



Sydney Metro City & Southwest: Crows Nest Over Station Development

Crime Prevention Through Environment Design (CPTED) Report

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Executive Summary

Purpose of this report

This report supports a concept State Significant Development application (concept SSD Application) for over station development (OSD) above the future Crows Nest Station. This report provides a Crime Prevention Through Environmental Design (CPTED) assessment of the concept proposal and has been prepared specifically to address the Secretary's Environmental Assessment Requirements (SEARs), which specify that the Environmental Impact Statement (EIS) must include a CPTED assessment.

Scope of assessment

This report provides a desktop analysis of indicative architectural plans prepared by Sydney Metro for the Crows Nest OSD. The plans include residential, commercial and hotel components above the approved station.

This report assesses the plans against the following four key principles of CPTED: surveillance, access control, territorial reinforcement, and space and activity management. The purpose of CPTED is to utilise design and place-management principles to reduce the likelihood of essential crime ingredients from intersecting in time and space. CPTED aims to create the perception that the risk of committing the crime is greater than the likely benefits.

The public domain and station levels of the podium of each building are approved under the CSSI Approval for the station, and the design of these approved levels will be resolved through the preparation of the Station Design and Precinct Plan (SDPP) (Condition E92). The SDPP will include consideration of the Sydney Metro City & Southwest Design Guidelines that specifically reference CPTED principles.

Nature of crime in the area

A review of crime statistics provided by Bureau of Crime Statistics and Research (BOSCAR) has revealed that the following crimes are most common in the North Sydney local government area:

- transport regulatory offences
- fraud
- malicious damage to property
- liquor offences
- possession and/or use of ecstasy
- steal from dwelling
- other left
- assault (non-domestic)
- steal from motor vehicle

- steal from retail store

These crimes are typical of dense urban areas such as the subject site and do not point to any known particular crime issues in the area.

Assessment of CPTED

Surveillance

The concept proposal demonstrates a number of natural surveillance attributes including multiple street frontages with glazed facades, clear sight lines between the building entries and the public domain, and a building layout that does not result in “blind” spots or areas for hiding.

Additionally, the active uses at ground level would help create an environment for people to be engaged in their normal behaviour while observing the space around them, essentially creating natural community policing of the precinct.

Access control

The concept proposal provides a number of effective access control opportunities, including corridors that channel persons into the intended locations, easily identifiable access point, installation of way-finding signage and installation of security doors to restricted areas.

Territorial enforcement

The concept proposal provides clear separation of uses and offers a number of key opportunities for territorial reinforcement, including use of distinctive materials, finishes, landscaping and signage to delineate between uses. Separate lobbies and corridors would also serve to direct persons to the intended locations.

Space and activity management

The concept proposal includes no impediments to proper environmental maintenance, such as regular maintenance of building, replacement of burnt out lighting and repairing of vandalism. It is presumed that such ongoing maintenance would be provided by the future building manager.

Mitigation measures

The following mitigation measures have been identified:

Surveillance:

- entry points should be designed to maximise surveillance opportunities to and from these areas

- apartment, hotel room and office layouts should be designed to encourage overlooking of the surrounding public domain
- the development should be designed to minimise the number of concealment or entrapment areas

Territorial reinforcement:

- appropriate signage should be installed around the precinct to define uses and to provide clear directions

Access control:

- blind bends and corners should be avoided in building corridors and walkways whenever possible, and where they cannot be avoided, surveillance can be enhanced through the use of vandal-resistant mirrors, windows (where applicable), and bright, evenly distributed lighting
- signage and security doors should be installed to controls access to restricted areas
- concierge/help desks should be considered in lobby areas

Space and activity management:

- ensure a maintenance plan is put in place to take care of all buildings in the precinct.

1.0 Introduction

1.1 Purpose of this report

This report supports a concept State Significant Development application (concept SSD Application) submitted to the Department of Planning and Environment (DPE) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The concept SSD Application is made under Section 4.22 of the EP&A Act.

