Crime Prevention Through Environmental Design (CPTED) Report

Multi-Trades and Digital Technology Hub
TAFE Meadowbank

On behalf of
TAFE NSW

October 2019

mecone

Project Director

Adam Coburn

Project Planners

Addison Boykin
Luke Zajac

*This document is for discussion purposes only unless signed and dated by project director.

Contact

mecone

Table of Contents

Appendices

Appendix 1: NSW Police Force CPTED Guideline Assessment

1   Introduction

This Crime Prevention Through Environmental Design (CPTED) report has been prepared on behalf of TAFE NSW and supports a State Significant Development application (SSDA) submitted to the Department of Planning, Industry and Environment (DPIE) for a proposed Multi-Trades and Digital Technology Hub at TAFE Meadowbank.

1.1   Report Purpose

The purpose of this report is to assess the proposal in terms of the key principles of CPTED and to provide recommendations that can be considered as part of detailed design for the site.

This report responds to the Secretary's Environmental Assessment Requirements (SEARs) for the project (described further below). It has been prepared with regard to the following documents:

- Crime prevention and the assessment of development applications – Guidelines under section 79C [now 4.15] of the Environmental Planning and Assessment Act 1979 (Department of Urban Affairs and Planning, 2001);
- "Safer by design – Crime Risk Assessment' (NSW Police Force, 2016); and
- Companion to Safer by Design Crime Risk Assessment (NSW Police Force).

The assessment undertaken in this report is based on drawings prepared by Gray Puksand dated 23 August 2019 and is informed by a site visit undertaken on 29 August 2019.

1.2   SEARs

This CPTED report responds to the Secretary's Environmental Assessment Requirements (SEARs) for the project re-issued on 28 August 2019. The table below outlines the SEARs requirements regarding CPTED.

Items 2 and 4 are addressed in this report. It is assumed that Item 7 is addressed in the separate the transport and accessibility impact statement submitted with the application.

Table 1. SEARs CPTED Requirement	
SEAR heading	SEAR content
2. Policies	Address the relevant planning provisions, goals and strategic planning objectives in the following: […] • Crime Prevention Through Environmental Design Principles
4. Built Form and Urban Design	• Address CPTED Principles
7. Built Form and Urban Design	Include a transport and accessibility impact statement, which details, but not limited to the following:

Table 1. SEARs CPTED Requirement	
	[...]
	• An assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED

1.3   Report Structure

The structure of this report is as follows:

- Chapter 1 introduces the report;
- Chapter 2 identifies the site and context;
- Chapter 3 provides an overview of the proposal;
- Chapter 4 provides an overview of crime in the area
- Chapter 5 provides a discussion of the development in the context of CPTED principles and provides recommendations for future implementation;
- Chapter 6 discusses relevant local policies; and
- Chapter 7 concludes the report.

Additionally, an assessment against the NSW Police Force CPTED Checklist is provided at Appendix 1.

2   Site Analysis

2.1   Location and Context

The site is located in the TAFE NSW Meadowbank Campus in the suburb of Meadowbank in the City of Ryde local government area (LGA), approximately 5km southwest of Macquarie Park, 8km northeast of the Parramatta central business district (CBD) and 12km northwest of the Sydney CBD.

The campus is approximately 6.16ha in area and comprises a single lot— Lot 11 in DP1232584. The campus is positioned approximately 200m southwest of Victoria Road, 425m north of Parramatta River and immediately adjacent Meadowbank Station as shown in the local context map below.
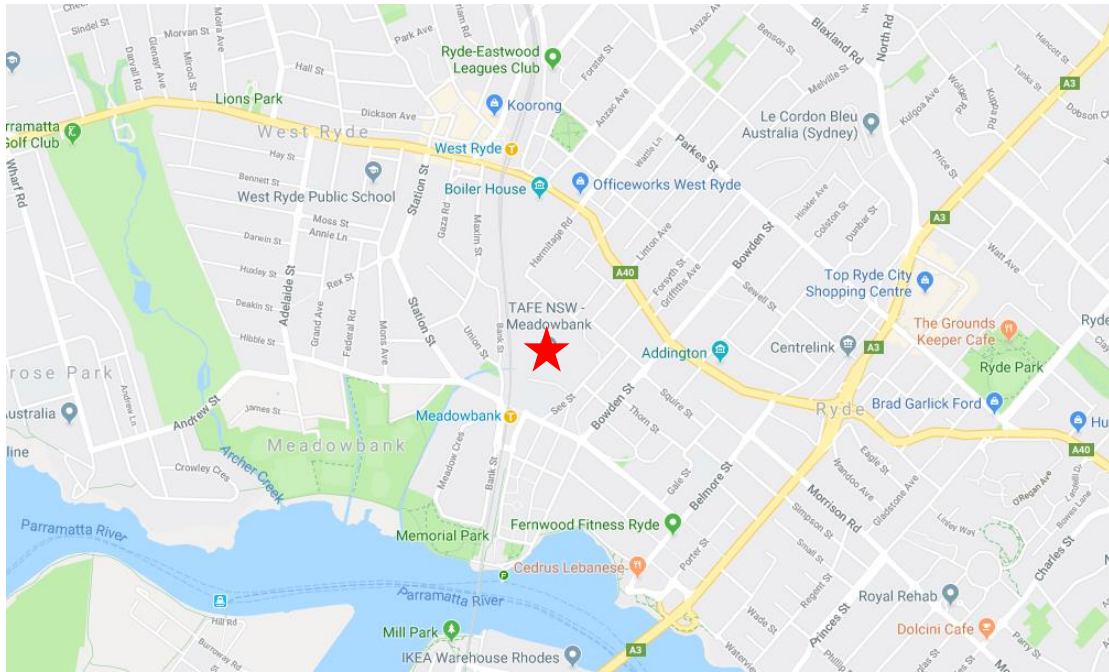
Figure 1: Local context map
Source: Google

