



Arada Development Management Pty Ltd

Crime Prevention through Environmental Design Assessment

Construction of three residential flat buildings and associated landscaping
and parking

2 Fishburn Crescent, Castle Hill

September 2025

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1 Introduction

1.1 Overview

The purpose of this report is to consider the potential crime risk generated by the proposed three residential flat buildings, comprising of 431 apartments and associated basement parking and communal outdoor areas, and to identify proactive and preventative building design measures to minimise opportunities for crime.

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

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

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

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

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

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

1.2 Locality

The subject site is located at 2 Fishburn Crescent, Castle Hill (Lot 1 DP 1316896). This site has been previously occupied by low-density residential development, which is being demolished separately to this application.

The subject site is bordered by four roads, with Carrington Road to the north, Middleton Avenue to the west, Fishburn Crescent to the south, and Sexton Avenue to the east. The site's topography gently slopes down towards the north-west corner of the site. An aerial image of the subject site is provided in **Figure 1** below.



Figure 1: Aerial image of the subject site (Nearmaps, 2025)

The proposed development is located within the suburb of Castle Hill, which is located in the southern portion of The Hills Shire Local Government Area (LGA). The predominant land uses surrounding the site include the following:

- To the north: Hills Showground Station Precinct, which includes the Hills showground, and mixed-use development under construction.
- To the east: Existing low-density residential development, with DA approved high-density residential development, some of which is currently under construction.
- To the south: New high-density residential development, with some areas still under construction. Beyond this is existing low-density residential development.
- To the west: Predominantly existing low-density residential development, and high-density residential development under construction.

It is noted that the surrounding residential area is predominantly zoned for medium-density and high-density residential development and appears to be undergoing a transition from the existing low-density residential development to higher density development. An aerial image of the locality and surrounding land zones are provided in **Figure 2 and 3** below.



Figure 2: Aerial image of the locality (Nearmaps, 2025)

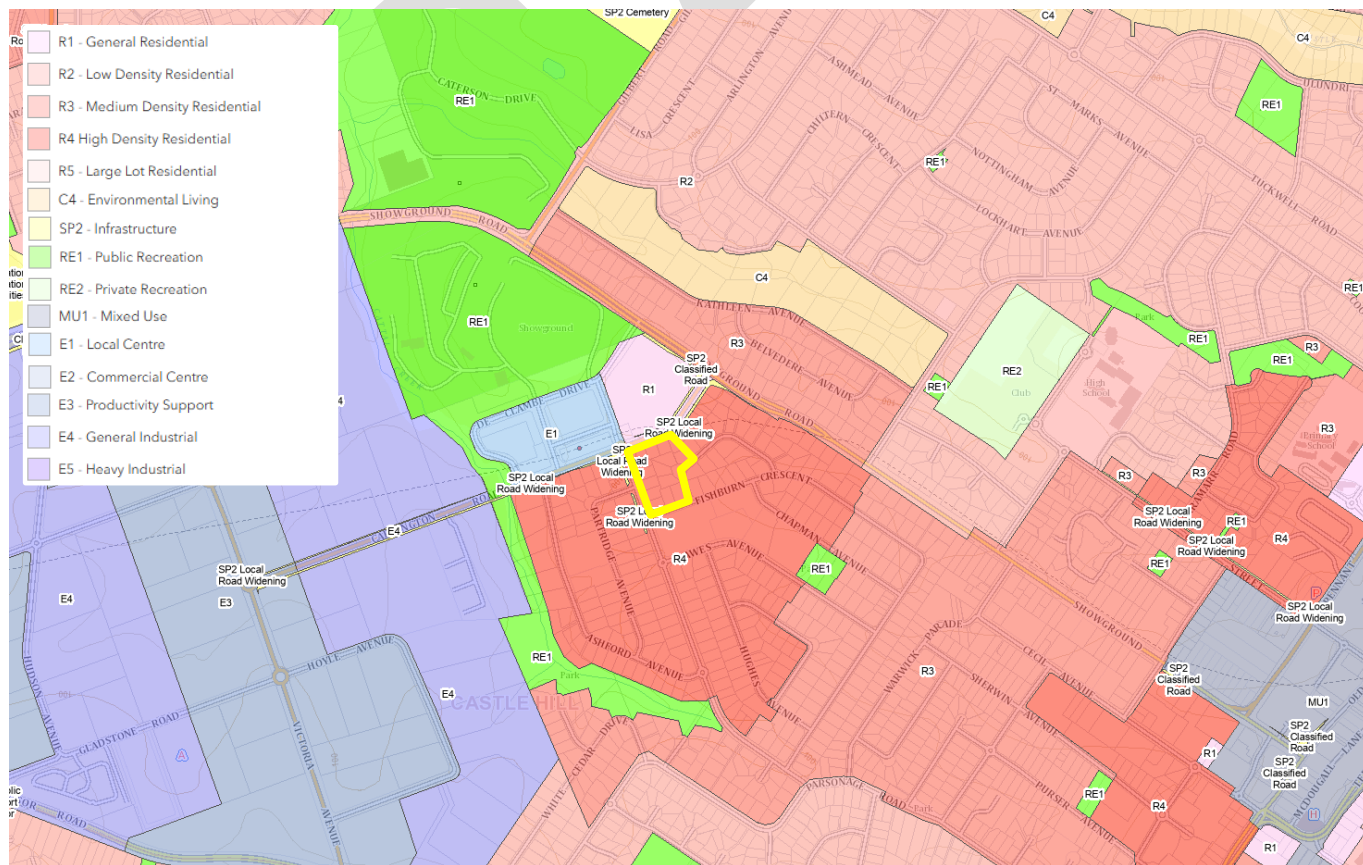


Figure 3: LEP zoning map (NSW ePlanning Spatial Viewer, 2025)

2 Crime Statistics

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

The BOSCAR data ranks crime rates through five levels based on the rates of occurrence per 100,000 people, with highest levels of crime corresponding to the highest rates of occurrence and the lowest levels of crime corresponding to the lowest rates of occurrence. **Table 1** below identifies the crime levels for crimes relevant to residential developments in Castle Hill and The Hills Shire LGA from October 2023 to September 2024.

Table 1: Crime type by location from October 2023 to September 2024 (NSW BOSCAR, 2025)

Level of Crime	Castle Hill	The Hills Shire LGA
Highest level of crime	Nil relevant crimes	Nil relevant crimes
High level of crime	Nil relevant crimes	Drug Offences – Manufacture drug
Medium level of crime	Nil relevant crimes	Robbery without a weapon Theft – Steal from retail store Theft – Steal from dwelling
Low level of crime	Nil relevant crimes	Robbery with a weapon not a firearm Theft – Other theft Drug Offences – Importing drugs
Lowest level of crime	Assault (all categories) Homicide (all categories) Robbery (all categories) Theft (all categories) Malicious damage to property Against justice procedures (all categories) Trespass Drug Offences (all categories) Arson Abduction and Kidnapping	Assault (all categories) Homicide (all categories) Robbery with a firearm Theft – Break and enter dwelling Theft – Break and enter non-dwelling Theft – Motor vehicle theft Theft – Steal from motor vehicles Malicious damage to property Against justice procedures (all categories) Trespass Drug Offences (all categories other than manufacturing and importing) Abduction and Kidnapping Arson

This table shows that the overall crime rate for Castle Hill is consistently very low, even when considering broader categories of crime not directly related to residential development. Comparatively, the crime rate of The Hills Shire LGA is generally low to medium, noting that the higher levels of crime recorded in the LGA

appear to be largely comprised of theft, robbery, or drug offences. Neither Castle Hill nor The Hills Shire LGA are recorded as having the highest levels of any crime relevant to residential development.

Crime "hotspot" mapping is provided in the figures below for key incidents relevant to the proposed residential development. The hotspots indicated where crime occurrences are clustered in particular areas, with the clusters using red, orange, and yellow colours to represent high, medium, and low crime density respectively. This form of crime mapping can be useful in identifying where areas of high crime rates are within larger areas and can be used to help understand the factors that affect the distribution and frequency of crime. The location of the subject site is identified on the hotspot maps by a red star.

