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EXECUTIVE SUMMARY

This Crime Prevention through Environmental Design (**CPTED**) assessment has been prepared to inform the development application for a proposed 16-storey mixed use development at 24-26 Railway Parade, Westmead (**the site**).

A CPTED assessment is an independent specialist study undertaken to identify and analyse potential improvements to a projects design which may help to reduce crime and anti-social behaviour as per NSW Government best practice guidelines. The four main CPTED principles which have been used to assess the proposed development are outlined in the table below.

Table 1 - CPTED Principles

Principle	Definition
Surveillance	Involves maximising opportunities for passers-by or residents to observe what happens in an area (the 'safety in numbers' concept). This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting. Natural surveillance is a by-product of well-planned, well-designed and well-used space. Higher risk locations can also benefit from organised surveillance, which involves the introduction of formal measures such as on-site security guards or CCTV.
Access control	Control of who enters an area so that unauthorised people are excluded, for instance, via physical barriers such as fences, grills etc.
Territorial reinforcement /ownership	People are more likely to protect territory they feel they own and have a certain respect for the territory of others. This can be expressed through installation of fences, paving, signs, good maintenance and landscaping. Territoriality relates to the way in which a community has ownership over a space.
Space management	Ensures that space is appropriately utilised and cared for. Space management strategies include: activity coordination (i.e. having a specific plan for the way different types of activities are carried out in space), site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out lighting and the removal or refurbishment of decayed physical elements.

Source: Crime prevention and the assessment of development applications, NSW Government Department of Planning 2001

THE PROPOSAL

The site is located at 24-26 Railway Parade, Westmead and has an area of approximately 2,514 sqm. The site is located approximately 500m from Westmead Hospital and the University of Western Sydney Campus and is part of a busy urban environment. The site is bound by Railway Parade to the south and Ashley Lane to the east.

The proposal development includes construction of a part 4-storey and part 16-storey building, connected via a double storey air bridge. The buildings will accommodate a range of uses including residential apartments, a hotel, tavern, medical centre and retail tenancies.

POLICY

A policy review was undertaken to understand State and local government policy priorities. Parramatta City Council aims to reduce risks to safety and perceived risks to safety as a result of population growth by developing attractive places to live which foster a sense of community. The Council's Development Control Plan (DCP) sets out design principles which incorporate CPTED principles.

DEMOGRAPHICS

A demographics analysis was undertaken based on 2016 census data from the Australian Bureau of Statistics (**ABS**) for Westmead. The analysis reveals that the area is generally characterised as follows:

- A median age of 33 years, Westmead is home to a higher proportion of family households (75%), and a high proportion of children under the age of 10 years (18%);
- Majority are white collar workers (75%), with a median weekly income of \$1,866, which is higher than that of Parramatta LGA and Greater Sydney; and
- The suburb is culturally diverse, with 75% of residents born overseas and 21% only speaking English at home

CRIME

Crime data from the NSW Bureau of Crime Statistics and Research (BOCSAR) was analysed to identify the crime profile at a suburb level and an LGA level. BOSCAR data indicates that Westmead has higher crime rates than the NSW average for 'fraud', 'steal from motor vehicle', 'break and enter - dwelling', 'assault non-domestic', 'steal from retail store', 'steal from dwelling' and 'liquor offences'.

Parramatta LGA generally has stable crime trends, however the site is located within several hotspots including;

- · Break and enter dwelling;
- Break and enter non-dwelling;
- · Domestic assault
- Motor vehicle theft;
- Steal from motor vehicle;
- Steal from dwelling; and
- Malicious damage to property.

Many of the crimes that currently affect Westmead are opportunistic and incidences of their occurrence can be minimised through the adoption of appropriate CPTED principles.

CPTED ASSESSMENT AND RECOMMENDATIONS

The following priority areas for assessment were identified through a review of the proposed plans and technical reports:

Car parking

Car parking areas can be common spaces for offences against property or persons. The proposed design should provide safety for pedestrians walking along Ashley Lane, which will become activated through the proposal. Security access into the car park acts as a barrier into a potentially high-risk area. Wayfinding and safe parking signage should be installed throughout the car park.

Entry and exit points

The proposed primary entry is defined by the arcade on Railway Parade, with high visibility from the train station. The building has multiple lobbies to manage the different uses, it is recommended that all lobbies are well-lit and have appropriate signage and access control measures.

External layout

The corner of Railway Parade and Ashley Lane will be activated by the gym lobby and the public art proposed on Ashley Lane will activate and promote social interaction and territorial ownership. The footpaths and laneways on Railway Parade and Ashley Lane will benefit from the proposed street widening, street

planting and new paving. This will create attractive linkages and increase pedestrian activity and promote passive surveillance. It is recommended that graffiti resistant materials are applied on surfaces susceptible to graffiti.

Internal layout

The proposal includes a range of private and public access areas, including residential units, a hotel, a medical centre, reinstatement of an existing tavern, retail and commercial tenancies, supermarket and gym. The internal layout of each use will need to carefully consider space management approaches to safely coordinate the different activities. In addition to separate lobbies for hotel and residential uses, the proposal should provide clear definition between private and public access areas through using signage, secure doors and CCTV.

Maintenance and management

Developments that are well managed and maintained are less likely to attract criminal activity by creating a sense of ownership for those who live and work close by.

Landscaping

The proposed landscaping plan includes street furniture and lighting in areas of communal open space and streetscape. This encourages gathering and social interaction. It is recommended that landscaping does not interrupt sightlines or provide opportunities for entrapment or concealment.

CONCLUSION

The proposal has considered CPTED principles, to provide positive outcomes for crime prevention and passive surveillance. This report has outlined recommendations to further minimise the conditions that could encourage crime.

Overall it is considered that with the implementation of recommendations, the proposed development will help to activate and improve the safety and security of the local area.

