

Crime Prevention Through Environmental Design

Irrawang High School

Rev A

21/11/2022

SINSW Tranche H #13690

School Infrastructure NSW



The APP Group

1. Introduction

The purpose of this report is to identify and assess crime risk associated with the proposed school upgrade at Irrawang High School, located at 80 Mount Hall Road, Raymond Terrace, NSW 2324 and to identify proactive and preventative 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, Industry and Environment.

CPTED is a crime prevention strategy that focuses on the planning, design and structure of cities and neighbourhoods. It reduces opportunities for crime by using design and place management principles that reduce the likelihood of essential crime ingredients from intersecting in time and space.

There are four CPTED principles that need to be considered when designing developments:

- + Surveillance;
- + Access control;
- + Territorial reinforcement; and
- + Space management.

This report considers these principles, in the context of the proposed development and the surrounding locality at Raymond Terrace.

2. Proposal

The proposal includes the following:

- + A new Learning Hub containing 8 new future-focused general learning spaces and 6 new learning support classes including new Emotional Disorder (ED) and Behavioural Disorder (BD) support classrooms.
- + Refurbishment and extension of the library to align to the core requirements.
- + Relocation of 2 demountables and removal of 9 at the end of the project.
- + Relocation of 1 modular building (Block L).
- + New external road works and SLS pick-up/drop-off zones.

Local Context

Irrawang High School is situated within the Port Stephens Local Government Area (LGA) in the township of Raymond Terrace and is located near Hunter River High School. Irrawang High School had enrolment of 1,011 students in 2020 and attracts students primarily from Medowie, and Wirreanda Public Schools in Medowie and Irrawang and Grahamstown Public Schools in Raymond Terrace.

The site is roughly in a rectangular shape with a total site area of 6.73 ha. Access to Irrawang HS is currently focused on Mount Hall Road with staff parking, bus services, Kiss and Drop as well as pedestrian demands occurring along the southern frontage of the school.

2.1. Crime Statistics

The crime statistics for the area have been sourced from the NSW Bureau of Crime Statics and Research (BOCSAR).

Data for the Port Stephens Local Government Area (LGA) indicates the following:

- + Incidents of robbery in the Port Stephens LGA are currently lower than the state average, however due to the rate decreasing and then increasing, no change has been observed over the last 5 years;
- + Incidents of theft in Port Stephens have been stable for the last five years;
- + 5.1% of incidents of theft are at licensed premises and 4.3% in car parks;
- + Incidents of malicious damage are higher than the NSW state average but have been down 4.4% per year for the past five years; and
- + Incidents on non-domestic assault in Port Stephens are above state average with 12.4% occurring in a licensed premises and 2.3% occurring in car parks.

Figures 1, 2, 3 and 4 show graphs representing the above data from the BOSCAR mapping system.