The campus is bordered by Constitution Road, to the south, See Street to the east, McPherson Street and Rhodes Street to the north, and a rail corridor to the west.

The campus is occupied by a number of buildings of varying heights and design, public domain, recreational spaces and car parking areas.

Within the campus, the development site area is located along the north-eastern edge of the campus in the location of the current at-grade car park, as identified by the red outline below.

Figure 2: Site aerial photograph
Source: Mecone Mosaic

Photographs of the site are provided below.

Figure 3: Existing car park entry off See Street
Source: Mecone, August 2019

Figure 4: Existing car park looking south
Source: Mecone, August 2019

Figure 5: Existing child care centre on site (to be demolished)
Source: Mecone, August 2019

Figure 6: Footpath along south edge of site, looking west to towards Building P
Source: Mecone, August 2019

Figure 7: Interface between car park and Building P looking south
Source: Mecone, August 2019

2.2   Surrounding Development

To the north, the site is bordered by a zone substation, and beyond the substation across MacPherson Street is a low-density residential area generally containing one- to two-storey dwelling houses. Further to the northwest is an industrial area containing large floorplate warehouse-type development.

To the south, the site is bordered by campus buildings, namely Buildings F and G.

To the east, the site is bordered by See Street, and on the opposite side of See Street is a low-density residential area generally containing one- to two-storey dwelling houses.

To the west, the site is bordered by other campus development. However, TAFE recently divested this area to the Department of Education for the development of a new K-12 school.

Photographs of surrounding development are provided below.

Figure 8: Adjoining Building P entry off car park
Source: Mecone, August 2019

Figure 9: Adjoining substation seen from See Street
Source: Mecone, August 2019

Figure 10: See Street streetscape looking north
Source: Mecone, August 2019

3   Proposed Development

The SSDA seeks approval for a new Construction and Buildings Trade Facility (Multi-Trades Hub) at the TAFE NSW Meadowbank Campus. The building will include:

- A gross floor area (GFA) of approximately 14,000m_2 to accommodate various learning spaces, workshop areas and digitally enabled spaces; and

- 200 basement car parking spaces and loading dock accessed from See Street.