Sydney Metro is seeking to secure concept approval for a mixed use development comprising four buildings above the Crows Nest Station, otherwise known as the over station development (OSD). The concept SSD Application seeks consent for building envelopes and land uses, maximum building heights, maximum gross floor areas, pedestrian and vehicular access, circulation arrangements and associated car parking and the strategies and design parameters for the future detailed design of the development.

Sydney Metro proposes to procure the construction of the OSD as part of an Integrated Station Development package, which would result in the combined delivery of the station, OSD and public domain improvements. The station and public domain elements form part of a separate planning approval for Critical State Significant Infrastructure (CSSI) approved by DPE on 9 January 2017.

As the development is within a rail corridor, is associated with railway infrastructure and is for commercial premises and residential accommodation with a Capital Investment Value of more than \$30 million, the project is identified as State Significant Development (SSD) pursuant to Schedule 1, 19(2)(a) of the *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP). The development is therefore, State significant development for the purposes of Section 4.36 of the EP&A Act.

This report has been prepared to specifically respond to the Secretary's Environmental Assessment Requirements (SEARs) issued for the concept SSD Application on 26 September 2018 which states that the Environmental Impact Statement (EIS) is to address the following requirements:

| Reference | SEARs Requirement | Where Addressed in Report |
|----------------------------|--|---------------------------|
| 8. Amenity | The EIS shall provide a Crime Prevention Through Environmental Design Report | This report |
| Plans and Documents | CPTED Report | This report |

1.2 Overview of Sydney Metro in its context

Sydney Metro is Australia's biggest public transport project. A new standalone metro railway system, this 21st century network will deliver 31 metro stations and 66km of new metro rail

for Australia's biggest city — revolutionising the way Sydney travels. Services start in the first half of 2019 on Australia's first fully-automated railway.

Sydney Metro was identified in *Sydney's Rail Future*, as an integral component of the *NSW Long Term Transport Master Plan*, a plan to transform and modernise Sydney's rail network so it can grow with the city's population and meet the future needs of customers. In early 2018, *the Future Transport Strategy 2056* was released as an update to *the NSW Long Term Transport Master Plan* and *Sydney's Rail Future*. Sydney Metro City & Southwest is identified as a committed initiative in the *Future Transport Strategy 2056*.

Sydney Metro is comprised of three projects, as illustrated in **Figure 1**:

- **Sydney Metro Northwest** — formerly the 36km North West Rail Link. This \$8.3 billion project is now under construction and will open in the first half of 2019 with a metro train every four minutes in the peak.
- **Sydney Metro City & Southwest** — a new 30km metro line extending the new metro network from the end of Sydney Metro Northwest at Chatswood, under Sydney Harbour, through the CBD and south west to Bankstown. It is due to open in 2024 with an ultimate capacity to run a metro train every two minutes each way through the centre of Sydney.
- **Sydney Metro West** — a new underground railway connecting the Parramatta and Sydney central business districts. This once-in-a-century infrastructure investment will double the rail capacity of the Parramatta to Sydney CBD corridor and will establish future capacity for Sydney's fast growing west. Sydney Metro West will serve five key precincts at Westmead, Parramatta, Sydney Olympic Park, The Bays and the Sydney CBD. The project will also provide an interchange with the T1 Northern Line to allow faster connections for customers from the Central Coast and Sydney's north to Parramatta and the Sydney CBD.

Sydney's new metro, together with signalling and infrastructure upgrades across the existing Sydney suburban rail network, will increase the capacity of train services entering the Sydney CBD — from about 120 an hour currently to up to 200 services beyond 2024. That's an increase of up to 60 per cent capacity across the network to meet demand.

Sydney Metro City & Southwest includes the construction and operation of a new metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and on to Bankstown through the conversion of the existing line to metro standards.

The project also involves the delivery of six (6) new metro stations, including at Crows Nest, together with new underground platforms at Central. Once completed, Sydney Metro will have the ultimate capacity for a train every two minutes through the CBD in each direction — a level of service never seen before in Sydney.



Figure 1: Sydney Metro alignment map

On 9 January 2017, the Minister for Planning (the Minister) approved the Sydney Metro City & Southwest - Chatswood to Sydenham application lodged by TfNSW as a Critical State Significant Infrastructure project (reference SSI 15_7400), hereafter referred to as the CSSI Approval.