1. INTRODUCTION

This Crime Prevention through Environmental Design (**CPTED**) report has been prepared to inform the Development Application (**DA**) for the proposed 16-storey mixed use development at 24-26 Railway Parade, Westmead (**the site**).

1.1. AIM OF THIS REPORT

A CPTED assessment identifies and analyses potential improvements to design which may help to reduce crime and anti-social behaviour, as per NSW Government best practice guidelines.

CPTED aims to influence the design of buildings and places by:

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

This report assesses CPTED principles against the design of the proposed development. Where crime risks are identified, the report makes recommendations in accordance with professional standards and statutory obligations.

1.2. THE PROPOSAL

The proposal seeks to redevelop the site for a mixed use development involving the following works:

- Demolition of existing structures throughout the site;
- Construction of a part 4-storey and part 16-storey building, connected via a double storey air bridge, comprising the following uses:
 - Basement level gymnasium, back-of-house areas including supermarket storage, loading dock and building services.
 - Ground Level retail including a supermarket and retail tenancies positioned along the through-site link and Railway Parade. Separate lobbies are provided for the hotel and residential uses and a shared lobby for the medical centre, tavern and gymnasium.
 - Level 1 tenancies, reinstatement of existing tavern located on the site and building managers office and public amenities to the rear of the floor plate; connected via a pedestrian overhead bridge.
 - Level 2 medical centre comprising reception and loft lobby in western building connected via the overhead bridge to the medical centre in the eastern building.
 - A 5-storey hotel comprising 97 rooms.
 - 7-storeys of apartments comprising 33 apartments.
- Car park and service vehicular access from Ashley Lane;
- Basement car parking for 122 vehicles at basement levels below;

NSW Government Department of Urban Affairs and Planning, Crime prevention and the assessment of development applications, 2001

- Provision of a pedestrian through-site link extending from Railway Parade in the south to the rear of the site in the north; and
- Landscaping throughout the site including the courtyard in the north-western corner near the termination of the through-site link.

The proposed development as viewed from Railway Parade is shown in Figure 1 below.

Figure 1 – Proposed Development



Source: Sissons Architects

2. METHODOLOGY

The following task have been undertaken as part of this CPTED assessment.

Figure 2 – CPTED Methodology

Stage 1: Policy and concept plan review

- Review of Safer By Design guidelines and Council CPTED guidelines
- · Review of concept plans and technical studies.

Stage 2: Baseline analysis

- Site visit and audit of surrounding context
- Review of demographic profile and crime statistics to identify potential local crime issues.

Stage 3: CPTED Assessment and recommendations

- Application of CPTED principles to the design plans
- Identification of potential crime risks associated with the proposed development
- · Identification of potential mitigation measures
- Reporting.

3. SITE AND CONTEXT

The site is located at 24-26 Railway Parade, Westmead and has an area of approximately 2,514 sqm. The site is located approximately 500m from Westmead Hospital and the University of Western Sydney Campus and is part of a busy urban environment. The site is bound by Railway Parade to the south and Ashley Lane to the east.

Westmead is an important medical precinct accommodating a cluster of key hospitals and health-related facilities. It is recognised in State and local planning policy as a specialised health centre and is earmarked for significant employment and residential growth.

The site is located on the opposite side of Railway Parade to the Westmead Train Station. East of the site are multi-storey residential developments and west of the site are commercial uses. To the north of the site, adjacent to the car park is a two-storey office building.

Westmead is located approximately 1.5km west of Parramatta Central Business District and 24km from the Sydney Central Business District. It is situated in Parramatta Local Government Area (LGA), close to the boundary adjoining Cumberland LGA to the south.

The area is currently serviced by rail at Westmead Rail Station and the North-West T-way, and is close to major roads including the Cumberland Highway and the M4 Motorway.

Site photos are included overleaf.

Figure 3 – Site location plan

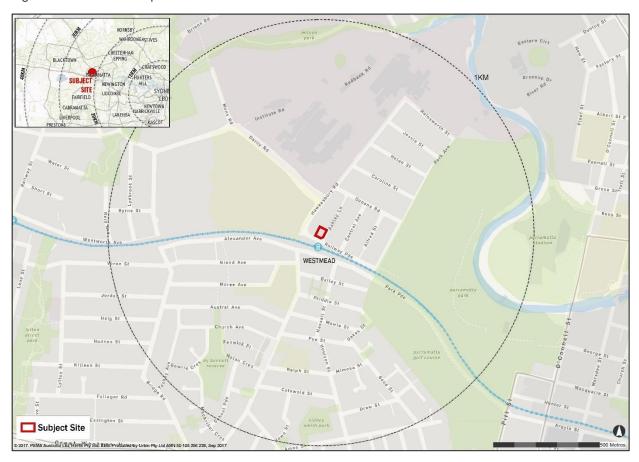


Figure 4 – Aerial map of the site



Source: Nearmaps

Figure 5 – Site visit photos



Picture 1 – Residential buildings on Ashley Lane



Picture 2 - Existing internal car park



Picture 3 – Site from Railway Parade



Picture 4 – Surrounding commercial activity

The site is characterised as the central retail district for Westmead residents, being easily accessible from Westmead Train Station, via a pedestrian crossing as shown in Picture 3. The area is therefore a busy urban environment, surrounded by residential housing as shown in Picture 1 and commercial activities (Picture 4). There is no buffer to residential properties located on Ashley Lane and poor pedestrian access with narrow footpaths and heavy vehicular movement.

4. POLICY CONTEXT

The following documents were reviewed to inform this assessment:

- NSW State Priorities: Making it Happen
- Crime prevention and assessment of development applications (NSW Department of Planning)
- NSW Police Safer by design guidelines and NSW Crime Prevention Strategy 2015-2017
- Guidelines for Developing a Crime Prevention Strategy
- Crime Prevention Strategy 2015-2017
- Parramatta Development Control Plan 2011
- Socially Sustainable Parramatta Framework 2017/18

Appendix A includes a detailed review of these policy documents.