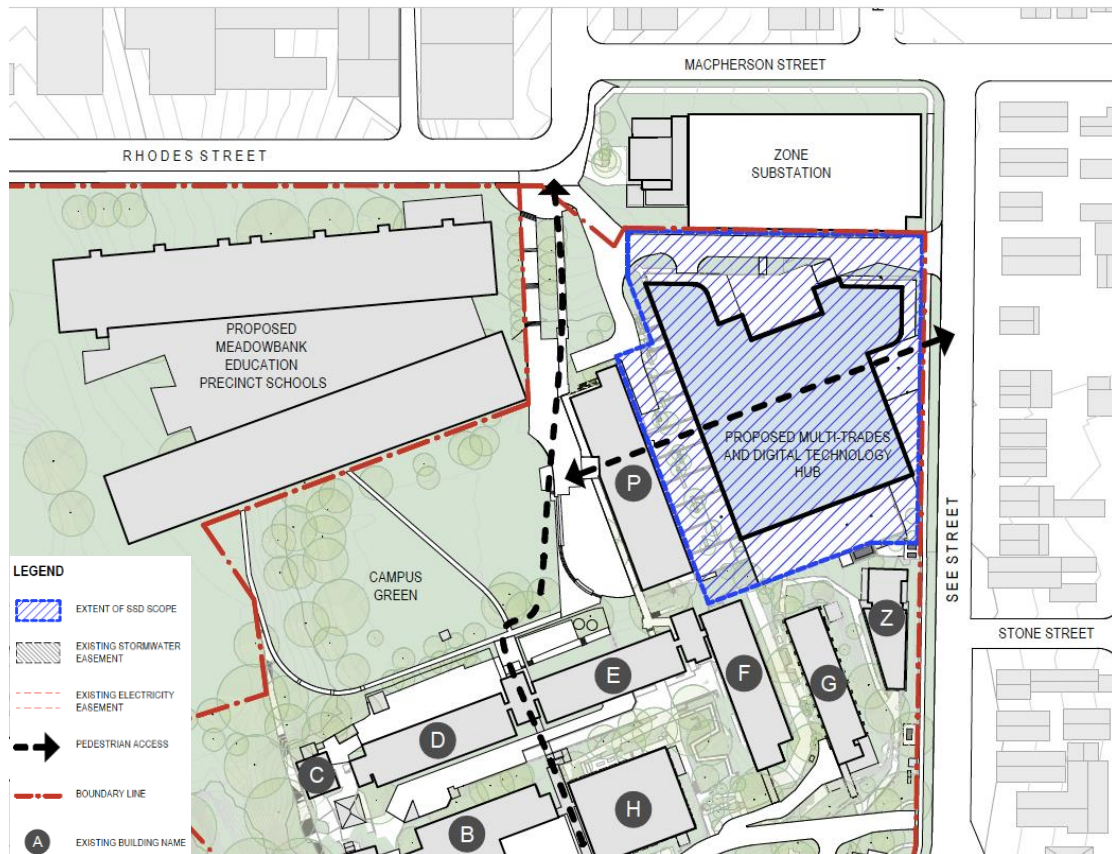Images of the proposed development are provided below.
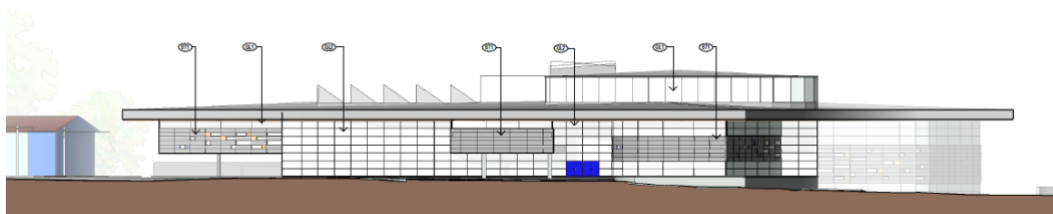

Figure 11: Proposed Site Plan
Source: Gray Puksand

Figure 12: Proposed East Elevation
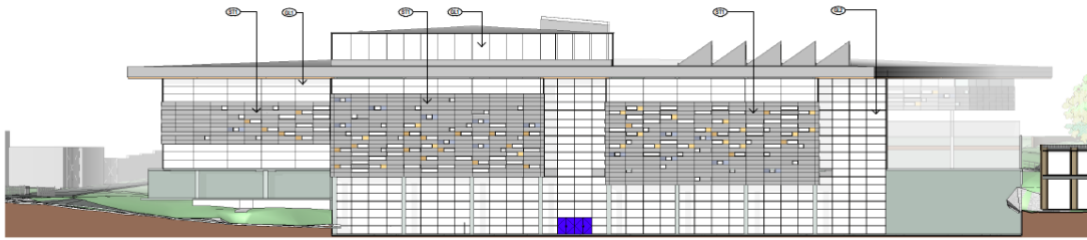*Source: Gray Puksand*

Figure 13: Proposed South Elevation
Source: Gray Puksand

4   Crime Profile

Table 2 provides a breakdown of major crime rates in the suburb of Meadowbank based on data from the NSW Bureau of Crime and Statistics and Research (BOSCAR).

The table shows the quantity of incidents recorded over the past year (March 2018 to March 2019) as well as the incident rate ratio of Meadowbank-to-NSW crime rates (with the NSW rate equivalent to 1).

The crime figures discussed in this section of the report are only those crimes that have been recorded by NSW Police and as such cannot be seen to represent all crimes committed in the area. Also, levels of reported crime are sensitive to a range of factors, such as the willingness or ability of people to report a criminal activity and the levels and nature of police activity.

Table 2. Meadowbank Suburb Crime Overview – 2018 to 2019		
Offence Type	Number of incidents	Meadowbank-to-NSW incident rate ratio
Assault – domestic violence related	18	1:1
Assault – non-domestic violence	6	0.3:1
Indecent assault, act of indecency and other sexual offences	5	1:1
Robbery without a weapon	1	1.1:1
Robbery with a firearm	1	9.6:1
Robbery with a weapon not a firearm	0	0:1
Break and enter dwelling	15	1:1
Break and enter non-dwelling	4	0.7:1
Motor vehicle theft	3	0.4:1
Steal from motor vehicle	10	0.4:1

Table 2. Meadowbank Suburb Crime Overview – 2018 to 2019		
Steal from retail store	3	0.2:1
Steal from dwelling	11	1:1
Steal from person	2	0.8:1
Fraud	22	0.7:1
Malicious damage to property	24	0.7:1

Compared to the rest of NSW, the suburb of Meadowbank generally has lower crime rates.

