst residents.
Neighbouring properties	• Maintain quality fencing to restrict access from neighbouring properties.
Way Finding	• Provide clear signage for pedestrians and motorists. • Given the large size of the development, consider implementing a public address system to assist with security and people management during emergencies.
General Matters for Consideration	• Prominently display any signs indicating the presence of a security system, the continual surveillance of the premises and any other security measures present.

2.4   Space Management

Space management 'ensures that space is appropriately utilised and well cared for. Strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti and the replacement of decayed physical elements.

Table 5 lists potential 'space management' issues and recommended strategies to minimise crime risk. The objective should be to minimise the perception of urban decay by maintaining clean and undamaged areas to minimise the fear of crime and avoidance behaviour.

Table 5: Space management issues and recommendations.

SPACE MANAGEMENT ISSUES	RECOMMENDATIONS
Waste storage	• Garbage bins and waste storage receptacles should be regularly emptied to prevent overflowing rubbish.
Graffiti	• Remove graffiti as quickly as possible to minimise potential for cumulative graffiti and vandalism actions. • Install vandal resistant lighting where applicable.
Gym	• The Gym should be cleaned on a regular basis.
Lighting Repair	• The management regime should ensure that lighting is repaired as soon as possible after any lighting failure or damage.
Cleanliness and Maintenance	• The management regime shall ensure that the site is kept clean and tidy at all times. • Clear all building perimeters including fences of rubbish and potential climbing aids. • Maintain well-built and adequately secured boundary fences.

3   Conclusion

Our assessment of the proposal in accordance with the CPTED principles confirms that the development can be managed to minimise the potential risk of crime and a re-design of the proposal is not required.

A review of local crime risk indicated that Westmead has higher rates of break and enter of dwellings, stealing from dwellings and stealing from motor vehicles. The below recommendations are based take the crime rates into consideration.

The recommended strategies are summarised as follows:

Surveillance recommendations
- *Lighting:* The communal area, entrances, perimeters and basement should be well lit in accordance with Australian Standards:
- *Landscaping:* Should be well maintained to ensure sight lines are maintained across the site and to not provide places for perpetrators to hide;
- *CCTV:* Consider installing CCTV cameras at car park entrances;
- *Security:* Engage a security firm to undertake regular inspections of the site and surrounding areas at night;

Access Control recommendations
- *Site:* Provide secure fencing along the western boundary between the site and Parramatta Marist High School;
- *Landscape:* Avoid planting large trees adjacent to buildings to prevent their use as "natural ladders" for access to roofs and balconies;
- *Residential:* Fully secure all external doors and windows with good quality locking devices; and
- *Security:* Install a monitored security alarm system.

Territorial Reinforcement recommendations
- *Signage:* Prominently display any signs indicating the presence of a security system, the continual surveillance of the premises and any other security measures present;
- *Way Finding:* Provide clear signage for pedestrians and motorists and introduce a public address system to assist with security and management of emergencies; and
- *Social:* Ensure the communal landscaped area is well maintained to foster a sense of ownership amongst residents.

Space Management
- *Maintenance:* Implement an on-going maintenance plan.

This report can be relied on as guide for security management across the site.