The CSSI Approval includes all physical work required to construct the CSSI, including the demolition of existing buildings and structures on each site. Importantly, the CSSI Approval also includes provision for the construction of below and above ground structures and other components of the future OSD (including building infrastructure and space for future lift cores, plant rooms, access, parking and building services, as relevant to each site). The rationale for this delivery approach, as identified within the CSSI application is to enable the OSD to be more efficiently built and appropriately integrated into the metro station structure.

The EIS for the Chatswood to Sydenham alignment of the City & Southwest project identified that the OSD would be subject to a separate assessment process.

Since the CSSI Approval was issued, Sydney Metro has lodged five modification applications to amend the CSSI Approval as outlined below:

- **Modification 1** - Victoria Cross and Artarmon Substation which involves the relocation of the Victoria Cross northern services building from 194-196A Miller Street to 50 McLaren Street together with the inclusion of a new station entrance at this location referred to as

Victoria Cross North. The modification also involves the relocation of the substation at Artarmon from Butchers Lane to 98 – 104 Reserve Road. This modification application was approved on 18 October 2017.

- **Modification 2** - Central Walk which involves additional works at Central Railway Station including construction of a new eastern concourse, a new eastern entry, and upgrades to suburban platforms. This modification application was approved on 21 December 2017.
- **Modification 3** - Martin Place Station which involves changes to the Sydney Metro Martin Place Station to align with the Unsolicited Proposal by Macquarie Group Limited (Macquarie) for the development of the station precinct. The proposed modification involves a larger reconfigured station layout, provision of a new unpaid concourse link and retention of the existing MLC pedestrian link and works to connect into the Sydney Metro Martin Place Station. It is noted that if the Macquarie proposal does not proceed, the original station design remains approved. This modification application was approved on 22 March 2018.
- **Modification 4** - Sydenham Station and Sydney Metro Trains Facility South which incorporated Sydenham Station and precinct works, the Sydney Metro Trains Facility South, works to Sydney Water's Sydenham Pit and Drainage Pumping Station and ancillary infrastructure and track and signalling works into the approved project. This modification application was approved on 13 December 2017.
- **Modification 5** - Blues Point acoustic shed modification which involves the installation of a temporary acoustic shed at Blues Point construction site and retrieval of all parts of the tunnel boring machines driven from the Chatswood dive site and Barangaroo through the shaft at the Blues Point temporary site. This modification application was approved on 2 November 2018.

The CSSI Approval as modified allows for all works to deliver Sydney Metro between Chatswood and Sydenham Stations and also includes upgrade of Sydenham Station.

The remainder of the City & Southwest alignment (Sydenham to Bankstown) proposes the conversion of the existing heavy rail line from west of Sydenham Station to Bankstown to metro standards. This part of the project, referred to as the Sydenham to Bankstown upgrade, is the subject of a separate CSSI Application (Application No. SSI 17_8256) for which an EIS was exhibited between September and November 2017, and a Submissions and Preferred Infrastructure Report was exhibited in June and July 2018. This application is currently being assessed by DPE.

1.3 Planning relationship between Crows Nest Station and the OSD

While Crows Nest Station and the OSD will form an Integrated Station Development, the planning pathways defined under the *Environmental Planning & Assessment Act 1979* require separate approval for each component of the development. In this regard, the approved station works (CSSI Approval) are subject to the provisions of Part 5.1 of the

EP&A Act (now referred to as Division 5.2) and the OSD component is subject to the provisions of Part 4 of the EP&A Act.

For clarity, the approved station works under the CSSI Approval included the construction of below and above ground structures necessary for delivering the station and also enabling construction of the integrated OSD. This includes but is not limited to:

- demolition of existing development
- excavation
- integrated station and OSD structure (including concourse and platforms)
- lobbies
- retail spaces within the station building
- public domain improvements
- pedestrian through-site link
- access arrangements including vertical transport such as escalators and lifts
- space provisioning and service elements necessary to enable the future development of the OSD, such as lift cores, plant rooms, access, parking, retail, utilities connections and building services.