(Note: The extreme ratio for robbery with a firearm reflects the small population of the suburb rather than the frequency of the incident (one incident only)).

The most commonly occurring offences over the past year (i.e., those with at least 10 reported incidents) were:

- Malicious damage to property;
- Fraud
- Domestic assault;
- Break and enter dwelling;
- Steal from dwelling; and
- Steal from motor vehicle.

There is no meaningful data on trends at the suburb level, but the Ryde LGA data shows that the large majority of major crime rates in the LGA have been stable over the previous two-year period.

As shown in the images below, BOSCAR data indicates that the site is located within or on the periphery of a "hotspot" for the following crimes:

- Robbery (all types);
- Break and enter dwelling;
- Break and enter non-dwelling;
- Motor vehicle theft;
- Steal from motor vehicle;
- Steal from dwelling; and
- Malicious damage to property.

Hotspots indicate areas of high crime density (number of incidents per 50m x 50m) relative to crime concentrations across NSW. It should be noted that hotspots are common to medium to high density urban areas and do not necessarily indicate a need for extraordinary design responses.

It is noted that there are no pubs or licensed premises in the immediate vicinity, which reduces the risk of public order incidents.

Figure 14: Hotspot map – robbery (all types)
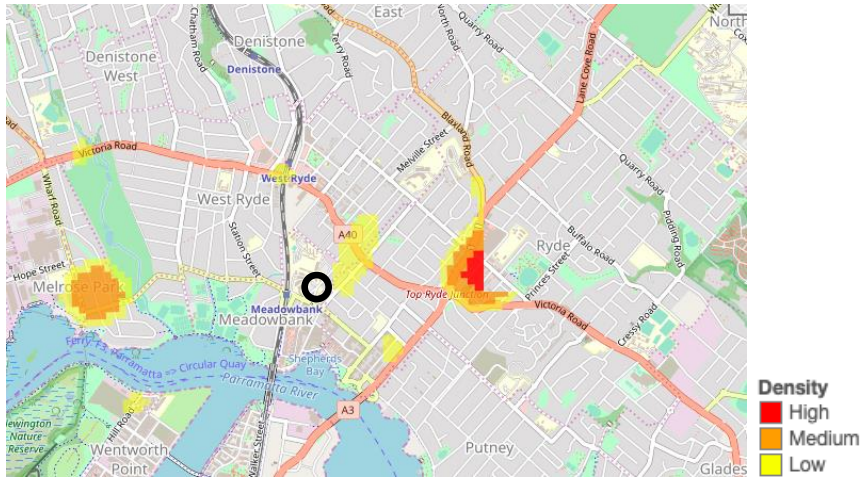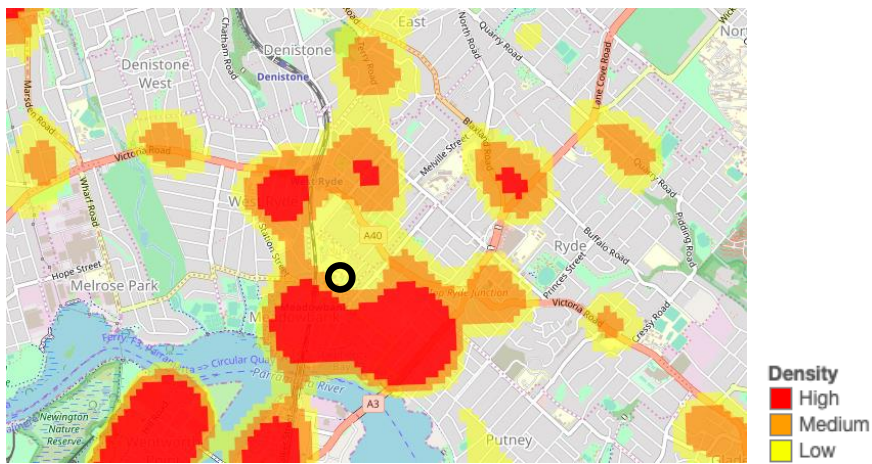*Source: BOSCAR*

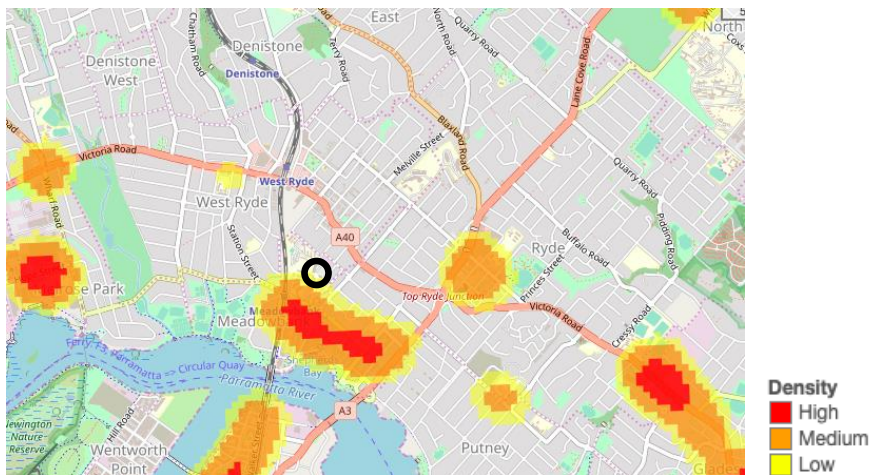**Figure 15:** Hotspot map – break and enter dwelling
Source: BOSCAR