4.1. POLICY IMPLICATIONS

There are a range of relevant policy implications for consideration, including:

- State policies and guidelines that aim to reduce crime and improve safety and perceptions of safety through improved design of private and public spaces
- Crime Prevention Through Environmental Design principles which seek to reduce opportunities for crimes by enhanced surveillance including natural surveillance, access control, territorial reinforcement which encourages community ownership of public spaces, and space management which enhances community safety and maximises use and activity
- The Council's objective to reduce risks to safety and perceived risks to safety as a result of population growth by developing attractive places to live which foster a sense of community
- The Parramatta DCP that sets out design principles which incorporate CPTED principles. These focus on improved opportunities for:
 - Natural surveillance;
 - Access control;
 - Enhanced sense of community ownership of spaces;
 - Transition boundaries between private and public spaces other than gates and fences;
 - Crime prevention measures which don't impact streetscapes;
 - Non-slip pavement;
 - o Activation of spaces at ground level; and
 - Lighting of laneways.

5. DEMOGRAPHIC SUMMARY

This demographic summary is based on 2016 census data from the ABS for Westmead. At the time of writing, 2016 census data for employment was not available, and 2011 census data has been included.

The full demographic summary table is provided at **Appendix B.**

5.1. **KEY FINDINGS**

Analysis of the census data indicates:

Population

- Westmead has a population of 16,309 people, which equates to 7% of the Parramatta LGA population (226,149)
- The population density is 5,632 people per square kilometre, which is higher than that for Parramatta LGA (2,698) and Greater Sydney (390)

Age

- There is a younger population, with a median age of 33 years, lower than that of Parramatta LGA (34 years) and Greater Sydney (36 years)
- There is a higher proportion of children under the age of 10 years (18%) than Parramatta LGA (14%) or Greater Sydney (13%)

Household structure

• Family household is the dominate household structure (75%), followed by non-family households (25%) and lone person (20%)

Diversity

- One quarter of the population were born in Australia, this is lower than that of Parramatta LGA (45%) and Greater Sydney (57%)
- There is a lower proportion of people who speak English only at home (21%), compared to Parramatta LGA (42%) and Greater Sydney (58%).

Income and employment

- The median weekly come for Westmead is \$1,866, which is higher than that of Parramatta LGA (\$1,532) and Greater Sydney (\$1,750)
- The unemployment rate is slightly higher at 8%, compared to Parramatta LGA (7%) and Greater Sydney (6%)
- Majority are white collar workers (75%), which is slightly higher with that of Parramatta LGA (71%), and Greater Sydney (74%)
- Over a third (34%) have received a bachelor degree or higher, which is higher than that of Parramatta LGA (20%) and Greater Sydney (24%).

Household tenure

- There is a higher proportion of renters (65%), than that of Parramatta LGA (41%) and Greater Sydney (34%)
- Flats, units or apartments makes up the largest proportion of dwelling structure at 71%, which is higher than that of Parramatta LGA (38%) and Greater Sydney (28%)

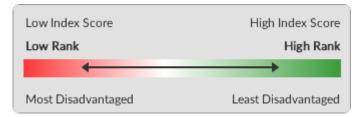
5.2. SEIFA DATA

The Socio-Economic Indexes for Areas (**SEIFA**) was developed by ABS to provide a ranking for social and economic wellbeing and welfare of communities across a range of spatial scales. Four indices have been developed, as follows:

- Index of Relative Socio-economic Disadvantage: focuses primarily on disadvantage, and is derived from Census variables like low income, low educational attainment, unemployment, and dwellings without motor vehicles
- Index of Relative Socio-economic Advantage and Disadvantage: is a continuum of advantage (high values) to disadvantage (low values), and is derived from Census variables related to both advantage and disadvantage
- Index of Economic Resources: focuses on financial aspects of advantage and disadvantage, using Census variables relating to residents' incomes, housing expenditure and assets
- Index of Education and Occupation: includes Census variables relating to the educational attainment, employment and vocational skills.

Each four indexes are released in four forms: as a 'score', as a 'rank', as a 'decile' and as a 'percentile'. Therefore, for each index every geographical area is given a score, rank, decile and percentile number. These numbers all rank in order of disadvantage, but are used for different purposes. For the purposes of this assessment score and decile have been used. A score provides detailed information and is used for sophisticated analysis, while deciles are used for most analyses.

Scores: A lower score indicates that an area is relatively disadvantaged compared to an area with a higher score. The area with the lowest score is given a rank of 1, the area with the second lowest score is given a rank of 2 and so on, up to the area with the highest score is given the highest rank.



Decile: All areas are ordered from the lowest to highest scores, the lowest 10% of areas are given a decile number of 1 and so on, up to the highest 10% of areas which are given a decile number of 10.

Table 2 – SEIFA Index

Location	Advantage and disadvantage		Disadvantage		Economic resources		Education and occupation	
	Score	Decile	Score	Decile	Score	Decile	Score	Decile
Parramatta LGA	996	8	984	6	959	3	1037	9
Westmead (suburb)	1006	6	1000	5	917	2	1076	9

Source: SEIFA 2011

• SEIFA results indicate that the population of Parramatta LGA has relatively high overall levels of advantage, being in the top 20%. The suburb of Westmead is in the top 40%, indicating a contrast between Parramatta LGA and the suburb of Westmead in terms of advantage.

- Based on the index for Education and Occupation, both Westmead and Parramatta LGA have high levels of advantage. A high score indicates relatively higher education and occupation status of people in the area, in general due to many people with higher education qualifications or many people in highly skilled occupations
- However, based on the index of Economic Resources, both Westmead and Parramatta LGA have low levels of economic advantage. Parramatta LGA is in the bottom 30% and Westmead in the bottom 20% for economic resources. The index of Economic Resources focuses on the financial aspects of relative socio-economic advantage and disadvantage, by summarising variables related to income and wealth. It misses some assets such as savings or equities, which could not be included because this information was not collected in the 2011 Census. A low score indicates a relative lack of access to economic resources in general, an area may have a low score if there are few owned homes.