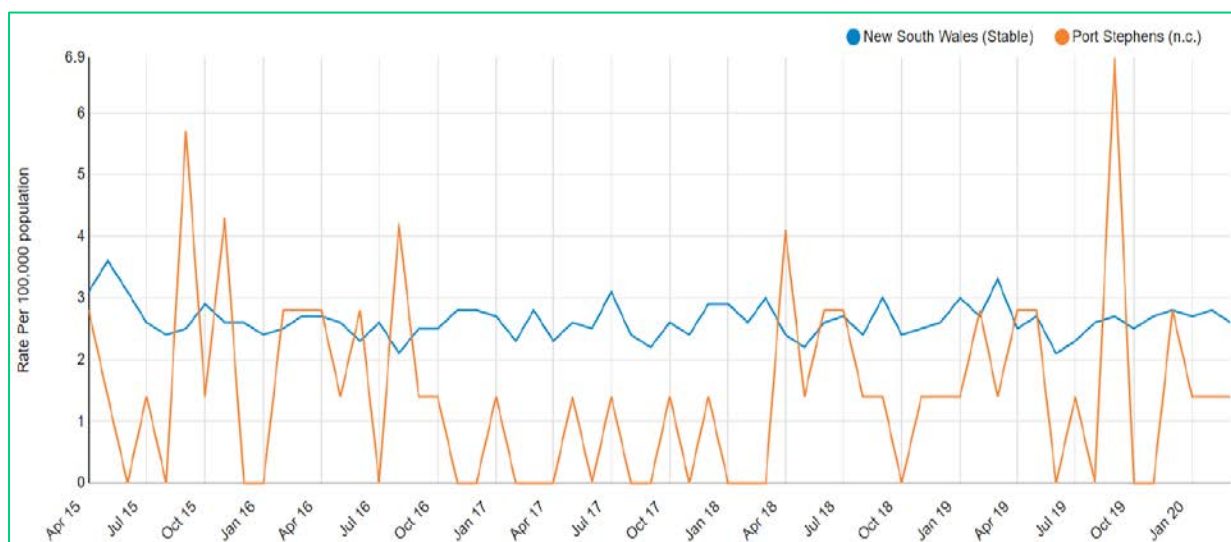


Figure 1 - Recorded Incidents of Robbery in Port Stephens LGA and New South Wales (Source: BOSCAR Mapping)

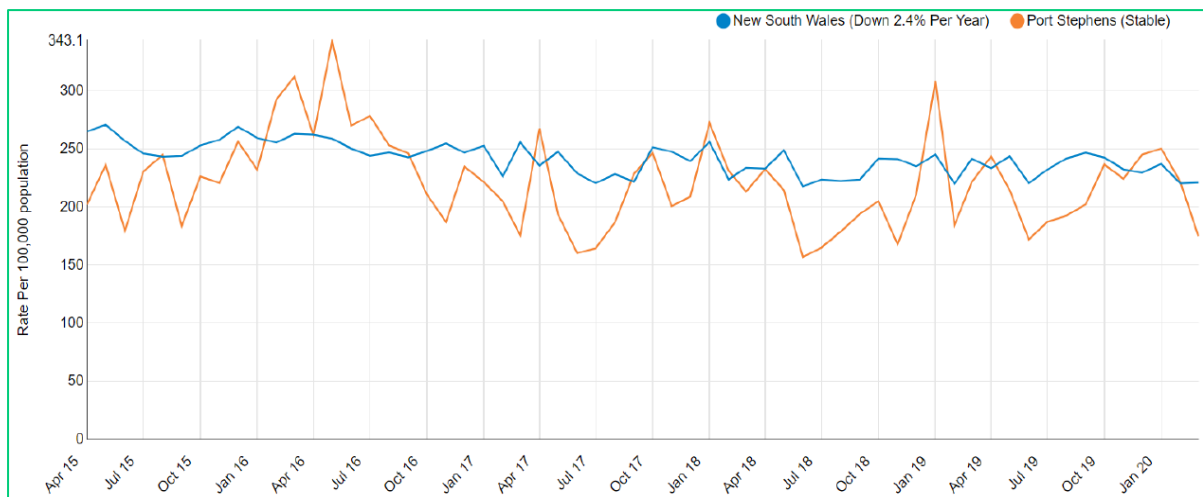


Figure 2 - Recorded Incidents of Theft in Port Stephens LGA and New South Wales (Source: BOSCAR Mapping)