Figure 16: Hotspot map – break and enter non-dwelling
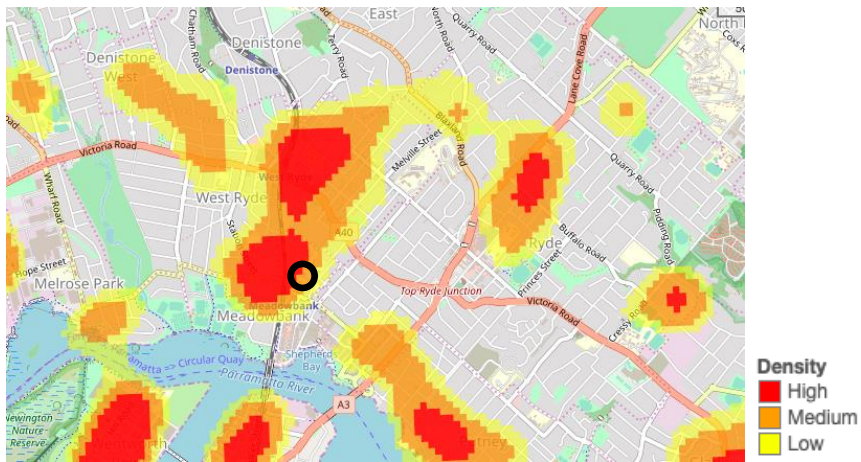*Source: BOSCAR*

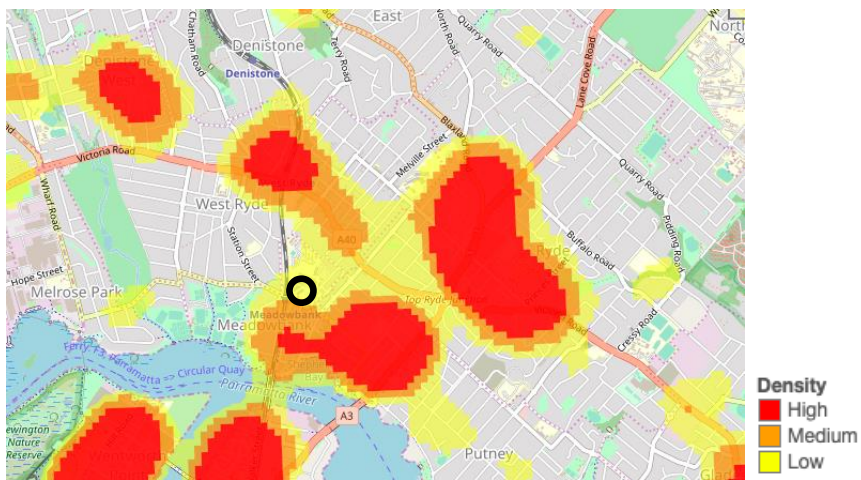**Figure 17:** Hotspot map – motor vehicle theft
Source: BOSCAR

Figure 18: Hotspot map – steal from motor vehicle
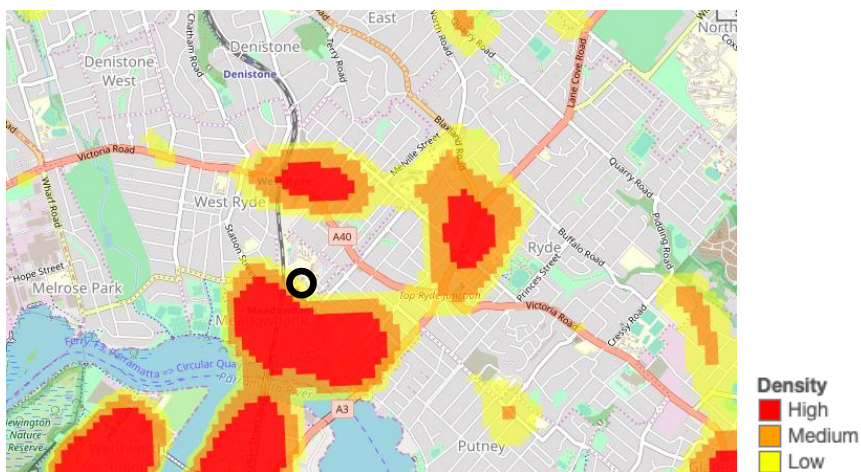*Source: BOSCAR*