It is noted that the hotspot maps discussed below show a trend of higher incident occurrence and density rates around the Castle Towers shopping centre and adjoining Castle Mall shopping centre and the residential areas located around the shopping centres. These areas are located over a kilometre east of the subject site. This suggests that many of the incidents of crime relating to residential development are more frequent or more likely if the residential development is located in close proximity to commercial development. The location of hotspot areas in relation the proposed development and the surrounding area are discussed in more detail below.

2.1 Assault (domestic)

Figures 4 and 5 below show the mapped hotspot areas of assault (domestic) in 2019 and 2024 within Castle Hill. The subject site remains outside of the hotspot areas in 2018/2019 and 2023/2024. These maps show some minor changes in the location of hotspots, particularly in the areas surrounding Castle Hill, but no significant change in the density. It is noted that the hotspot areas within Castle Hill appear to be predominantly located around areas of existing commercial and mixed-use development, such as the existing shopping centre.

Figure 6 provides a graph of incidents of assault (domestic) in Castle Hill and NSW over a five-year period from 2019 to 2024. Over this period, rates of domestic assault in NSW appears to be rising by 4% per year while there is no distinct trend within Castle Hill. The graph shows sporadic incidents of domestic assault in Castle Hill, however the incident rates per 100,000 people remains lower than NSW. Spikes in the incident rate of Castle Hill appear to be less severe over the last two years than in the previous three years, however it is unclear if this is indicative of a downward trend until further data for the coming years are available.

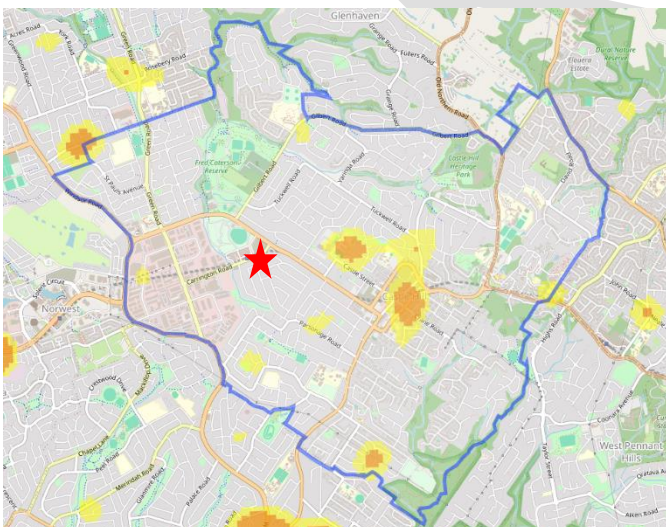


Figure 4: Incidents of Assault (domestic) October 2018 to September 2019 (NSW BOSCAR, 2025)

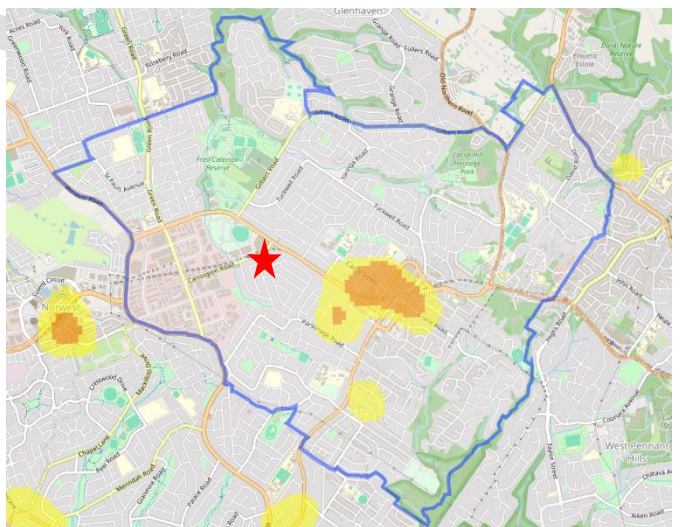


Figure 5: Incidents of Assault (domestic) October 2023 to September 2024 (NSW BOSCAR, 2025)

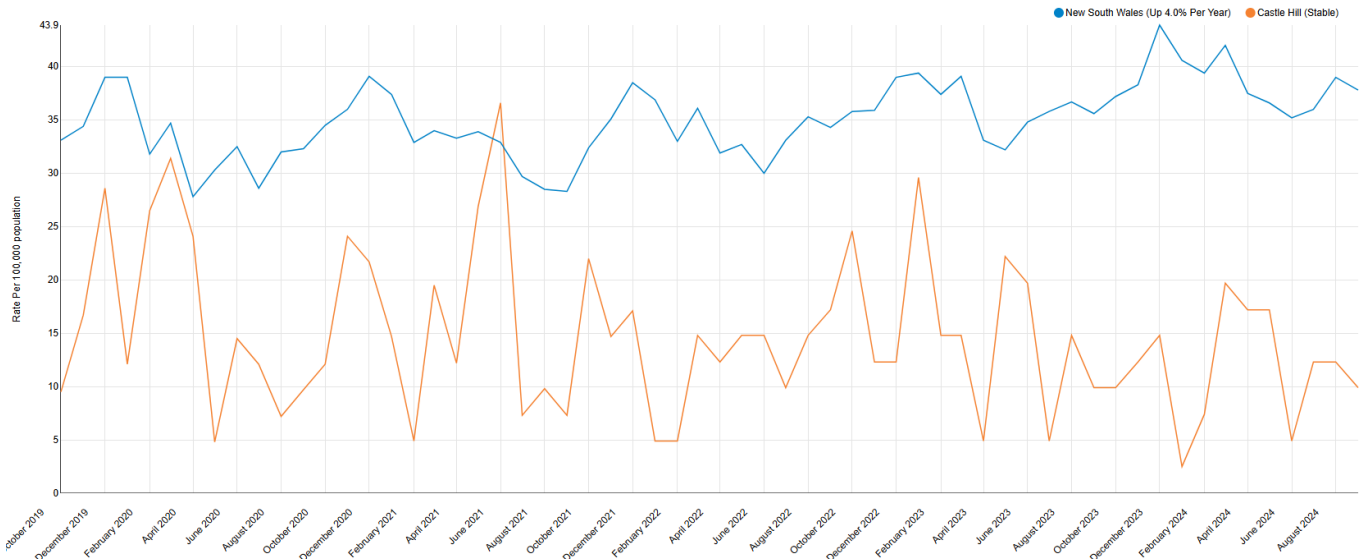


Figure 6: Rates of Assault (domestic) in Castle Hill and NSW between October 2019 and September 2024 (NSW BOSCAR)

2.2 Malicious damage to property

Figure 7 below provides a map of the malicious damage to property hotspot area in Castle Hill in 2018/2019. The subject site is not located within a hotspot area; however, it is noted that there is an area with a high density of incidents located around the existing shopping centre. Figure 8 provides a map of the malicious damage to property hotspot areas in 2023/2024. The hotspot area around the shopping centre has significantly increased in size, and there appears to be an increase in hotspot areas around Castle Hill. The subject site is now located within a low-density hotspot area.