6. CRIME PROFILE

Crime data from the NSW Bureau of Crime Statistics and Research (BOCSAR) was analysed to identify the crime profile at a suburb level and an LGA level.

6.1. TYPES OF CRIME

Table 3 shows the top ten crime categories for the Parramatta LGA based on rates of crime per 100,000 of the population between July 2015 and June 2017.

Parramatta LGA has higher rates of crime than the NSW in the following categories:

- Fraud;
- Steal from motor vehicle;
- Break and enter dwelling;
- Assault non-domestic;
- Steal from retail store;
- · Steal from dwelling; and
- Liquor offenses.

Table 3 – Crime rate per 10,000 (July 2015-June 2017)

Type of crime	(Rate per 10,000 population)			
	Parramatta LGA	NSW		
Fraud	1,074.3	681.1		
Malicious damage to property	687.6	834.3		
Steal from motor vehicle	651.1	523.5		
Break and enter – dwelling	452.6	400		
Assault – non-domestic	441.2	412.5		
Assault – domestic	380.1	384.7		
Steal from retail store	360	299.7		
Steal from dwelling	284.9	274.8		
Liquor offenses	171.3	144.8		
Motor vehicle theft	170.2	173.7		

Source: BOSCAR 2017

6.2. CRIME TRENDS

Table 4 below presents the two-year trends (July 2015-June 2017) in the incident rates from key crime types in the Parramatta LGA.

Overall, the LGA has experienced stable rates of crime except for break and enter- dwelling, which has decreased by 17%.

Table 4 – Two-year crime trends (July 2015- June 2017)

Type of crime	24-month trend (2015-2017)				
3, pe or	Parramatta LGA	NSW			
Fraud	Stable	-7.7%			
Malicious damage to property	Stable	Stable			
Steal from motor vehicle	Stable	Stable			
Break and enter – dwelling	-17%	-4.9%			
Assault – non-domestic	Stable	Stable			
Assault – domestic	Stable	Stable			
Steal from retail store	Stable	Stable			
Steal from dwelling	Stable	Stable			
Liquor offenses	Stable	Stable			
Motor vehicle theft	Stable	Stable			

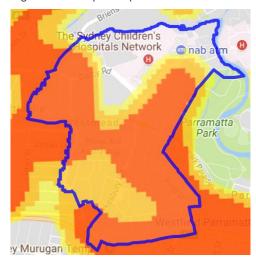
Source: BOSCAR

6.3. CRIME HOT SPOTS

BOSCAR publishes 'hotspot' maps to illustrate areas of high crime density relative to crime concentrations across NSW. The site is within several hotspots including;

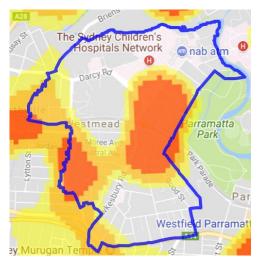
- Break and enter dwelling;
- · Break and enter non-dwelling;
- Domestic assault
- Motor vehicle theft;
- Steal from motor vehicle;
- Steal from dwelling; and
- Malicious damage to property.

Figure 6 – Hotspot maps



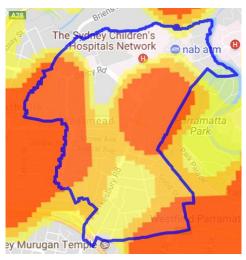
Picture 5 - Break and enter dwelling

Source: BOCSAR



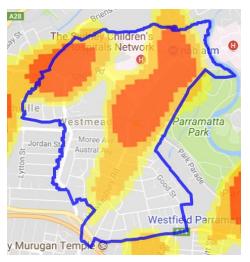
Picture 7 - Motor vehicle theft

Source: BOCSAR



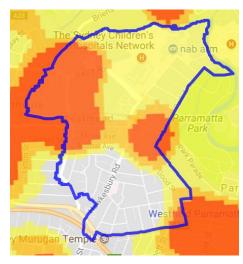
Picture 9 - Steal from motor vehicle

Source: BOSCAR



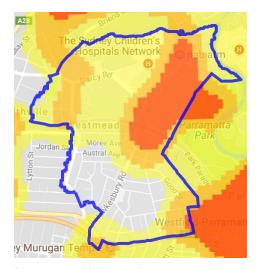
Picture 6 - Break and enter non-dwelling

Source: BOCSAR



Picture 8 - Steal from dwelling

Source: BOCSAR



Picture 10 - Malicious damage to property

Source: BOSCAR

6.4. IMPLICATIONS FOR THIS ASSESSMENT

Many of the crimes that currently affect Westmead are opportunistic and incidences can be managed and minimised through the adoption of appropriate CPTED principals.

Westmead is recognised by state and local planning policy as a specialised health centre, earmarked for significant employment and residential growth.

The proposed development has the potential to assist in this transformation by activating the site, public domain improvements, increasing lighting and passive surveillance opportunities and using adequate materials that discourages vandalism.

7. CPTED ASSESSMENT

7.1. CPTED PRINCIPLES

A CPTED Assessment identifies and analyses potential improvements to the design of a project which may help to reduce crime and anti-social behaviour as per NSW Government best practice guidelines, outlined below.

Table 5 - CPTED Principles

Principle	Definition
Surveillance	Involves maximising opportunities for passers-by or residents to observe what happens in an area (the 'safety in numbers' concept). This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting. Natural surveillance is a by-product of well-planned, well-designed and well-used space. Higher risk locations can also benefit from organised surveillance, which involves the introduction of formal measures such as on-site security guards or CCTV.
Access control	Control of who enters an area so that unauthorised people are excluded, for instance, via physical barriers such as fences, grills etc.
Territorial reinforcement /ownership	People are more likely to protect territory they feel they own and have a certain respect for the territory of others. This can be expressed through installation of fences, paving, signs, good maintenance and landscaping. Territoriality relates to the way in which a community has ownership over a space.
Space management	Ensures that space is appropriately utilised and cared for. Space management strategies include: activity coordination (i.e. having a specific plan for the way different types of activities are carried out in space), site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out lighting and the removal or refurbishment of decayed physical elements.