The vertical extent of the approved station works above ground level is defined by the 'transfer level' level, above which would sit the OSD. This delineation is illustrated in Error! Reference source not found..

The CSSI Approval also establishes the general concept for the ground plane of Crows Nest Station including access strategies for commuters, pedestrians, workers, visitors and residents.

Since the issue of the CSSI Approval, Sydney Metro has undertaken sufficient design work to determine the space planning and general layout for the station and identification of those spaces within the station area that would be available for the OSD. In addition, design work has been undertaken to determine the technical requirements for the structural integration of the OSD with the station. This level of design work has informed the concept proposal for the Crows Nest OSD. It is noted that ongoing design development of the works to be delivered under the CSSI Approval would continue with a view to developing an Interchange Access Plan (IAP) and Station Design Precinct Plan (SDPP) for Crows Nest Station to satisfy Conditions E92 and E101 of the CSSI Approval.

All public domain improvement works around the site would be delivered as part of the CSSI Approval.

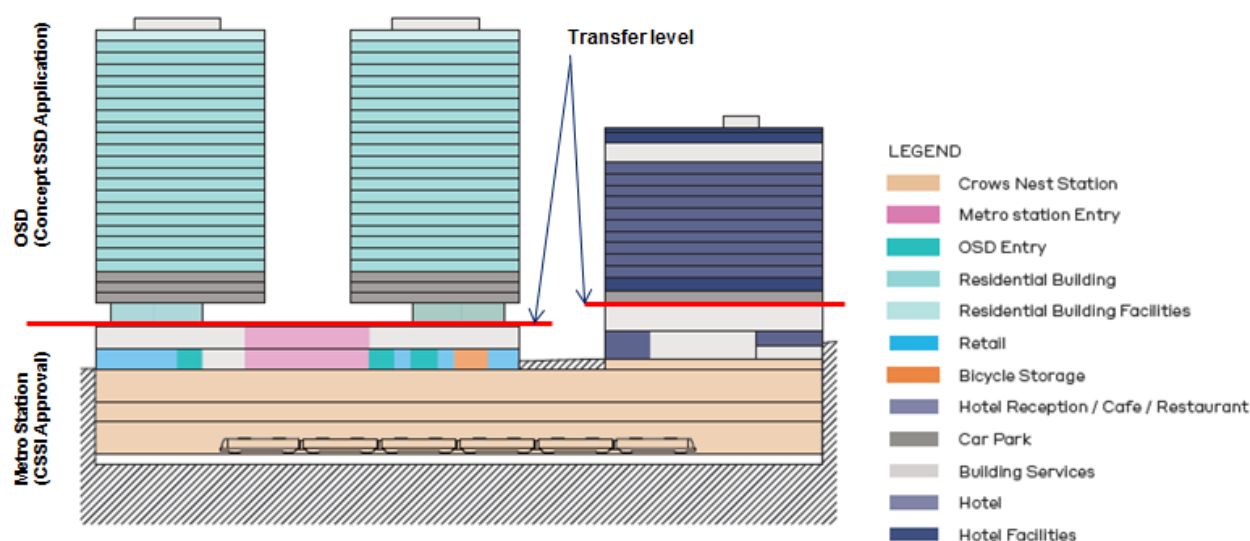


Figure 2: Delineation between the Metro station and OSD (based on indicative OSD design)

1.4 The strategic planning context

DPE is currently undertaking strategic planning investigations into revitalising the area surrounding St Leonards railway station and the metro station at Crows Nest. In August 2017, DPE released the *St Leonards and Crows Nest Station Precinct Interim Statement* and in October 2018 DPE released the *St Leonards and Crows Nest 2036 Draft Plan* (2036 Draft Plan) and supporting documents which detail recommended changes to land use controls in the precinct. These documents recommend new developments be centred around the Pacific Highway corridor and the Crows Nest Station while protecting the amenity of Willoughby Road.

In October 2018, DPE also placed on public exhibition the *Crows Nest Sydney Metro Site Rezoning Proposal* (Planning Proposal). The Planning Proposal outlines the State led rezoning of the subject site, on the basis that the current planning controls in the *North Sydney Local Environmental Plan 2013* do not reflect the opportunities for improved accessibility associated with the new metro station enabling people to live, work and spend time close to public transport. This concept SSD Application is aligned with the planning controls proposed in the Planning Proposal.