Figure 19: Hotspot map – steal from dwelling
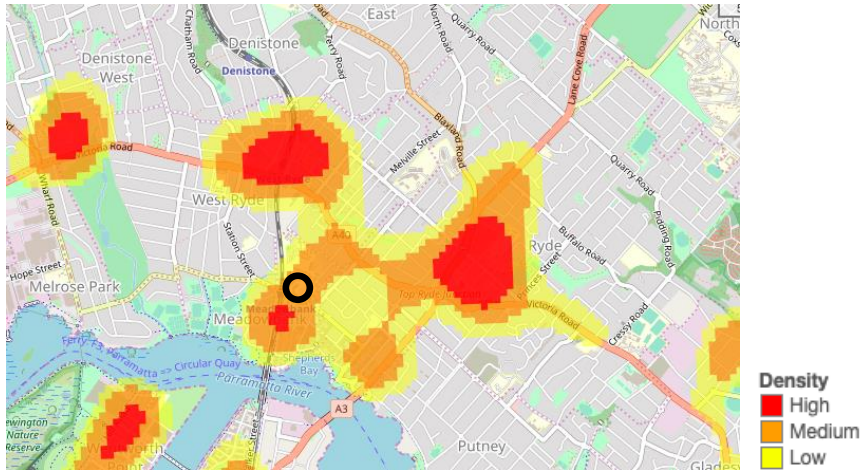*Source: BOSCAR*

Figure 20: Hotspot map – malicious damage to property
Source: BOSCAR

Overall, the crime data for the suburb of Meadowbank and Ryde LGA point to a **stable, relatively low-incident crime environment**.

5 CPTED Principles

This report utilises the principles of CPTED, which are based on a situational approach to crime prevention that seeks to minimise the risks for possible crime offences to occur. This is achieved by:

- Increasing the possibility of detection, challenge and capture;
- Increasing the effort required to commit crime;
- Reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'; and
- Removing conditions that create confusion about required norms of behaviour.

Notwithstanding, this report and approach acknowledge that any design strategy cannot operate effectively in isolation and is just one element of a broader approach to a crime prevention strategy that includes social and community inputs and complementary strategies.

There are four key CPTED principles laid out in the CPTED guidelines:

- Natural surveillance;
- Access control;
- Territorial re-enforcement; and
- Space management.

The following subsections discuss these principles in greater detail in the context of the proposed development. Additionally, an assessment against the NSW Police Force CPTED Checklist is provided at Appendix 1.

5.1 Natural Surveillance

NSW police defines natural surveillance as follows:

Natural surveillance is achieved when normal space users can see and be seen by others. This highlights the importance of building layout, orientation and

location; the strategic use of design; landscaping and lighting – it is a by-product of well-planned, well-designed and well-used space.

Natural surveillance is achieved by:

- Orienting buildings, windows, entrances and exits, car parks, rubbish bins, walkways, landscape trees and shrubs, in a manner that will not obstruct opportunities for surveillance of public spaces;

- Placing persons or activities to maximise surveillance possibilities; and

- Providing lighting for night-time illumination of car parks, walkways, entrances, exits and related areas to promote a safe environment.

5.1.1 Evaluation

Our review of the plans indicates the following in relation to natural surveillance:

- The building is oriented generally parallel to See Street, providing opportunity for surveillance of the street.

- The building provides glazed facades on all elevations that allow for good natural surveillance of the entries, surrounding campus and public domain.

- Uses within the building are positioned such that there will be ongoing activity throughout all areas of the building, providing ongoing opportunity for overlooking of the surrounding areas.

- The See Street frontage will contribute to an attractive, animated streetscape that will encourage pedestrian activity and help create natural community policing.

- The western building entry is located directly opposite from, and will be overlooked by, the adjoining Building P.

5.1.2 Recommendations

- Entries and the car park should be illuminated during night-time in accordance with the relevant standards.

- CCTV at entries and in the car park should be considered.

- Landscaping should utilise low level shrubs interspersed with canopy trees to allow for sightlines at eye-level and to minimise opportunities for hiding.

- Trees should be maintained by a regular maintenance plan that keeps good sightlines to the building entries.

5.2 Territorial Re-Enforcement

NSW Police defines territorial re-enforcement as follows:

Territorial re-enforcement uses actual and symbolic boundary markers, spatial legibility and environmental cues to 'connect' people with space, to encourage communal responsibility for public areas and facilities, and to communicate to people where they should/not be and what activities are appropriate.

Territorial enforcement is achieved by:

- Enhancing the feeling of legitimate ownership by reinforcing existing natural surveillance and natural access control strategies with additional symbolic or social ones;

- Designing space to allow for its continued use and intended purpose; and

- Using landscaping, pavement finishes, art, screening and fences to define and outline ownership of space.