Source: Crime prevention and the assessment of development applications, NSW Government Department of Planning 2001

7.2. PRIORITY AREAS

The discussion below sets out a detailed assessment of the following CPTED priority areas. These priority areas were identified through a review of the plans and technical reports:

- Carparking
- · Entry and exit points
- External layout
- Internal layout
- · Maintenance and management

7.2.1. Car parking

Car parking areas can be common spaces for offences against property or persons. Relevant CPTED considerations for car parks include: access control, providing visibility, ensuring safe access for cars and pedestrians and discouraging loitering. Car parking is considered a priority area as the site is within in a crime hotspot for 'steal from motor vehicle' and 'motor vehicle theft.

The proposed development includes four levels of basement car parking to accommodate approximately 122 car parking spaces, including ten accessible bays, one ambulance bay and two servicing bays. The basement car park and loading dock are accessed via Ashely Lane, which will become an enhanced pedestrian environment through the proposal.

Parking entry off Ashely Lane has security access and is separate from the loading dock entry. Lighting and CCTV is also proposed throughout the car park as per by Design Control 5 of the Parramatta DCP.

Recommendations

In finalising the design, it is important to consider the following recommendations:

- Provide physical or symbolic barriers to identify where people can and cannot go in the car parks, as per section 3.4.4 safety and security of the Parramatta DPC which seeks to restrict access to high crime risk areas such as car parks.
- Install safe parking signage throughout the car park to remind people to secure their cars, bicycles and valuables
- Install wayfinding signage throughout the car park and in the external coach parking areas to safely manage interactions between cars, buses and pedestrians
- Install traffic control signage (e.g. give way and stop signs) at all entry and exit points, to avoid conflicts between vehicles, cyclists and pedestrians both on the street and within the car park
- Provide secure bicycle parking or lockers for cyclists
- Clearly identify (number or colour-code the parking bays) or control access (e.g. gates, shutters) to parking allocated to different users, e.g. residential and commercial
- Ensure a regular maintenance plan is in place including rubbish removal, graffiti removal, repair of light fixtures, maintenance of lux levels and other necessary repairs
- Signage should be highly visible and able to be seen clearly at night

7.2.2. Entry and exit points

Entry and exit points are a key consideration for CPTED assessments because of the interface they provide with the surrounding area. Entry and exit points are considered a potential risk area in the local context given that 'steal from retail store' rates are above the NSW levels and the site is in a hotspot for 'malicious damage to property.'

About the development

The proposed development has multiple entry and exit points to service the different uses in the building, including retail, office, hotel, residential, medical centre, gym and tavern. The primary entry is defined by the arcade on Railway Parade, with visibility from the train station. Parking entry is via Ashley Lane. Entry and exit points are considered a potential risk area due to the high level of theft related crime in the Parramatta LGA.

The building has multiple lobbies to manage the different proposed uses. Lobbies must be lockable, well-lit and have appropriate signage and access control measures, such as swipe access cards. Separate lobbies are provided for the hotel and residential uses and a shared lobby for the medical centre, tavern

and gymnasium. Due to the high level of liquor offences in Parramatta LGA security measures are recommended to monitor activity for the shared lobby.

The different building uses provide surveillance at a range of hours. The corner of Railway Parade and Ashely Lane is activated by the gym lobby, while the street and arcade frontages are activated by retail tenancies and entries. A public arcade is proposed as an active pedestrian link from Railway Parade to the public open space at the rear of the site, which is activated by retail tenancies and entries.

Recommendations

In finalising the design, it is important to consider the following recommendations:

- Install adequate lighting at all entry and exit points including, commercial, residential and emergency access
- Install CCTV at all entry and exit points including commercial, residential and emergency access
- Install signage to clearly demarcate residential areas from commercial areas and publicly accessible areas from service areas
- It is important that all entry/exit points are aesthetic, inviting and accessible. The use of materials, landscaping and the presence of staff in these areas will maximise security
- Install control measure (e.g. access passes) to control access to residential areas
- Doors to be built from resistant materials to prevent break-ins and vandalism
- Emergency exits to be self-closing
- Access control measures should not restrict building evacuation requirements
- Provide clear sight lines to the pedestrian crossing on railway parade

7.2.3. External layout

External layouts can resolve safety conflicts and improve activation of the urban environment. Key external layout considerations in regard to CPTED include visibility, activation and prevention of vandalism and graffiti.

About the development

The Parramatta DCP encourages definition and transition of boundaries between public and private spaces as a method of territorial reinforcement. The proposal provides clear boundaries that defines public and private spaces and provide activation and surveillance at all hours.

The site is situated on the corner of Railway Parade and Ashley Lane. Railway Parade has heavy pedestrian and vehicular movement. Ashley Lane currently has poor pedestrian amenity, with intermittent footpaths and areas of dumped rubbish. The corner of Railway Parade and Ashley Lane will be activated by the gym lobby and public art in Ashley Lane will further activate the space and promote social interaction and territorial ownership.

Pedestrian footpaths along Railway Parade and Ashely Lane are also proposed to be upgraded with new paving, street furniture and tree planting. The proposed setback of the building from the footpaths will help create attractive linkages and increase pedestrian activity which will promote passive surveillance and provide improved amenity and perceptions of safety.

The proposed landscape plan reinforces territorial ownership with public art opportunities, these include suspended lighting through the arcade and sculptural furniture elements. Outdoor areas that are attractive and well-maintained will reduce opportunities for crime by encouraging people to feel responsibility for its use and condition.