1.5 The site

Crows Nest Station precinct is located between the Pacific Highway and Clarke Street (eastern side of the Pacific Highway) and Oxley Street and south of Hume Street, Crows Nest (**Figure 3**).

The site is located within the North Sydney Local Government Area.

The Crows Nest Station precinct is divided into three separate sites as illustrated in **Figure 4** and described below:

- **Site A:** Six lots in the block bound by the Pacific Highway, Hume Street, Oxley Street and Clarke Lane (497-521 Pacific Highway, Crows Nest)
- **Site B:** Three lots on the southern corner of Hume Street and Pacific Highway (477-495 Pacific Highway, Crows Nest)
- **Site C:** One lot on the north-western corner of Hume Street and Clarke Street (14 Clarke Street, Crows Nest).

Sites A, B and C have a combined site area of 6,356 square metres.

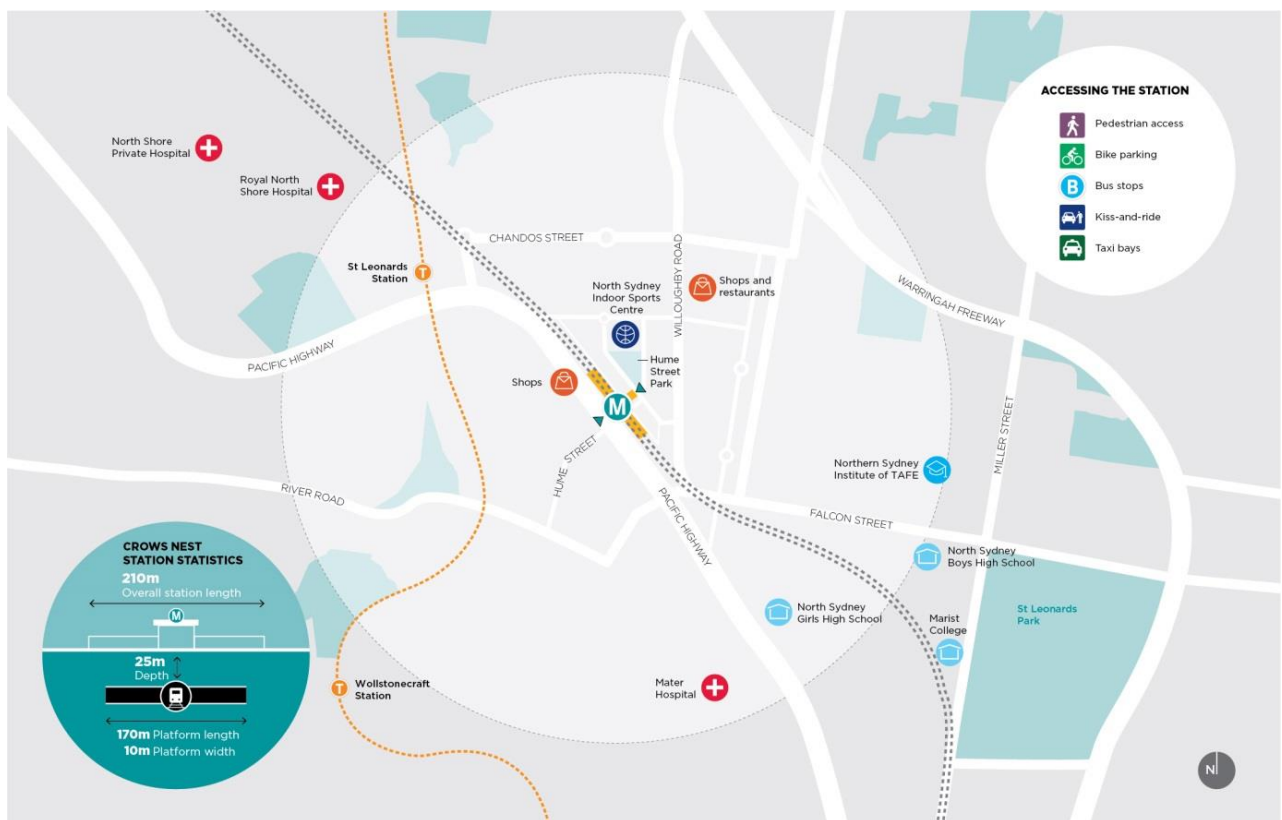


Figure 3: Crows Nest Station location plan



Figure 4: The subject site

The site comprises the following properties:

- **Site A:**
 - 497 Pacific Highway (Lot 2 in DP 575046)
 - 501 Pacific Highway (Lot 1 in DP 575046)
 - 503-505 Pacific Highway (Lot 3 in DP 655677)
 - 507-509 Pacific Highway (Lot 4 in DP 1096359)
 - 511-519 Pacific Highway (SP 71539)
 - 521-543 Pacific Highway (Lot A and Lot B in DP 374468)
- **Site B:**
 - 477 Pacific Highway (Lot 100 in DP 747672)
 - 479 Pacific Highway (Lot 101 in DP 747672)
 - 491-495 Pacific Highway (Lot 100 in DP 442804)
- **Site C:**
 - 14 Clarke Street (Lot 1 in SP 52547)

1.6 Overview of the proposed development

This concept SSD Application comprises the first stage in the Crows Nest OSD project. It will be followed by a detailed SSD Application for the design and construction of the OSD to be lodged by the successful contractor who is awarded the contract to deliver the Integrated Station Development.

This concept SSD Application seeks approval for the planning and development framework and strategies to inform the future detailed design of the Crows Nest OSD.

The concept SSD Application specifically seeks approval for the following:

- maximum building envelopes for Sites A, B and C, including street wall heights and setbacks as illustrated in the plans prepared by Foster + Partners for Sydney Metro

- maximum building heights:
 - **Site A:** RL 183 metres or equivalent of 27 storeys (includes two station levels and conceptual OSD space in the podium approved under the CSSI Approval)
 - **Site B:** RL 155 metres or equivalent of 17 storeys (includes two station levels and conceptual OSD space approved under the CSSI Approval)
 - **Site C:** RL 127 metres or 8 storeys (includes two station levels and conceptual OSD space approved under the CSSI Approval)

Note 1: the maximum building heights defined above are measured to the top of the roof slab and exclude building parapets which will be resolved as part of future detailed SSD Application(s)

- maximum height for a building services zone on top of each building to accommodate lift overruns, rooftop plant and services:
 - **Site A:** RL 188 or 5 metres
 - **Site B:** RL 158 or 3 metres
 - **Site C:** RL 132 or 5 metres

Note 1: the use of the space within the building services zone is restricted to non-habitable floor space.

Note 2: for the purposes of the concept SSD Application, the maximum height of the building envelope does not make provision for the following items, which will be resolved as part of the future detailed SSD Application(s):

- communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like, which are excluded from the calculation of building height pursuant to the standard definition in NSLEP 2013
 - architectural roof features, which are subject to compliance with the provisions in Clause 5.6 of NSLEP 2013, and may exceed the maximum building height, subject to development consent.
- maximum gross floor area (GFA) of 55,400sqm for the OSD comprising the following based on the proposed land uses:
 - **Site A:** Residential accommodation - maximum 37,500 square metres (approximately 350 apartments)
 - **Site B:** Hotel / tourist accommodation and associated conference facilities or commercial office premises GFA - maximum of 15,200 square metres (approximately 250 hotel rooms)
 - **Site C:** Commercial office premises GFA - maximum of 2,700 square metres
 - **Site A or C:** social infrastructure GFA inclusive of the GFA figures nominated above for each site, with provision optional as follows:
 - Site A: podium rooftop (approximately 2,700 square metres)
 - Site C: three floors and rooftop (approximately 1,400 square metres)

Note 1: GFA figures exclude GFA attributed to the station and station retail space approved under the CSSI Approval