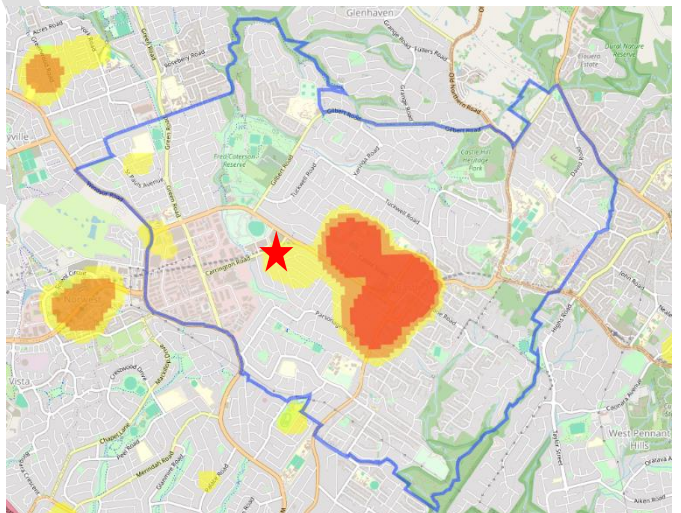
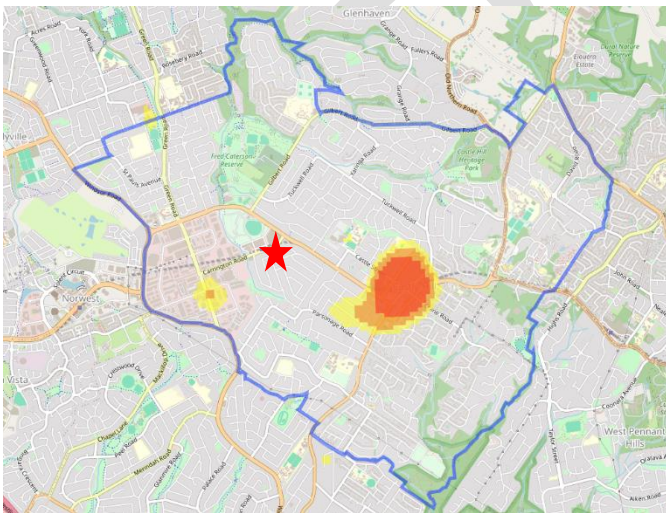


Figure 7: Incidents of malicious damage to property, October 2018 to September 2019 (NSW BOSCAR, 2025) Figure 8: Incidents of malicious damage to property, October 2023 to September 2024 (NSW BOSCAR, 2025)

Figure 9 provides a graph of the rates of malicious damage to property in Castle Hill and NSW between 2019 and 2024. This graph shows the NSW rates dropping by 2.4% per year, while the Castle Hill rates remain relatively stable. The incident rates within Castle Hill often remains around 20-35 incidents per 100,000 people, however, there have been several noticeable spikes over the last 5 years. In comparison, the incident rates in NSW appear to be less variable and are on a downward trend from above 60 incidents per 100,000 people in 2019 to just below 50 incidents per 100,000 people in 2024.

CPTED recommendations are included in Section 4 of this report to mitigate the opportunity for malicious damage to property within the proposed development.

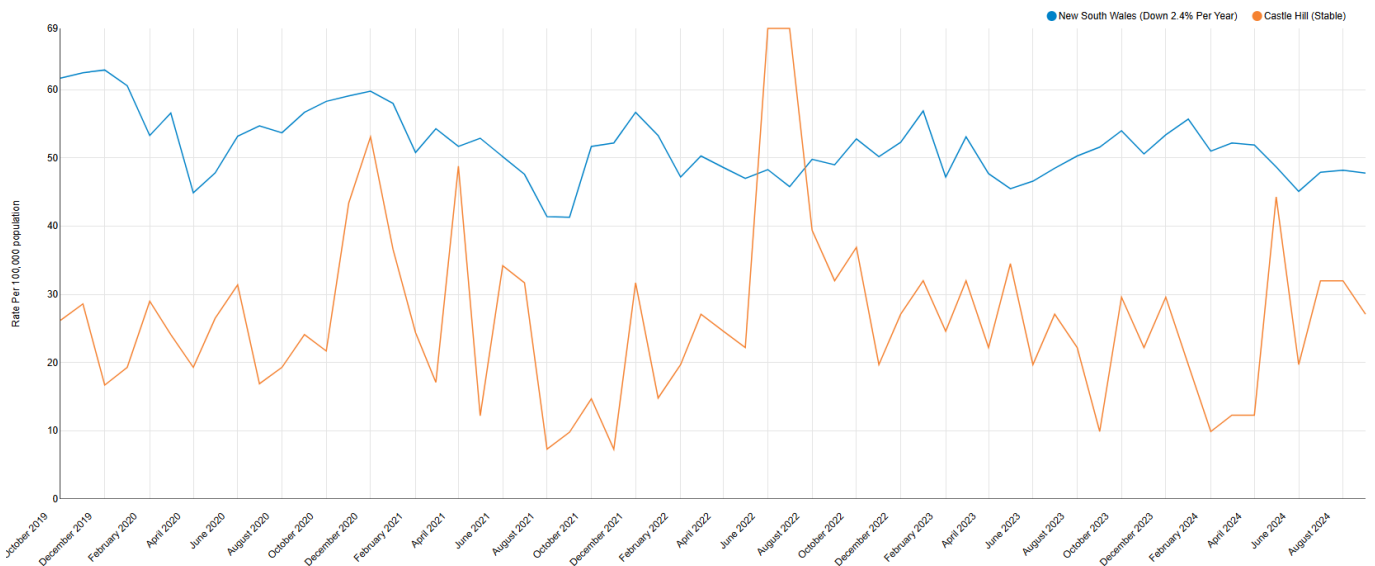


Figure 9: Rates of malicious damage to property in Castle Hill and NSW, October 2019 to September 2024 (NSW BOSCAR, 2025)

2.3 Robbery

Figures 10 and 11 below provides the robbery hotspot maps for 2018/2019 and 2023/2024 within Castle Hill. It is noted that these maps include all categories of robbery, including robbery with a weapon, robbery with a firearm, and robbery with a weapon not a firearm, and no hotspot maps are available for the individual categories of robbery. Based on these hotspot maps it appears that there has been an increase in the occurrence and density of incidents of robbery in the area, however the subject site remains outside of the hotspot areas. It is noted that both hotspot maps demonstrate that incidents of robbery are primarily occurring around the shopping centre and the adjoining high density residential area to the south west.

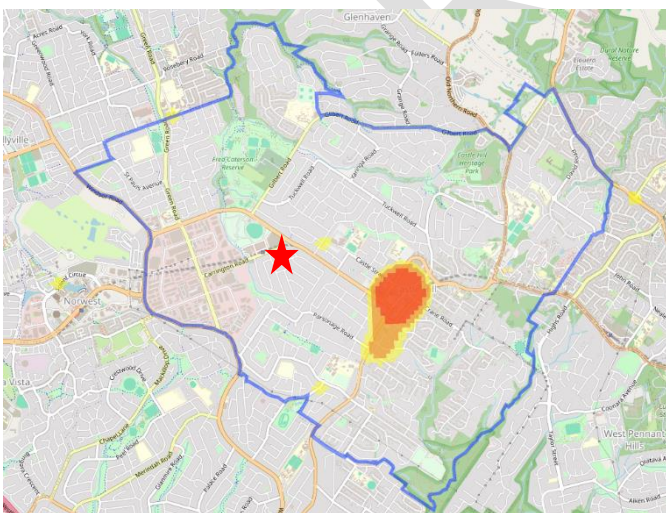


Figure 10: Incidents of Robbery, October 2018 to September 2019 (NSW BOSCAR, 2025)

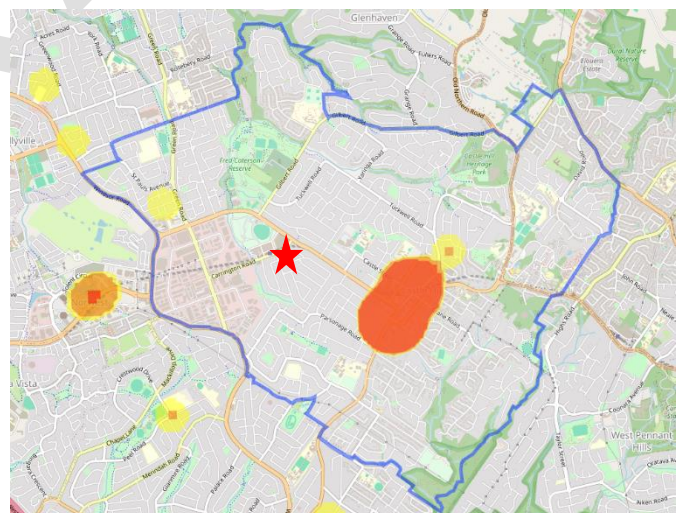


Figure 11: Incidents of Robbery, October 2023 to September 2024 (NSW BOSCAR, 2025)

Figure 12 provides a graph comparing the rates of robbery (all categories) in Castle Hill and NSW between 2019 and 2024. This graph shows a relatively stable incident rate in NSW, however the incident rate in Castle Hill is quite variable with no trend rate calculated. It is noted that incident rates in Castle Hill have generally remained quite low, often below 3 incidents per 100,000 people, with several spikes in incident rates above

this.