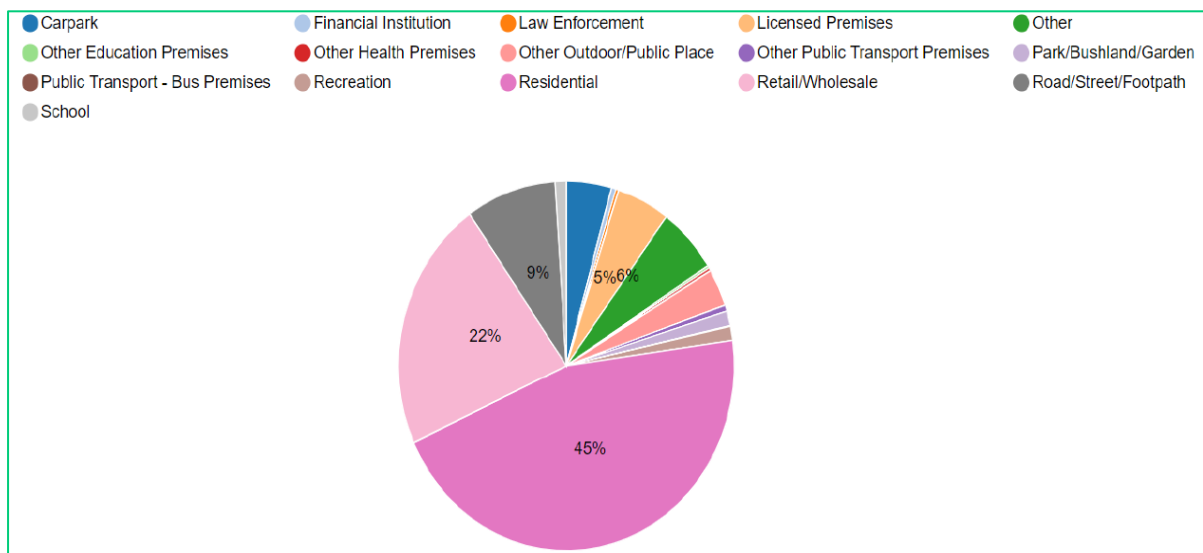


Figure 3 - Recorded Incidents of Theft by Premises Port Stephens LGA (Source: BOSCAR Mapping)

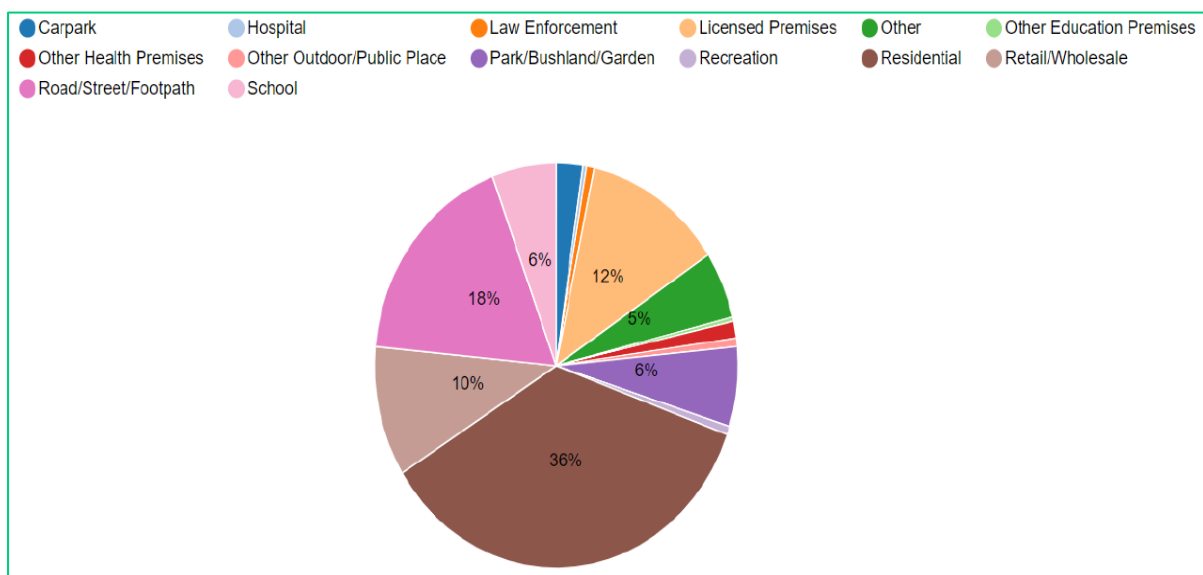


Figure 4 - Recorded Incidents of Assault (non-domestic) by Premise in Port Stephens LGA (Source: BOSCAR Mapping)