APPENDIX A
Architectural Plans
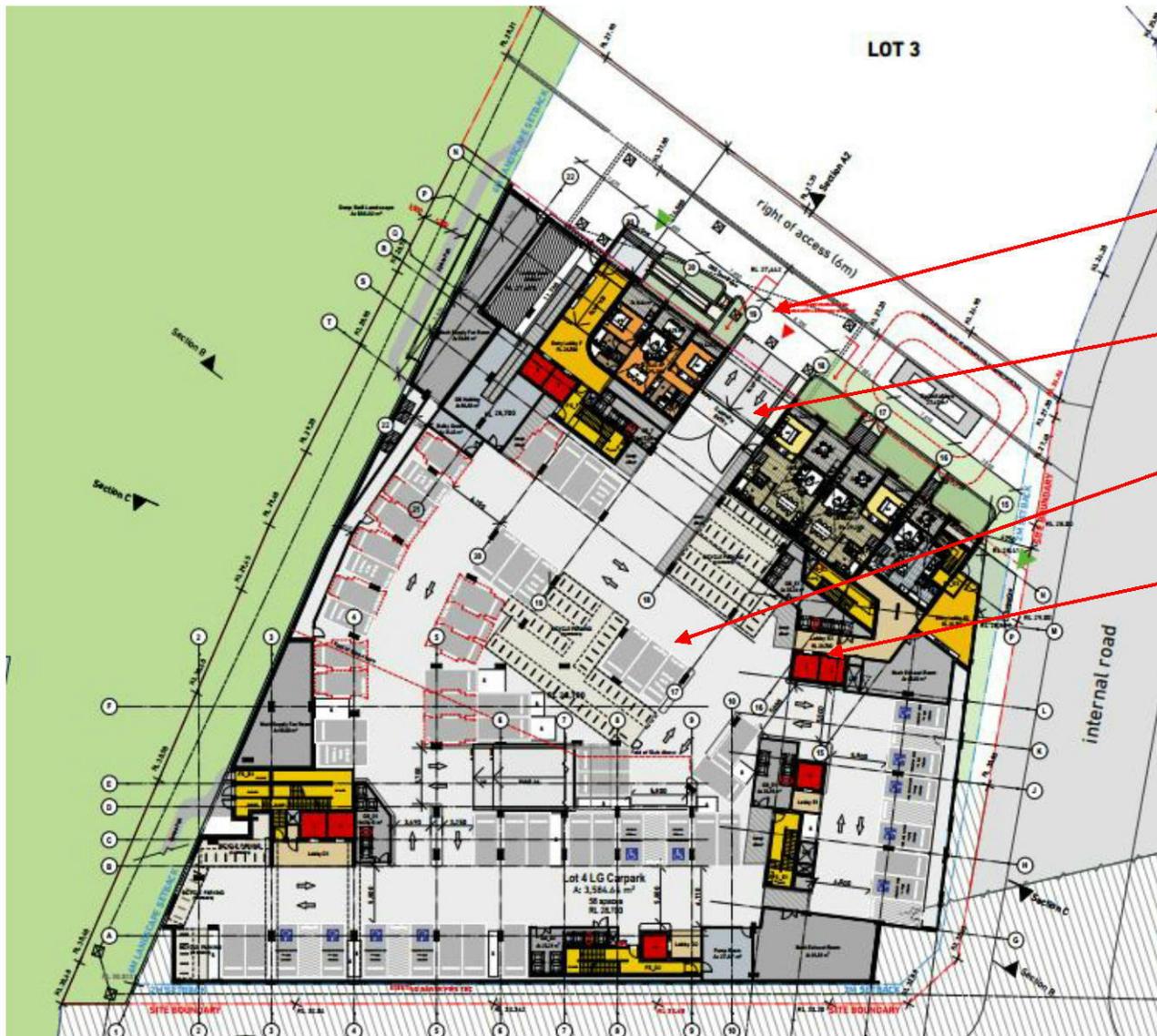
Consider CCTV at the car park entrance

Swing gates will be controlled via an electronic swipe card

The basement and entrances should be well lit

Provide clear sight lines to lobbies, lift entrances and storage areas

Appendix A1: Extract from Basement Plan.

Communal areas & entrances should be well lit

Security should inspect the area at night

Ground level private open space should be securely fenced

Balconies provide passive surveillance over communal areas

Ensure landscaping does not impact sight lines

Landscaping should be well maintained and not act as a natural ladder to access buildings or balconies

Appendix A2: Extract from Ground floor Plan.

APPENDIX B
Landscaping Plans

The variation in the landscaping and materials acts as a transition between the public and semi-private areas

Communal areas & recreation areas should be well lit

Security should inspect the area at night

Ground level private open space should be securely fenced

Ensure landscaping does not impact sight lines

Landscaping should be well maintained and not act as a natural ladder to access buildings or balconies

Appendix B1: Extract from Landscape Plan.