CPTED recommendations have been included in Section 4 of this report to mitigate the potential for robbery for the proposed development.

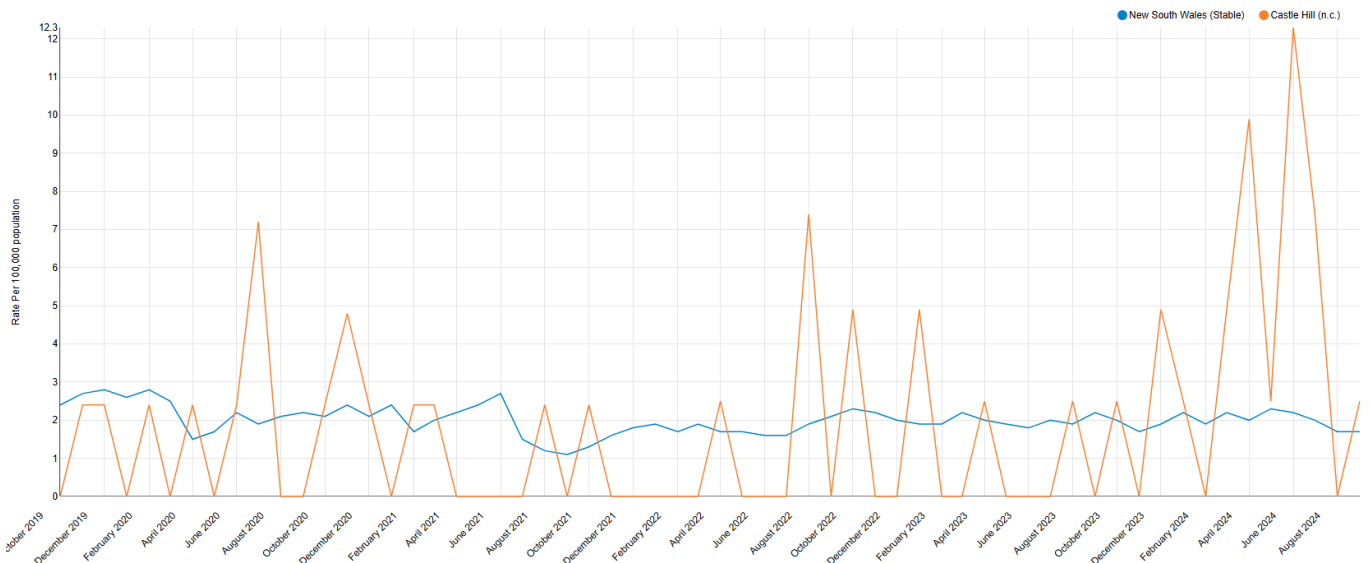


Figure 12: Rates of Robbery in Castle Hill and NSW, October 2019 to September 2024 (NSW BOSCAR, 2025)

2.4 Theft (break and enter dwelling)

The hotspot maps showing incidents of theft (break and enter dwelling) in Castle Hill in 2018/2019 and 2023/2024 are provided in **Figures 13** and **14** below. These maps show that there has been a significant decrease in the distribution and density of incidents over the last 5 years. It is noted that the hotspot areas within Castle Hill are often located within higher density residential areas in proximity to the shopping centre, however this is not a consistent profile of all hotspots identified in these maps. The subject site has remained outside of the mapped hotspot areas in both 2018/2019 and 2023/2024 and is also now located further away from the hotspot areas.

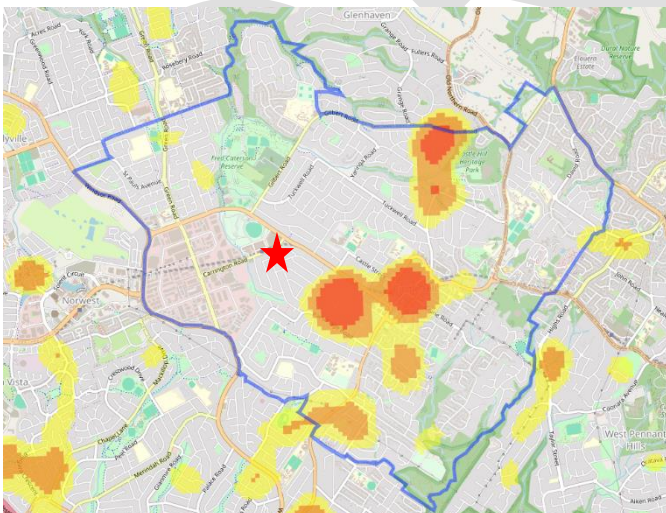


Figure 13: Incidents of Theft (Break and enter dwelling), October 2018 to September 2019 (NSW BOSCAR, 2025)

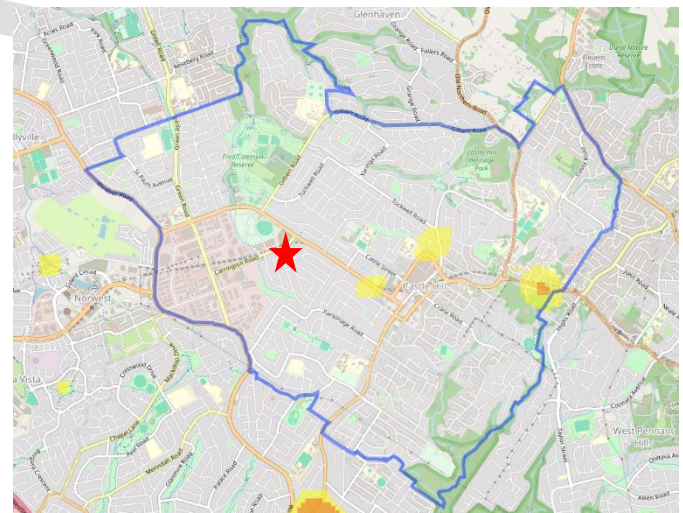


Figure 14: Incidents of Theft (Break and enter dwelling), October 2023 to September 2024 (NSW BOSCAR, 2025)

This reduction in incidents is reflected in the graph provided in **Figure 15**, which provides a comparison of the rates of theft (break and enter dwelling) in Castle Hill and NSW between October 2019 and September

2024. This graph shows the incident rate in NSW remaining stable, while the incident rate in Castle Hill has decreased by 20.5% per year over the last 5 years. The incident rate in Castle Hill is now consistently below the NSW rate, despite remaining somewhat variable.