The public domain area that surrounds the site at the ground level is designed to guide pedestrians around the site and into designated/intended gathering places. Signage will be provided across the precinct to assist with wayfinding and navigation through the site. The proposal will include appropriate lighting at street level and in public areas to mitigate crime.

Recommendations

In finalising the design, it is important to consider the following recommendations:

- All external areas of the building, including Ashley Lane, to be well lit at night to meet relevant Australian Lighting Standards
- Consider CCTV cameras to monitor external areas of the building where passive surveillance is limited
- Remove opportunities for concealment provided by external building design or landscaping
- Install specific design measures to prevent climbing in (e.g. metal gratings and bars, toughened glass windows) on windows and balconies above ground
- Apply low maintenance and graffiti resistant materials wherever possible on surfaces susceptible to graffiti
- Install adequate lighting throughout the site with a focus on pedestrian links, entry and exit points to the building and car park on Ashley Lane
- Footpaths to be well-maintained and accessible by wheelchairs
- Appropriate public bins should be placed in high pedestrian traffic areas to ensure cleanliness
- Public pedestrian areas are to be provided with non-slip pavement surfaces as per the Parramatta
 DCP
- Facades should not result in glare that causes discomfort or threatens safety of pedestrians or motorists
- Locate bicycle parking in areas of high surveillance.

7.2.4. Internal layout

Key internal layout considerations in regards to CPTED include interfaces between public and private space, and the existence of 'dead space, 'areas of entrapment' and 'areas of concealment'. A key consideration for this development is the interaction between the different proposed uses.

About the development

The proposal includes a range of private and public access areas, including residential units, a hotel, a medical centre, reinstatement of an existing tavern, retail and commercial tenancies, supermarket and gym.

The internal layout provides a clear delineation between private and public space, with separate building entries provided for the hotel and residential land uses and shared lift lobbies for the commercial. Different functions of the building are organised on different floors to minimise interaction between uses.

The building has multiple lifts wells and fire stairs which can provide areas of concealment and entrapment. Developments are required to minimise these impacts in line with the safety and security measures outlined in the Parramatta DCP. Patrons leaving the tavern should be directed away from other land uses in the building, to avoid alcohol related opportunistic crime.

Recommendations

In finalising the design, it is important to consider the following recommendations:

- The design of internal spaces should not create 'areas of entrapment or concealment' (especially in passageways, stairwells, alcoves, the air bridge and toilet facilities)
- Provide visibility into spaces where there is a perceived risk to personal safety, (e.g. stairwells, elevators, car parks, and lobby entrances)
- Provide clear definition between private and public access areas by using clear signage and secure doors

7.2.5. Maintenance and management

Developments that are well managed and maintained are less likely to attract criminal activity through establishing a sense of ownership and pride for those who live and work close by. Proper maintenance of landscaping, lighting treatment and other features can therefore assist in the prevention of crime.

About the development

A key crime priority for Parramatta LGA is 'malicious damage to property', which presents a challenge to both maintenance and security.

Maintenance systems are integrated into the proposed design, including planting that responds to water conservation and building design that can be cleaned from the inside and outside without scaffolding. Ground floor activation will maximise passive and active surveillance across the site.

Recommendations

In finalising the design, it is important to consider the following recommendations:

- Consider implementing random security patrols in high risk areas, e.g. car park
- Ongoing engagement with neighbouring premises and police to understand local crime issues and safety risks
- Monitor the need to provide information in other languages to meet the needs of CALD community

7.2.6. Landscaping

Landscaping can play an important role in reinforcing site boundaries, but must not interrupt site lines or create areas of entrapment or concealment.

As outlined in the landscaping strategy the proposed development includes upgrades to the street space along Railway Parade and Ashely Lane, as well as public open space to the arcade on the upper ground floor. The landscape plan includes street furniture, public art opportunities and lighting in areas of communal open space and streetscape, which encourages gathering and social interaction.

The public domain works that surrounds the site at the ground level are designed to guide pedestrians around the site and into designated/intended gathering places. Signage will be provided across the precinct to assist with wayfinding and navigation through the site. The proposal will include appropriate lighting at street level and in public areas to mitigate crime.

Recommendations

In finalising the design, it is important to consider the following recommendations:

- Proposed landscaping at the communal open space on level 8 should not interrupt sightlines or provide opportunities for entrapment or concealment
- Landscaping near the pedestrian crossing on Railway Parade should not interrupt sightlines of drivers of pedestrians
- Consider installing greenways or vertical planting on blank walls to deter graffiti and vandalism
- Implement maintenance schedule as outlined in the landscaping stagey cut back tree canopies
 and groundcovers to road verges, and light poles and signs as required achieving clear sight lines
 when viewed along roadway.

8. CONCLUSION

This report has assessed the proposed development at 24-26 Railway Parade, Westmead against the CPTED principles and a series of recommendation have been made.

Overall it is considered that with the implementation of recommendations, the proposed development will help to activate and improve the safety and security of the local area.

DISCLAIMER

This report is dated 24 October 2017 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Drill Pty Ltd (**Instructing Party**) for the purpose of CPTED Assessment (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A POLICY REVIEW

NSW STATE PRIORITIES

The NSW Government in its State Priorities *NSW: Making It Happen* identifies five priority areas. One of these is a priority for safe communities. Goals described under this priority are:

- Reducing violent crime LGAs to have stable or falling violent crime rates by 2019
- Reduce adult re-offending by 5% by 2019, and
- Reduce road fatalities by at least 30% from 2011 levels by 2021.

CRIME PREVENTION AND ASSESSMENT OF DEVELOPMENT APPLICATIONS

Crime prevention and assessment of development application guidelines were developed to assist councils identify crime risks and minimise opportunities for crime. These guidelines seek to influence building design under the NSW Environmental Planning and Assessment Act (EPAA) 1979. They seek to reduce opportunities for committing crimes by:

- Increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture
- Increasing the effort required to commit crime by increasing the time, energy or resources which need to be expended
- Reducing the potential rewards of crime by minimising, removing or concealing "crime benefits"
- Removing conditions that create confusion about required norms of behaviour.
- Subsections of 79C require consent authorities to ensure that "a development provides safety and security to users and the community".