5.2.1 Evaluation

Our review of the plans indicates the following in relation to territorial re-enforcement:

- The development has been designed for a specific purpose as a TAFE building with learning spaces and communal areas.

- The building provides a strong and defined street wall to See Street, which will serve to demarcate the building from the public domain.

- The building entries are located and designed to be easily identifiable:

  o The See Street entry is centrally located along the street frontage and indented, providing a strong visual cue.

  o The western entry is centrally located along the façade and positioned directly across from the Building P entrance, resulting in a continuous path of travel and direct sightlines between the two buildings.

- It is anticipated that building entries will be marked with signage.

- The development's materials and finishes will distinguish the development from the surrounding public domain.

5.2.2 Recommendations

- The building should incorporate appropriate entry signage and way-finding signage.

- The development should incorporate distinctive paving and landscaping to serve as transition cues to alert people they are moving between the public domain and TAFE campus.

5.3 Access Control

NSW Police defines access control as follows:

Access control treatments restrict, channel and encourage people and vehicles into, out of and around the development. Way-finding, desire-lines and formal/informal routes are important crime prevention considerations. Effective access control can be achieved by using physical and symbolic barriers that channel and group pedestrians into areas, therefore increasing the time and effort required for criminals to commit crime.

Access control is achieved by:

- Using footpaths, pavement, lighting and landscaping to clearly guide the public to and from entrances and exits; and

- Using of gates, fences, walls, landscaping and lighting to prevent or discourage public access to or from dark or unmonitored areas.

5.3.1 Evaluation

Our review of the plans indicates the following in relation to access control:

- The building limits pedestrian entry to two primary locations—a western entry across from Building P and an eastern entry off See Street. These limited entries will serve to channel people into the desired lobby areas.

- The building entries are positioned to allow clear and direct access to the surrounding pedestrian network.

- The single driveway off See Street formalises vehicular movements into and out of the site.

- It is anticipated that appropriate signage will direct pedestrians to the entries.

5.3.2 Recommendations

- The carpark should incorporate boom gates and access control devices.

- The loading yard should also incorporate security gate.

- Fire exit doors should be fitted with measures to restrict unauthorised access from the outside.

- All areas should be fitted with doors that comply with relevant Australian Standards.

5.4 Space/Activity Management

NSW Police defines space/activity management as follows:

Space/Activity Management strategies are an important way to develop and maintain natural community control. Space management involves the formal supervision, control and care of the development. All space, even well planned and well-designed areas need to be effectively used and maintained to maximise community safety. Places that are infrequently used are commonly abused. There is a high correlation between urban decay, fear of crime and avoidance behaviour.

Space/activity management is achieved by:

- Ensuring premises are well maintained and cared for; and

- Ensuring rapid repair of vandalism and replacement of lighting.

5.4.1 Evaluation

Our review of the plans indicates the following in relation to space/activity management:

- The building has been designed for a specific purpose as a TAFE building and will be owned and maintained by TAFE.

- It is anticipated that a management plan/strategy will be put into place to ensure proper building maintenance.

5.4.2 Recommendations

- Consideration should be given to the use of graffiti-resistance materials.

- Graffiti management measures should be incorporated into the maintenance plan/strategy for the building. Research has shown that the most effective strategy for reducing graffiti attacks is the quick removal of graffiti within a 48-hour period.

- The building maintenance plan/strategy should also include landscaping to ensure the site displays strong ownership.

- The development should incorporate a robust material palette, particularly for outdoor spaces in order to reduce susceptibility to vandalism and wear and tear.

6 Local Policies

6.1 City of Ryde Crime Prevention Plan

The City of Ryde Crime Prevention Plan (July 2011 to July 2014) was prepared to:

- *Align existing council actions to create a strategic response to crime and promote the key messages of the Plan across Council's strategic planning and business deliverables related to the Plan's outcomes.*

- *Create productive partnerships to achieve a holistic community approach to crime prevention in the City.*

- *Develop a coordinated approach to community ownership of Macquarie Park, including combining and aligning community education, street parties and situational prevention actions by Council and key partners.*

- *Implement best practice place based actions to reduce the rates of crime.*

The plan outlines action plans for specific crimes and specific locations in the LGA. None of the action plans relates directly to TAFE Meadowbank. Notwithstanding, the proposed development aligns with the plan's overall approach in that it promotes a targeted situational approach to crime prevention.

6.2 City of Ryde Graffiti Action Plan

The City of Ryde Graffiti Action Plan (2014-2016) focuses on initiatives to support the strategies of Prevention, Reporting and Redirection, in particular the following Prevention strategy:

The provision of community education programs which seek to educate participants in effective tools to deter graffiti vandalism, including:

o *An education campaign for local businesses and retailers encouraging areas to be maintained, graffiti reported and removed efficiently and vegetation is introduced where possible to reduce access to graffiti prone walls and buildings.*

o *Residents near hotspots on how to report graffiti effectively and ways they can work with Council to improve the situation.*

o *Co-operate with the Crime Prevention Officers, Youth Liaison Officer and School Liaison Officers at NSW Police to implement graffiti information workshops in schools, clearly outlining the consequences of making poor decisions.*

Given the action plan largely relates to provision of community education programs, it is not directly relevant to the proposed development. Notwithstanding, the development generally incorporates anti-vandalism measures by incorporating a variety of materials and finishes and avoiding long expanses of light-coloured solid walls.