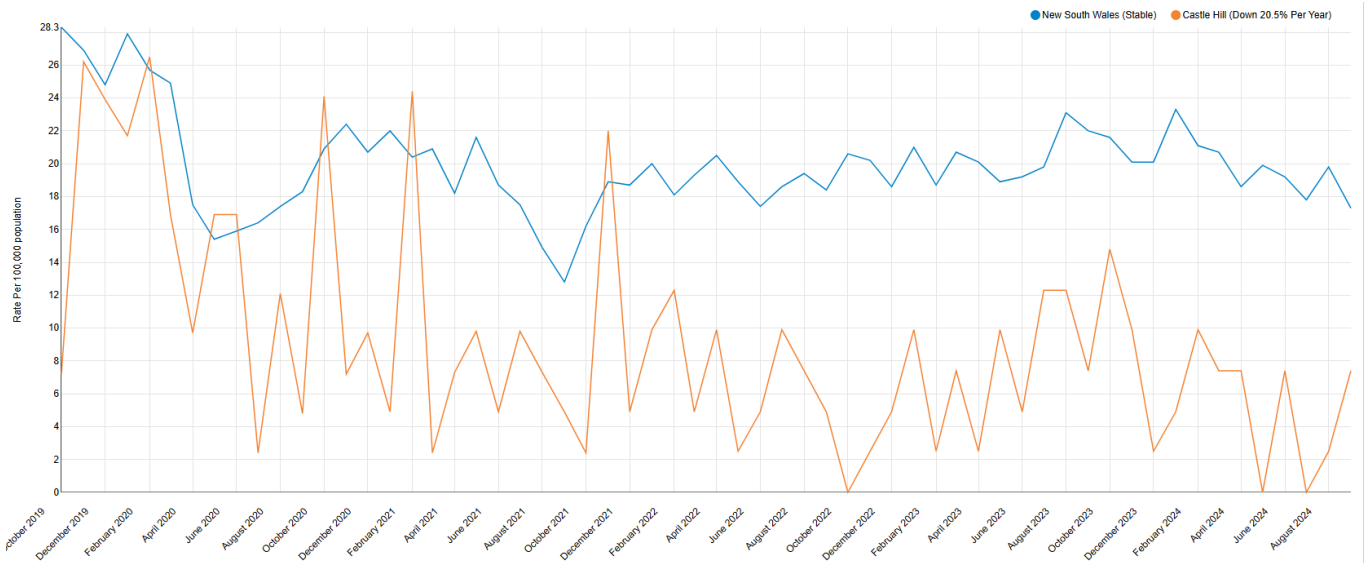


Figure 15: Rates of Theft (Break and enter dwelling) in Castle Hill and NSW, October 2019 to September 2024 (NSW BOSCAR, 2025)

2.5 Theft (steal from dwelling)

Figures 16 and 17 below provide the hotspot maps for incidences of theft (steal from dwelling) in Castle Hill in 2018/2019 and 2023/2024. It is noted that the subject site was located within a low-density hotspot area in 2018/2019 but is not within any hotspot area in 2023/2024. These maps show that the number of hotspot locations within Castle Hill and the surrounding area has significantly decreased over the last 5 years, however, there has been an increase in the density and number of incidents in the residential area north-east of the shopping centre. A secondary, low-density, hotspot is located within the residential area south-west of the shopping centre.

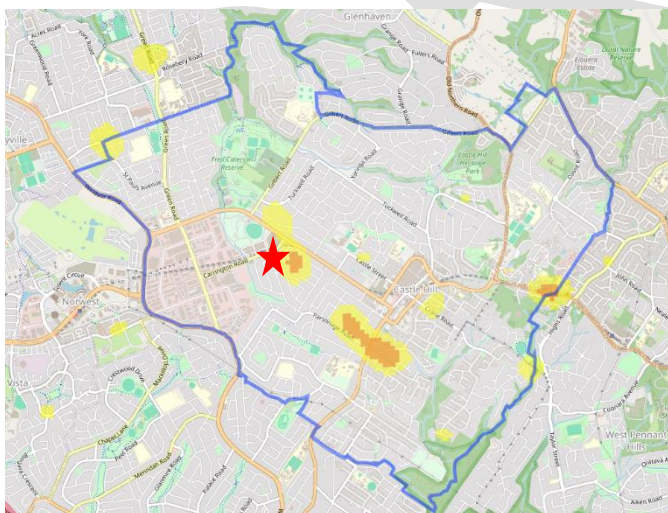


Figure 16: Incidents of Theft (Steal from dwelling), October 2018 to September 2019 (NSW BOSCAR, 2025)

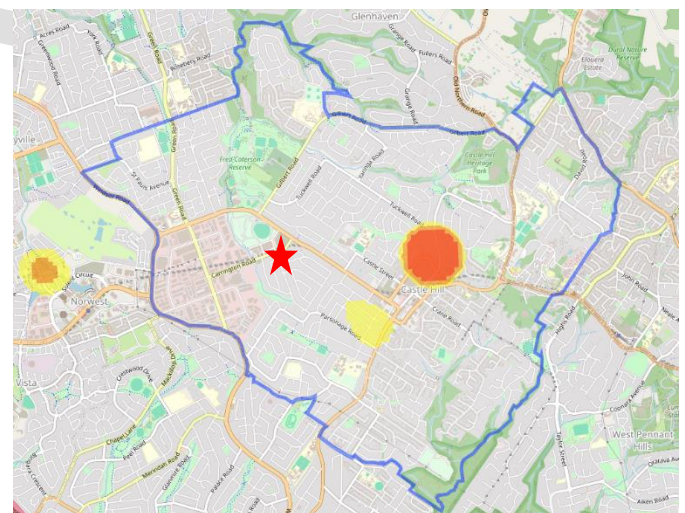


Figure 17: Incidents of Theft (Steal of dwelling), October 2023 to September 2024 (NSW BOSCAR, 2025)

Figure 18 below provides a graph of the incident rates of theft (steal from dwelling) in Castle Hill and NSW between October 2019 and September 2024. The incident rates in NSW have decreased by 1.7% per year

over the last five years while the incident rates in Castle Hill have increased by 9.9% per year over the same period. This is evident in the graph, which shows the incident rate in Castle Hill remaining below the NSW rate until October 2022, from which point the Castle Hill rate begins to occasionally raise above the NSW rate. However, it is noted that the Castle Hill rate remains quite variable, with incident rates in 2023 and 2024 fluctuating between 2.5 and 24.6 incidents per 100,000.

CPTED recommendations have been included in Section 4 of this report to mitigate the potential for theft (steal from dwelling) for the proposed development.

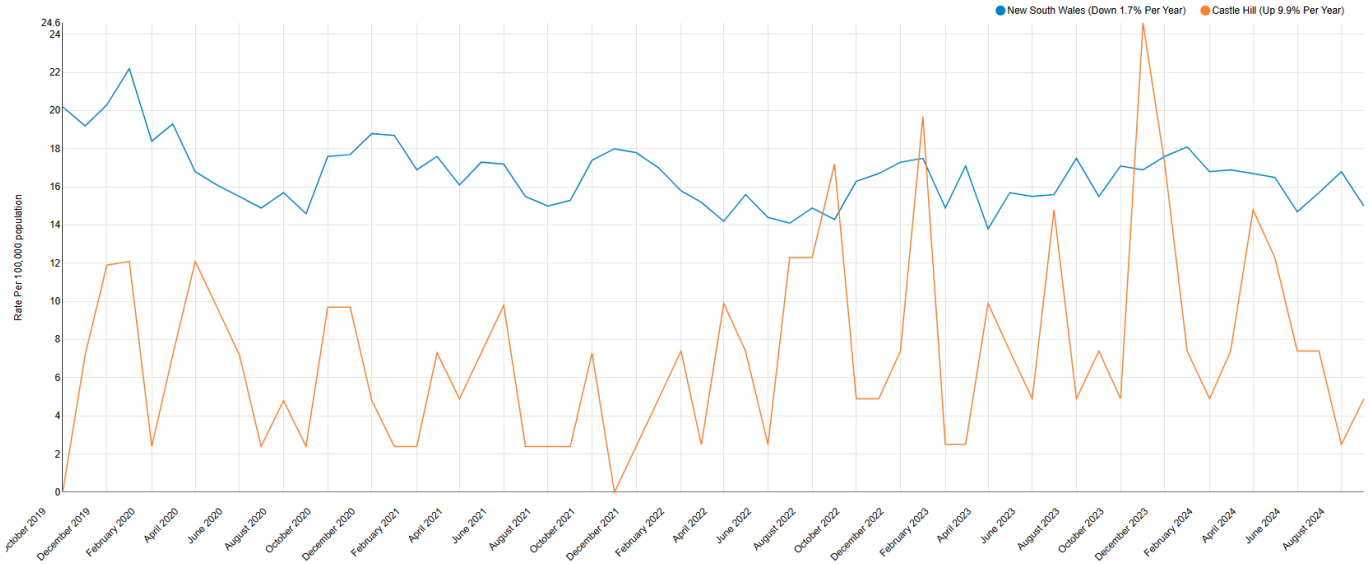


Figure 18: Rates of Theft (Steal from dwelling) in Castle Hill and NSW, October 2019 to September 2024 (NSW BOSCAR, 2025)