SAFER BY DESIGN

The *Safer By Design* evaluation process is used by NSW Police to identify and quantify crime risks. The evaluation measures statistical probability of crime, consequence, 'hotspots' analysis and situational opportunity.

NSW Police provide Safer by Design courses to a range of stakeholders including police and crime prevention officers, council staff, planners, designers, and government agencies.

The four focus areas are:

Surveillance – including natural surveillance (when normal space users see and can be seen by others); technical surveillance including CCTV, help points, mirrored panels; and formal surveillance (positioning of guardians).

Access control – including physical and symbolic barriers that channel and group pedestrians into areas

Territorial reinforcement - community ownership and guardianship of public space

Space/activity management – involving the control and care of developments and spaces to maximise use and community safety.

GUIDELINES FOR DEVELOPING A CRIME PREVENTION STRATEGY

Guidelines for Developing a Crime Prevention Strategy developed by the NSW Department of Police and Justice outline strategies known as 'situation prevention measures' aimed at reducing opportunistic crime.

The Guidelines suggest considering whether environmental design, maintenance or surveillance factors provide opportunities for crime to occur. Factors which may make it easier for crimes to occur can include poor lighting, overgrown foliage, and placement of barriers or signage which reduce the opportunity for natural surveillance.

CRIME PREVENTION STRATEGY 2015-2017

The *Crime Prevention Strategy 2015-2017* was developed by the NSW Police Force to enhance opportunities for police and communities work together for crime reduction.

Objectives of crime prevention strategies are to:

Reduce crime and increase public safety

Strengthen engagement with communities and key partners to deliver sustainable solutions for crime

Reduce the repetitive response of incidents of crime by employing problem solving at the core of all policy activities.

The document noted two areas of crime prevention as:

- Situational crime prevention which relates to reducing opportunities for crime. Components of this
 may be community awareness campaigns as well as increased physical and technical surveillance in
 public places.
- Social crime prevention which addresses conditions in communities that influence behaviours that may lead to crime.

PARRAMATTA DEVELOPMENT CONTROL PLAN 2011

Parramatta Development Control Plan 2011 – Part 3 Development Principles seeks to reduce opportunity for crimes and improve safety and perceptions of safety by implementing the CPTED principles of casual surveillance, reinforcing territory, controlling access and managing space.

Objectives are:

- To reduce crime risk and minimise opportunities for crime.
- To increase and contribute to the safety and perception of safety in public and semi-public spaces.
- To encourage the consideration and application of crime prevention principles when designing and siting buildings and spaces.
- To encourage dwelling layouts that facilitate safety and encourage interaction and recognition between residents.

Design principles include:

- Incorporation of enhanced opportunities for effective natural surveillance by providing clear sight lines between public and private places, installation of effective lighting, and the appropriate landscaping of public areas.
- Minimisation of opportunities for crime through suitable access control. Physical or symbolic barriers should be used to attract, channel and/or restrict the movement of people. Landscaping and/or physical elements may be used to direct people to destinations, identify where people can and cannot go and restrict access to high crime risk areas such as carparks
- Incorporation of design elements that contribute to a sense of community ownership of public spaces. Encouraging people to gather in public spaces through appropriate design techniques, helps to nurture a sense of responsibility for a place's use and condition.
- Definition and transition of boundaries between public and private spaces is encouraged as a method of territorial reinforcement. Methods other than gates, fences and enclosures are encouraged. The installation of solid security shutters will not be supported.
- The incorporation of crime prevention measures in the design of new buildings and spaces is not to detract from the quality of the streetscape. Subtle design techniques should be applied to blend into façades and places.
- New development is to be designed to reduce the attractiveness of crime by minimising, removing or concealing crime opportunities. The design of development should increase the possibility of detection, challenge and apprehension of persons engaged in crime.
- A site management plan and formal crime risk assessment (Safer by Design Evaluation) involving the NSW Police Service may be required for large developments, which in Council's opinion, would create a crime risk.
- Public pedestrian areas within developments as well as communal access ways within multiunit developments are to provide non-slip pavement surfaces.
- The design of buildings adjoining laneways and through block connections should be designed to activate these spaces at ground level and provide casual surveillance from ground and upper levels.
- Lighting of laneway spaces is encouraged.

SOCIALLY SUSTAINABLE PARRAMATTA FRAMEWORK 2017/18

Sharing the Opportunities for Growth for All – Socially Sustainable Parramatta Framework has a goal of green, inclusive and save places to share. It aims to design, build and maintain public spaces and neighbourhoods that are green, safe and inclusive for all.

Population growth has led to perceptions of increasing crime though crime rates are actually decreasing. Residents and visitors report feeling unsafe in parts of the city particularly at night.

Living in attractive surrounds helps create a sense of harmony and increases feelings of safety.

APPENDIX B DEMOGRAPHIC ANALYSIS

Data item	Westmead	Parramatta LGA	Sydney GCCSA		
Total population	16,309	226,149	4,823,991		
Population Density (Persons per Sq.km)	5,623.8	2,698.7	390.0		
Median Annual Personal Income	\$40,040	\$37,544	\$37,388		
Age Distribution (%)					
Aged 0-4	9.9%	7.3%	6.4%		
Aged 5-9	8.0%	6.2%	6.4%		
Aged 10-14	4.4%	4.9%	5.8%		
Aged 15-19	3.0%	5.1%	6.0%		
Aged 20-24	4.5%	6.6%	7.1%		
Aged 25-29	10.0%	9.2%	7.9%		
Aged 30-34	16.7%	11.1%	8.1%		
Aged 35-39	12.9%	8.8%	7.4%		
Aged 40-44	7.2%	7.0%	7.1%		
Aged 45-49	4.3%	6.0%	6.7%		
Aged 50-55	3.7%	5.8%	6.3%		
Aged 55-59	3.4%	5.3%	5.8%		
Aged 60-64	2.9%	4.6%	5.0%		
Aged 65-69	2.4%	3.8%	4.4%		
Aged 70-74	1.8%	2.9%	3.3%		
Aged 75-79	1.4%	2.2%	2.4%		
Aged 80-84	1.4%	1.6%	1.8%		
Aged 85+	1.9%	1.7%	2.0%		
Aged 18+	75.3%	87.3%	77.8%		
Median age	33	34	36		
Country of Birth and Indigenous Identification (%)					
Australia born	25.4%	44.7%	57.1%		
Overseas born	74.6%	55.3%	42.9%		
India	36.3%	10.6%	2.7%		
China	4.8%	10.3%	4.7%		