3. Assessment Against the CPTED Principles

3.1. Crime Opportunity

Given the statics in the previous section, it is evident that there is an opportunity for crime or anti-social behaviour (e.g. vandalism, graffiti, litter, excessive noise) at the site. The following assessment of the development against the CPTED Principles provides recommendations to further improve the safety and security of the development.

3.2. Surveillance

Surveillance limits the opportunity for crime by increasing awareness that people can be seen. Potential offenders therefore feel increased scrutiny and limitations on their escape routes.

Good surveillance is achieved by:

- a) Clear sightlines between private and public spaces;
- b) Effective lighting of public places; and
- c) Landscaping that makes places attractive, but not a place to hide.

The design of the proposed development affords natural surveillance by the strategic placement of physical features and buildings to maximise visibility within the site. The specific design elements include:

- + Clear sight lines between the site and adjoining streets and businesses, allowing maximum visibility and surveillance at the vehicular entries into the site;
- + The maintenance levels for paths of travel comply with AS1680;
- + Appropriate day and night lighting ensures potential problem areas like carpark and corners are well lit; and
- + No 'hidden spots' created within the site. Any external areas not visible from the building will be captured as required on closed circuit television (CCTV) and this will be signposted within the site. CCTV systems will also be installed in the sick bay clinic (if required for effective supervision from Administration) and the public reception.

Recommendations:

- + Trees and landscaping should be regularly maintained to ensure clear sightlines;
- + Signs should be placed in prominent locations around the building advising that the building is under 24-hour camera surveillance and that any anti-social behaviour will be reported to the NSW Police.
- + Broken light fixtures and bulbs within the premises and car park should be replaced within 24 hours.
- + Routine maintenance checks and reporting should be carried out by personnel employed at the premises to ensure the entire property is maintained and to reduce the likelihood of crime or vandalism. Any vandalism or graffiti should be repaired and removed promptly by staff or contractors.

3.3. Access Control

Access control limits the opportunity for crime by taking steps to clearly differentiate between public space and private space.

Good access control for the movement of people is achieved by:

- a) Landscapes and physical locations that channel and group pedestrians into target areas;
- b) Public spaces that attract rather than discourage people from gathering; and
- c) Restricted access to internal or high risk areas (e.g. car parks).

The existing site has been designed to limit access and control flow by:

- + Lighting of pedestrian pathways and access routes to Australian Standard (AS 1158);
- + The creation of attractive open spaces within the development;
- + Clear delineation of the property boundary with landscape treatment; and
- + Use of landscaping that supports pedestrian access within the site.
- + Fences and gates will comply with Educational Facilities Standards and Guidelines (ESFG) security fence standards (SG242 3.11). They will be the same colour, material, and height as the security fence (minimum 2150 mm) with no climbing points on either side of the fences or gates.

Note: these existing controls are maintained in the proposed redevelopment.

The proposed site will provide the following additional control measures to limit access and control flow:

- + For manual gates, a keyed lock (ES 1-30) which overrides the electronic access control system will be fitted to provide after-hours access for emergency services and facilitate manual operation if there is a power failure.
- + Electronic Access Controls will be installed on any motorised gate, the main visitor entry pedestrian gate (where a security fence is installed), on all elevators (lifts) and to form a secure line at Public Reception which will restrict access to meeting areas, learning spaces and office areas.
- + At least one Passive Infrared sensor with walk test input will be installed in all new rooms, internal corridors, and stairways.
- + Hard-wired reed switches will be fitted to all doors leading to external areas.
- + Screamers will be provided in each block.
- + Electric strike locks will be used on doors instead of magnetic locks. | 7

Recommendations:

- + Regular maintenance of landscaping and pathways to ensure the area encourages use by customers.