3 Proposed Development

The proposed development is for the construction of three residential flat buildings with shared three-storey basement parking comprising the following:

- Three residential flat buildings containing 431 units as follows:
 - 41 one-bedroom apartments
 - 251 two-bedroom apartments
 - 122 Three-bedroom apartments
 - 17 four-bedroom apartments
- 25 units will be for affordable housing, which comprises of 4 one-bedroom units and 21 two-bedroom units.
- Three levels of basement parking, which is shared by all buildings, and will contain:
 - 740 car parking spaces, 653 of which are allocated to residents and 87 of which are allocated to visitor parking;
 - 180 bicycle parking spaces;
 - 32 motor bike parking spaces;
 - Several residential storage areas; and
 - Plant areas.
- Landscaped communal and private open spaces.
- Consolidation of all lots and subsequent subdivision into two lots as follows:
 - Site A: 8,573m²
 - Site B: 5,651m²

The proposed residential development is comprised of three separate buildings as shown in **Figure 19** below. Building A is a 20-storey residential flat building, which maintains primary frontage to Middleton Avenue and secondary frontage to Carrington Road. The northern portion of this building will be located within Site A, while the southern portion will be located within Site B. A landscaped communal terrace area will be located on level 18, which will include seating and BBQ areas.

Building B is a 18-storey residential flat building located in the north-eastern corner of the site and maintains primary frontage to Carrington Road and secondary frontage to Sexton Avenue. The building is entirely located within Site A. A landscaped communal terrace area is located on level 7, which contains seating, a BBQ area, and a yoga area.

Building C is a 12-storey residential flat building located at the south of the site within Site B. Primary frontage is to Middleton Avenue, however secondary frontage is provided to both Fishburn Crescent and Sexton Avenue. The ground floor level includes an indoor pool and gym area, and a landscaped communal terrace area is provided on level 10, which includes seating areas, a BBQ area, and a zen garden.

These buildings have been orientated to face the surrounding streets, providing space for the communal open area within the centre of the site. This layout allows for surveillance opportunities to all streetscapes, minimises hidden corners, and provides direct sightlines to communal open space areas and pathways.



Figure 19: Extract of the ground floor plan (Turner Studio, 2025)

Access and Lobby Entries

Building A provides a single, centralised lobby accessible from Middleton Avenue. The entry provides connection between the streetscape and the communal outdoor area and is benefitted by natural surveillance opportunities to the streetscape and communal areas.

Building B also provides a single, centralised lobby, which is accessible from Carrington Road in the north west corner of the site and provides surveillance opportunities to the streetscape. While part of the building adjoins Sexton Avenue, no formalised building entry is provided to this elevation. Nonetheless, alternative pedestrian access for residents to Sexton Avenue is provided and the building provides passive surveillance opportunities to this elevation.

Building C provides two separate lobbies, one on the ground level facing Middleton Avenue, and the other on the upper ground level facing Sexton Avenue. There is also a secondary "wellness lobby" on the ground

floor which faces towards the communal outdoor area and provides access to the communal indoor pool. This layout provides surveillance opportunities to the streetscape and access control to the communal facilities. It also ensures that all apartments within this building maintain suitable access to the lobby area, noting that the building has been designed to have two separate wings.

All buildings provide windows and balconies facing towards each streetscape and site entry, which provides surveillance opportunities to these areas, refer to **Figures 20 and 21** below. Recommendations for restricted access controls, such as key locks, swipe card, or intercom entry at lobby doors for all residential buildings are discussed in Section 4 below.

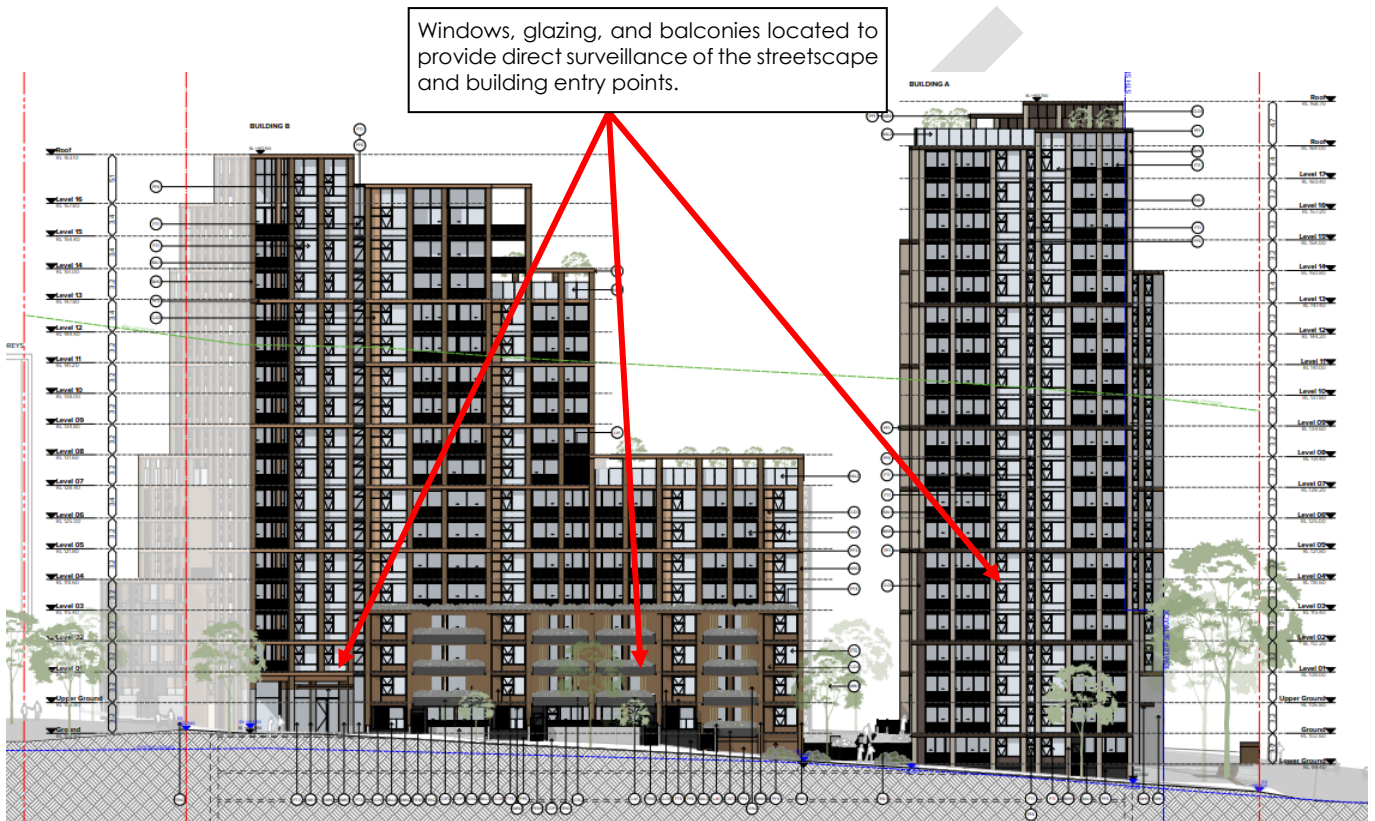


Figure 20: Extract of elevation plan for Carrington Road (Turner Studio, 2025)