7 Conclusion

This CPTED report supports an SSDA submitted to the DPIE for a proposed Multi-Trades and Digital Technology Hub at TAFE Meadowbank.

The proposed development has been evaluated in the context of the four key principles of CPTED and relevant data from BOSCAR.

Section 5 of this report outlines measures that will enable the design and ongoing use of the development to align with those CPTED principles to reduce opportunities for crime. The works/measures identified are minor in scope and can be achieved by means of conditions of consent or otherwise detailed in the Construction Certificate drawings.

This CPTED report demonstrates that the proposed multi-trades hub at TAFE Meadowbank will promote casual surveillance of the public domain and campus, further activate the area and provide appropriate security measures to ensure the safety of students and broader public.

Given the above, we conclude that the development is acceptable from a crime risk perspective.

NSW Police CPTED Guideline Assessment		
Standard	Provisions	Compliance
Natural Surveillance	Openings in buildings are located and designed to overlook public places to maximize casual surveillance.	Entry points are visible and clearly distinguishable.
	The main entry to a building should face the street.	The main entry faces See Street. A secondary entry faces inwards towards the campus, but this is considered acceptable given the nature of the land use and large site area.
	An external entry path and the foyer to a building must be direct to avoid potential hiding places.	Paths provide no opportunity for potential hiding places and its integrated into the development.
	Entry lobby areas to and from car parking areas should be transparent allowing viewing into and from these areas.	Entrances to lobby areas are clearly defined and generally transparent.
	Landscaping must not conceal the front door to a building when viewed from the street	Able to be implemented.
	Pedestrian access should be well lit and maximize sight lines.	Pedestrian access paths are direct and provide sight lines into the development.
	Landscaping should not inhibit sight lines.	Able to be implemented.
	ATM design and location is within direct view of pedestrian paths so that they can be overlooked from vantage points.	Noted. May be incorporated into detailed design.
	The street number of a building must be visible from the street and made of a reflective material to allow visitors and emergency vehicles to easily	Able to be implemented.

NSW Police CPTED Guideline Assessment		
Standard	Provisions	Compliance
	identify the location of the building.	
	Landscaping should be designed to maximize sight lines.	Able to be implemented.
Measures /security devices	All windows and doors on the ground floor must be made of toughened glass to reduce the opportunities for 'smash and grab' and 'break and enter' offences.	Able to be implemented.
	A security alarm system must be installed in a building.	Able to be implemented.
	Unless impracticable, access to an outdoor car park must be closed to the public outside of business hours via a lockable gate.	Able to be implemented.
	CCTV system must cover all high risk areas and including all entry areas.	Able to be implemented.
Access control	Loading docks in the vicinity of main entry areas are secured outside of business hours.	Able to be implemented.
	Access to a loading dock, or other restricted area in a building must only be accessible to tenants via a security door, intercom, code or other mechanism.	Able to be implemented.
	Clear signage should be erected indicating loading docks and other areas which cannot be accessed by the general public.	Able to be implemented.

NSW Police CPTED Guideline Assessment		
Standard	Provisions	Compliance
Territoriality/ownership	Site planning provides a clear definition of territory and ownership of all private, semi-public and public places.	The site and design make a clear distinction between private and public.
Lighting	Both natural and artificial lighting is used to reduce poorly lit or dark areas and therefore deterring crime and vandalism.	Natural and artificial light will improve visibility of the development, the semi-public spaces and the street.
	Lighting must be provided to the following areas of a building to promote safety and security and night; A – an external entry path, foyer, driveway and car park to a building b- shopfront. This may be in the form of motion sensitive lighting or timer lighting c – the underside of an awning.	Able to be implemented.
	Lift access to a car park that are intended for night use must be well lit using a vandal resistant, high mounted light fixture.	Able to be implemented.
	The lighting in a car park must confirm to Australian Standards 1158.1, 2890.1.	Able to be implemented.
	The use of lighting fixtures, and vandal resistant, high mounted light fixtures, which are less susceptible to damage in the car park and laneway areas.	Able to be implemented.
	Car parking areas should be painted in light colours which will increase levels of illumination.	Able to be implemented.
Vandalism and graffiti	Development minimizes blank walls along all street frontages.	The design avoids long expanses of blank walls and includes articulation and modulation in

NSW Police CPTED Guideline Assessment		
Standard	Provisions	Compliance
		the façade and transparent materials to both express the building and avoid graffiti opportunities. In particular, the development provides an articulated frontage to See Street.