3.4. Territorial Reinforcement (Community Ownership)

Territorial reinforcement promotes social control through increased definition of space and improved proprietary concern, i.e. it makes the normal user feel safe and makes the potential offender aware of a substantial risk of apprehension or scrutiny. By using buildings, fences, pavement, signs, lighting and landscape to express ownership and define public, semi-public and private space, natural territorial reinforcement occurs.

Community ownership (territorial reinforcement) makes people feel comfortable in a place and is achieved by:

- a) A design that encourages people to gather in public spaces;
- b) Having a clear transition between boundaries of public and private spaces; and
- c) Having clear design cues as to who is to use the space and what it is to be used for.

The proposed development has been designed to clearly delineate spaces that are to be used for congregation and areas that are not. This will ensure that any potential intruders or people who are not students or staff will stand out and be easily identified. Elements of territorial reinforcement include:

- + The premises and landscaping is maintained such that it communicates an alert and active presence occupying the space;
- + Clearly defined boundaries of the site;
- + Provision of directional signage that assists in controlling activities and movements throughout the premises (knowing how and where to enter/exit and find assistance can impact on safety);
- + Appropriate landscaping treatments; and
- + Display of security system signage at access points.

Recommendations:

- + Ensure that all access points are legible and inviting and that proposed wayfinding signage is installed in appropriate locations.

3.5. Space and Activity Management

Space and activity management strategies such as site maintenance, target hardening, and target removal are included in the development.

3.5.1. Maintenance

Management and maintenance are closely linked to a sense of ownership. Good management and maintenance of a place, or property, is often the difference between it seeming safe or unsafe and it being

cared for or uncared for. Deterioration indicates less control by the users of a site and indicates a greater tolerance of disorder.

It is in the interest of the school to maintain the site to a high standard so it can operate at an optimal level and attract as much usage as possible. Routine maintenance checks and reporting shall be carried out by personnel employed to ensure the property is maintained and to reduce the likelihood of crime or vandalism.

Furthermore, robust materials should be used where possible including graffiti resistant materials and fixed rubbish bins to mitigate against potential malicious damage. Any vandalism or graffiti should be repaired and removed promptly by staff or contractors.

As stated above, the proposed landscaping is designed not to create pockets or enclosures whereby victims could be entrapped but to help integrate the built form into the site and surrounds. The proposed landscaping scheme avoids vegetation that impedes the effectiveness of outdoor lighting and allows for good sightlines without areas for concealment.

3.5.2. Target Hardening and Removal

Target hardening and removal is the use of 'design out crime' strategies to make it harder for a crime to be committed and reduces the gains of crime. While this is the most long-established and traditional approach to crime prevention, it can create a 'fortress mentality' and imagery whereby users of the development withdraw behind physical barriers and the self-policing capacity of the built environment is damaged. This is effectively working against CPTED strategies that rely on surveillance, territoriality, and positive image management.

The proposal includes the use of some physical barriers associated with target hardening; however, overall the site allows opportunities for natural surveillance from within the site, with clearly defined boundaries, and allows opportunities for natural access control. The site design has ensured that there is a safe environment for students, staff, and visitors within the site.

4. Conclusion

The above assessment of the proposed upgraded Irrawang High School, in accordance with the CPTED principles, confirms the proposal can be managed to minimise the potential risk of crime. The proposal will incorporate appropriate night lighting, car park design, site and building layout and landscaping as well as security devices to assist in crime deterrence and prevention.

Implementation of the above-mentioned measures into the design of the proposal will create an environment that will dissuade offenders from committing crimes by manipulating the built environment in which those crimes proceed from or occur.

The proposal is considered to be consistent with the Department of Planning, Industry and Environment (former Department of Urban Affairs and Planning) Crime Prevention and the Assessment of Development Applications, 2001.



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