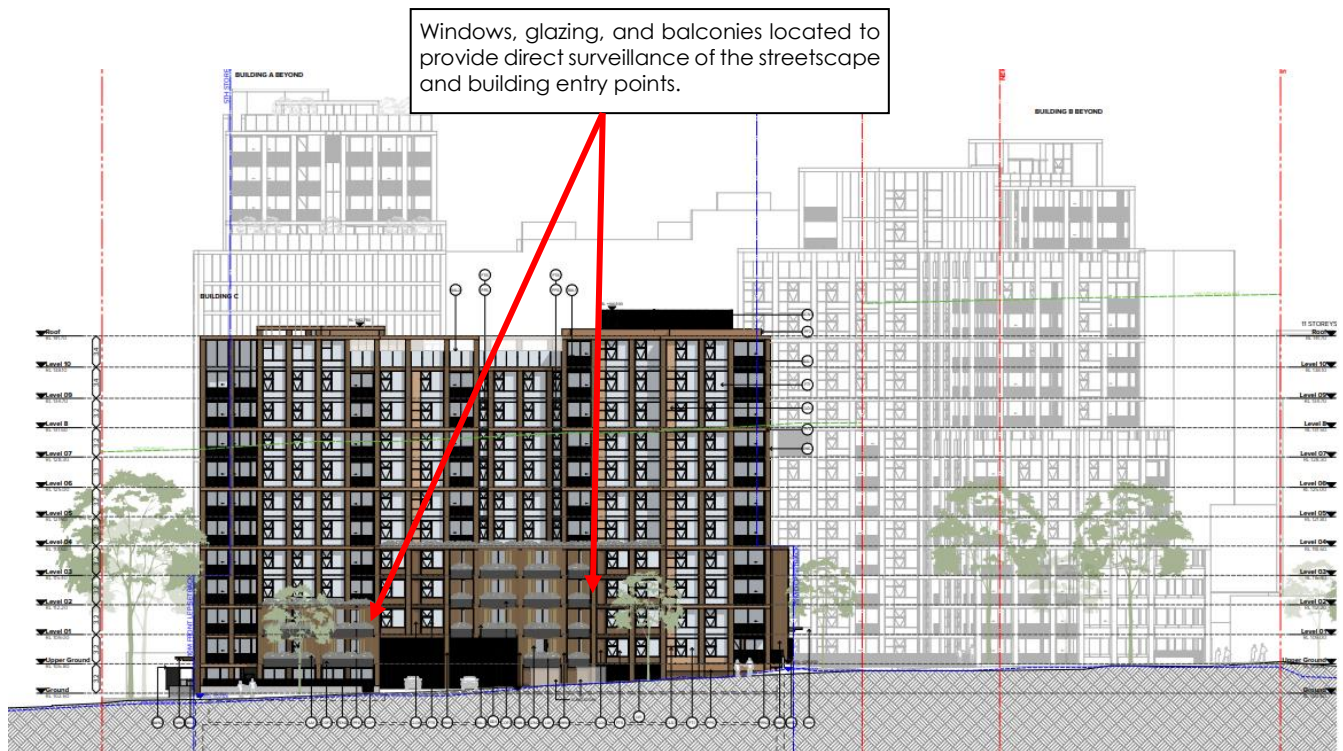


Figure 21: Extract of elevation plan for Fishburn Crescent (Turner Studio, 2025)

Car Parking

The development includes a single parking area across three basement levels which will service all three proposed residential flat buildings. This includes resident and visitor parking area, bicycle parking, and accessible parking spaces. A single vehicle access point to the basement levels is provided to Fishburn Crescent within Building C to accommodate passenger and service vehicles, refer to **Figure 19** above. Lifts are located throughout the basement levels to provide access to building lobbies or central hallways for all buildings. However, access to the bicycle parking area can be obtained via a pathway connecting to Carrington Road.

Recommendations have been provided in Section 4 below for access control measures to parking and loading areas, such as roller shutters or boom gates, and use of CCTV surveillance for entry points.

Landscaping and Communal Open Space

The proposed development provides significant open space opportunities with high quality landscaping to all frontages and within the central communal open space area. Refer to **Figure 22** for an extract of the landscape plan.

The landscape design includes tree plantings along footpaths and sight frontages that will support larger species and canopy cover of a suitable height to facilitate clear ground level sightlines for pedestrians and vehicles. This landscaping will also provide a visual buffer to delineate the public spaces and residential area.

The incorporation of seating, play equipment, pool area, pathways, and other such recreational facilities within the centre of the site will encourage activation of the space. The location of the buildings around the communal open space area also increases natural surveillance opportunities.

Recommendations are provided in Section 4 relating to proposed access control measures for the communal open space at ground level to restrict access to residents only. The locations for access control measures have been identified in **Figure 23** below.



Figure 22: Extract of the landscape plan for the ground floor (Arcadia, 2025)



Figure 23: Extract of the landscape plan for the ground floor (Arcadia, 2025)

Additional communal open space is provided on upper levels and are generally landscaped seating and entertainment areas for use by the residents and their guests. Refer to **Figure 24** below. These areas have been designed to CPTED standards with opportunities for passive surveillance of streetscapes below and sightlines of access points.

Recommendations are provided in Section 4 relating to consideration of signage, swipe card or key access, and CCTV surveillance of entry points to these areas.



Figure 24: Extract of the rooftop landscape plan (Arcadia, 2025)

4 CPTED Principles

4.1 Surveillance

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

From a design perspective, ‘deterrence’ can be achieved by:

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

Positive surveillance features of the development include:

- Windows, glazing, and balconies at ground level and above provides surveillance opportunities to the streetscape and building entry points.
- The site is bordered by the road network to four sides which has informed the design and siting of the buildings to increase the surveillance opportunities to each of the streetscapes.
- Internal footpaths and pedestrian access points have been designed with appropriate canopy height and landscaping in accordance with CPTED principles to minimise opportunities for offender concealment.
- Pedestrian and vehicle access points are clearly identifiable from the streetscape and facilitate appropriate sightlines to and from ingress/egress points.
- Communal areas are centrally located within the site and benefit from natural surveillance from terraces and balconies above.

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

Table 2: Surveillance issues and recommendations

Surveillance Issues	Recommendation
Perimeter / Streetscape Frontage	<ul style="list-style-type: none"> • Appropriate density of planting around perimeter to maintain clear sightlines to pedestrian and vehicle entry points. • The area shall be well lit at night in accordance with the Australian Standard for lighting. • Consideration should be given to the installation of Closed-Circuit TV (CCTV) along frontages, entry points, and thoroughfares within the site.
Entrances	<ul style="list-style-type: none"> • All entrances should be well lit at night especially in alcoves and corners. Consideration should be given to the use of sensor lights in area which do not require constant illumination. • Entrances should be well defined and clearly sign posted. • Glazing should allow natural surveillance of surrounding area from within ground level communal area, such lobbies.

Car Parking	<ul style="list-style-type: none"> • Minimise density of planting around the driveway to maintain clear sightlines and minimise opportunities for offender concealment. • The car park should be well lit at night. • Consideration should be given to the installation of Closed-Circuit TV (CCTV) in the basement and at basement entry points. • Clearly display signage identifying the presence of CCTV surveillance at basement entries.
Positioning of CCTV cameras	<ul style="list-style-type: none"> • Should CCTV be implemented within the site, position CCTV at places where the offender/s is most likely to have to pass or want to access, such as building entry/exit points, storerooms, or areas where high value items are kept. • CCTV should be: <ul style="list-style-type: none"> ○ clearly visible to deter potential offenders. ○ Placed at a height that captures a full view of the offenders' face whilst not being obscured by other interferences. ○ In areas where image capture will not be compromised by insufficient lighting. ○ Identified by clear signage as appropriate.
Landscaping	<ul style="list-style-type: none"> • Planting proposed in the Landscape plan should not obstruct surveillance along road frontages and site perimeters. • Landscaping should allow for clear sightlines along designated pedestrian paths and should be low (below 700mm) in areas where offenders could easily hide. • Landscaping should not impede opportunities of natural surveillance of building or car park entries. • Regular vegetation pruning and site maintenance should be conducted to ensure any vegetation or debris on pathways are removed and vegetation height and foliage density is appropriate to prevent obstructions to sightlines and concealment opportunities.
Lighting	<ul style="list-style-type: none"> • Lighting should be in accordance with the relevant Australian Standards. • Lighting should be vandal resistant and at an appropriate height. • Effective illumination at ground level should reduce any opportunities for shadowing along the pedestrian access paths. • Car parks should be illuminated for increased visibility, particularly in storage areas or areas of potential entrapment. • Street numbers on buildings and any building identification signage should be illuminated to promote site identification.