Data item	Westmead	Parramatta LGA	Sydney GCCSA
Sri Lanka	4.2%	1.5%	0.6%
Philippines	2.0%	1.6%	1.6%
Nepal	2.0%	0.5%	0.6%
Aboriginal and /or Torres Strait Islander	0.4%	0.7%	1.5%
Language Spoken at Home (%)			
English only	20.8%	41.7%	58.4%
Indo-Aryan languages	33.1%	22.17%	4.6%
Chinese languages	7.4%	17.0%	7.6%
Arabic	2.4%	3.2%	4.0%
Weekly Household Income (%)			
\$Neg/Nil	1.5%	2.0%	1.9%
\$1-\$149	0.5%	0.7%	0.7%
\$150-\$299	1.9%	1.8%	1.8%
\$300-\$399	2.7%	2.2%	2.4%
\$400-\$499	3.5%	4.3%	4.9%
\$500-\$649	2.6%	3.2%	3.4%
\$650-\$799	4.0%	5.1%	5.5%
\$800-\$999	4.4%	5.3%	5.4%
\$1,000-\$1,249	6.3%	7.3%	6.9%
\$1,250-\$1,499	6.7%	7.1%	6.5%
\$1,500-\$1,749	8.1%	6.5%	5.7%
\$1,750-\$1,999	8.1%	6.3%	5.5%
\$2,000-\$2,499	16.7%	12.8%	11.1%
\$2,500-\$2,999	8.2%	8.0%	7.1%
\$3,000-\$3,499	5.8%	5.6%	5.1%
\$3,500-\$3,999	4.8%	4.9%	5.3%
\$4,000 plus	6.3%	8.5%	1.1%
Median Household Income	\$1,866	\$1,532	\$1,750
Housing Status (%)			

Data item	Westmead	Parramatta LGA	Sydney GCCSA		
Owner	10.4%	24.6%	29.1%		
Purchaser	21.1%	30.5%	33.2%		
Renter	64.7%	41.4%	34.1%		
Public Renter	8.3%	5.4%	4.8%		
Private Renter	54.4%	35.9%	29.3%		
Households in Mortgage Stress (% Households)	4.9%	8.4%	8.4%		
Loan Mortgage Repayments (monthly \$)	\$2,000	\$2,167	\$2,167		
Households in Rental Stress (% Households)	18.4%	15.5%	14.2%		
Rent Payments (weekly \$)	\$430	\$440	\$440		
Car Ownership (%)					
0 Cars	16.3%	10.6%	11.1%		
1 Car	55.2%	41.4%	36.3%		
2 Cars	20.8%	32.9%	32.8%		
3+ Cars	3.9%	12.2%	15.7%		
Household Structure (%)					
Family Households	75.5%	75.3%	73.6%		
Non-Family Households	24.5%	24.7%	26.4%		
Group	4.6%	4.7%	4.7%		
Lone Person	19.8%	20.1%	23.8%		
Family Composition (%)					
Couple family with no children	28.2%	32.9%	33.4%		
Couple family with children	61.1%	52.2%	49.5%		
One parent family	8.3%	13.0%	15.2%		
Other family	2.4%	1.9%	1.8%		
Labour Force (%) (from 2011 Census data)					
% Unemployed	7.5%	7.0%	5.7%		
Labour Force Participation	65.0%%	73.0%	65.6%		
Occupation (%) (from 2011 Census data)					

Data item	Westmead	Parramatta LGA	Sydney GCCSA		
Professionals	36.6%	25.9%	26.0%		
Clerical & Administrative Workers	15.7%	17.3%	16.5%		
Technicians & trades workers	9.3%	12.5%	12.4%		
Labourers	8.2%	8.2%	7.5%		
Managers	7.8%	10.6%	15.5%		
Sales Workers	7.5%	8.7%	9.2%		
Community & Personal Service Workers	7.2%	8.3%	9.0%		
Machine Operators & Drivers	5.5%	6.2%	5.8%		
White Collar (%)	74.8%	70.8%	74.3%		
Blue Collar (%)	25.2%	29.2%	25.7%		
Tertiary Education (%) (from 2011 (Census data)				
Bachelor Degree or Higher	34.0%	20.2%	24.1%		
Advanced Diploma or Associate Degree	8.0%	8.3%	9.0%		
Undertaking Tertiary Education	5.9%	5.6%	6.5%		
Highest Level of Schooling Achieve	ed (%)				
Year 8 or Below	2.6%	2.6%	4.0%		
Year 9 or Equivalent	1.9%	2.9%	3.8%		
Year 10 or Equivalent	6.8%	11.7%	16.6%		
Year 11 or Equivalent	1.6%	3.0%	4.0%		
Year 12 or Equivalent	74.8%	70.4%	62.1%		
Did not go to School	1.4%	1.3%	1.4%		
Dwelling Structure (%)					
Separate House (%)	17.0%	45.7%	56.9%		
Semi-detached (%)	11.3%	15.2%	14.0%		
Flat, Unit or apartment (%)	70.8%	38.4%	28.1%		
Other dwelling (%)	0.0%	0.3%	0.6%		



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