General Recommendations	<ul style="list-style-type: none"> • Signs should be erected in areas which are restricted prohibited or under surveillance to discourage criminal or anti-social activity. • Consider contracting a local security firm for regular inspections of the site. • Transparent doors and glazing for building entryways and lobbies is recommended to increase surveillance opportunities.
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4.2 Access Control

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

Effective access control can be achieved by creating:

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

Positive access control aspects of the design include:

- Vehicle access to the basement car parking area is restricted to a single entry/exit point to channel vehicles into highly visible location;
- Pedestrian access to the basement car parking areas is restricted, and is predominantly via internal stairways and lifts, which restrict unauthorised access to the basement area and other residential areas;
- Lobby entries to each building are centralised to restrict entry points to the site and clearly delineated from public spaces.

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

Table 3: Access control issues and recommendations

Access Control Issues	Recommendation
Communal Open Space Areas at Ground Level	<ul style="list-style-type: none"> • Secure fencing should be constructed to prevent access to any areas designated for resident use only. This must include the provisions of gates and fencing to secure the areas in Figure 24. • Signage should be provided to clearly delineate where access is controlled. Central communal areas at ground level should be clearly designated for use by residents and their guests only. • Any operational restrictions on the use of communal open spaces areas (i.e. hours of use) should be clearly identified on signage at entry points.
Communal Open Space Areas at Upper Levels	<ul style="list-style-type: none"> • Communal areas within upper levels area to be secured through access control methods such as swipe cards.

	<ul style="list-style-type: none"> • Signage must be present identifying that these spaces are for residents and their authorised guests only.
Landscaping	<ul style="list-style-type: none"> • Avoid planting large trees adjacent to buildings to prevent use of “natural ladders” for access to roofs. • Landscaping should not inhibit entry to access gates, paths, or building entries.
Private Open Space Areas	<ul style="list-style-type: none"> • Private open spaces should be clearly delineated and secure fencing provided to prevent access from adjoining ground floor terraces, communal areas, the streetscape, and public areas.
Basement Access	<ul style="list-style-type: none"> • Ensure basement access points and loading areas are controlled through measures such as boom gates or roller doors to prevent unauthorised entry. • Access restriction measures should be undertaken to ensure the basement areas and waste storage areas are secure for access by residents, authorised contractors, and service vehicle only.
Entrances	<ul style="list-style-type: none"> • Residential lobby entrances should be secured and controlled via electronic cards and intercom. • Elevator access to residents only areas should only be available via electronic swipe card or intercom system. • Regular maintenance to lobby areas and car park and building entrances is essential for effective access control.
General Matters for Consideration	<ul style="list-style-type: none"> • Fully secure all external doors and windows with good quality locking devices. Make sure they are regularly maintained. All doors should be of solid construction and well fitted. • Make use of signage and stickers promoting security measures such as security alarms, video surveillance and security contractors that may be engaged to periodically inspect the site and through site pedestrian link.

4.3 Territorial Reinforcement

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

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

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

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

Positive territorial reinforcement aspects of the proposal include:

- The location of the buildings around the site boundaries clearly delineates public and semi-private spaces;
- The entrance design provides engagement with the streetscape while maintaining a clear demarcation between the public and semi-private spaces through design cues and secure doors; and
- Architecturally designed common areas, landscaping design, and communal facilities at ground level promote resident interaction, recreational use, and a sense of responsibility of users for the area.

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

Table 4: Territorial reinforcement issues and recommendations

Territorial Reinforcement Issues	Recommendations
Creating a sense of place/ownership	<ul style="list-style-type: none"> • Common areas should allow some resident maintenance and inclusion, in conjunction with a designated contractor maintenance plan. • Clear distinction should be provided in landscaping, materials, finishes, and paving to identify separation between public and private spaces. • Signage should clearly identify private areas (particularly open space) so as to minimise conflict between residents and the general public and unintentional access.
Way Finding	<ul style="list-style-type: none"> • Provide clear signage for pedestrians utilising internal footpaths. • Provide clear signage for motorists throughout the precinct to reduce vehicle-pedestrian conflict. • Consider opportunities for a public address system to assist with security and management of emergencies. • Provide clear way-finding signage and building identification signage for residents. • Ensure any emergency access points and evacuation routes are clearly identified.
Public Open Space Areas	<ul style="list-style-type: none"> • Public open spaces should be well maintained to allow the area to be used by the public, residents, and visitors. • The areas should encourage social interaction to increase natural surveillance and sense of ownership of these spaces. • Any fencing along public open space areas within the site should be reviewed and appropriately designed as perceived access controls can discourage community usage of public spaces.
General Recommendations	<ul style="list-style-type: none"> • Consider installation of a monitored security alarm system. • Prominently display any signs indicating the presence of a security system, the continual surveillance of the premises

and any other security measures present.

4.4 Space Management

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

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

Table 5: Space management issues and recommendations

Space Management Issues	Recommendations
Waste storage	<ul style="list-style-type: none">• Garbage bins and waste storage receptacles should be regularly emptied to prevent overflowing rubbish.
Graffiti	<ul style="list-style-type: none">• Remove graffiti as quickly as possible to minimise potential for cumulative graffiti and vandalism actions.• Install vandal resistant lighting where applicable.• Shrub planting to street frontage may assist in preventing graffiti on blank walls.
Lighting Repair	<ul style="list-style-type: none">• The management regime should ensure that lighting is repaired as soon as possible after any lighting failure or damage.
Cleanliness and Maintenance	<ul style="list-style-type: none">• The management regime shall ensure that the site is kept clean and tidy at all times, including communal areas and facilities.• Clear all building perimeters including fences of rubbish and potential climbing aids.• Maintain well-built and adequately secured boundary gates and fences.

5 Conclusion

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

The key recommended strategies are summarised as follows:

Surveillance

- *Lighting*: Entrances, communal open spaces including open space on upper levels, car parks, and perimeters should be well lit at night;
- *Natural Surveillance*: Promote natural surveillance via balconies overlooking the streets, lobby areas, site entryways, and communal/private open space at ground level;
- *Landscaping*: Maintain sightlines wherever possible via effective landscaping techniques using CPTED principles.
- *Concealment*: Ensure landscape design and maintenance reduces opportunities for concealment via low planting or taller trees and canopied; and
- *CCTV*: Consider the implementation of a CCTV surveillance system throughout the site in areas that offenders are likely to conceal themselves or within building or communal area entry points.

Access Control

- *Access Control*: Key/swipe card access and/or intercom system should enforce restricted access to the residential lifts, waste rooms, basement car parking premises and private and restricted communal open spaces;
- *Landscaping*: Large trees should not be planted immediately adjacent to balconies or glazing to prevent vegetation being used as a "ladder";
- *Communal Areas*: Communal areas not for use by the general public should be clearly designate, and access control should be maintained via a key/swipe card access or intercom system;
- *Signage*: Provide signage identifying restricted and monitored areas, including the car park and private open space areas; and
- *Security*: Ensure use of high-quality locking systems, reinforced glass, clear signage and stickers.

Territorial Reinforcement

- *Landscaping*: Engage a landscape contractor to maintain perimeter and communal areas;
- *Fencing*: Ensure fencing provides clear delineation between public areas and ground floor private open spaces.
- *Car Park*: Clearly delineate parking spaces, such as visitor parking, accessible parking, and any parking allocated to specific buildings/apartments, through signage, boom gates, physical separation and other security measures.
- *Alarm*: Consideration should be given to the installation of an alarm and dedicated CCTV system; and
- *Signage*: Provide signage to any visitors to the site which outline access control measures, emergency evacuation measures, and procedures.

Space Management

- Implementation of an ongoing maintenance plan/strategy for waste, vandalism, toilets, communal facilities, landscaping, fencing, and lighting.

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