- a minimum non-residential floor space ratio (FSR) for the OSD across combined Sites A, B and C of 2.81:1 or the equivalent of 17,900 square metres
- the use of approximate conceptual areas associated with the OSD which have been provisioned for in the Crows Nest station box (CSSI Approval) including areas above ground level (i.e. OSD lobbies and associated spaces)
- a maximum of 150 car parking spaces on Sites A and B associated with the proposed commercial, hotel and residential uses
- loading, vehicular and pedestrian access arrangements
- strategies for utilities and services provision
- strategies for managing stormwater and drainage
- a strategy for the achievement of ecological sustainable development
- a public art strategy
- indicative signage zones
- a design excellence framework
- the future subdivision of parts of the OSD footprint, if required.

As this is a staged development pursuant to section 4.22 of the EP&A Act, future approval would be sought for the detailed design and construction of the OSD.

The proposed location of the buildings on the site is illustrated in the location plan provided at **Figure 5**.

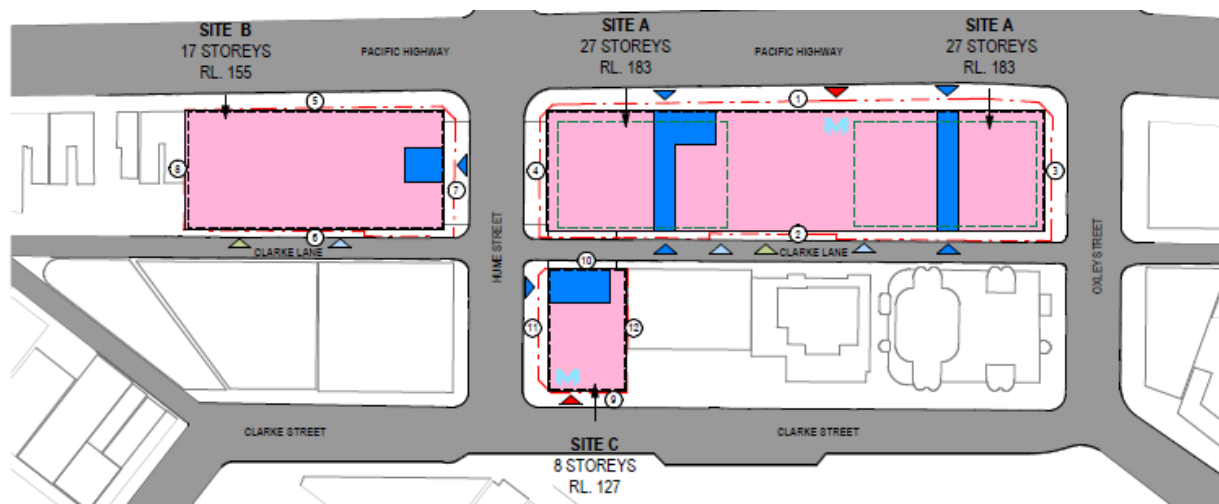


Figure 5 – Proposed location of buildings on the

The total GFA for the integrated station development, including the station GFA (i.e. retail, station circulation and associated facilities) and the OSD GFA is 60,400 square metres, equivalent to a floor space ratio (FSR) of 9.5:1.

The concept proposal includes opportunities for community uses in the development on either Site A or Site C. This space has the potential to be used for a range of uses including

community facilities, child care centre, recreational area/s, library, co-working space, which can take advantage of the sites accessibility above the metro station.

Through design development post the CSSI Approval, pedestrian access to the metro station is proposed from the Pacific Highway and from Clarke Street, opposite the Hume Street Park. Vehicular access to the site including separate access to the loading docks and parking is proposed from Clarke Lane.

Public domain works around the site would be delivered as part of the CSSI Approval. Notwithstanding, the OSD will be appropriately designed to complement the station and activate the public domain. Provision for retail tenancies to activate the public domain are included in the ground floor of Sites A, B and C, as part of the CSSI Approval. Future detailed development applications will seek approval for the fitout and specific use of this retail space.

Drawings illustrating the proposed building envelopes are provided in Figures 6A and 6B. The concept SSD Application includes an indicative design for the OSD to demonstrate one potential design solution within the proposed building envelope (refer to Figure 7).

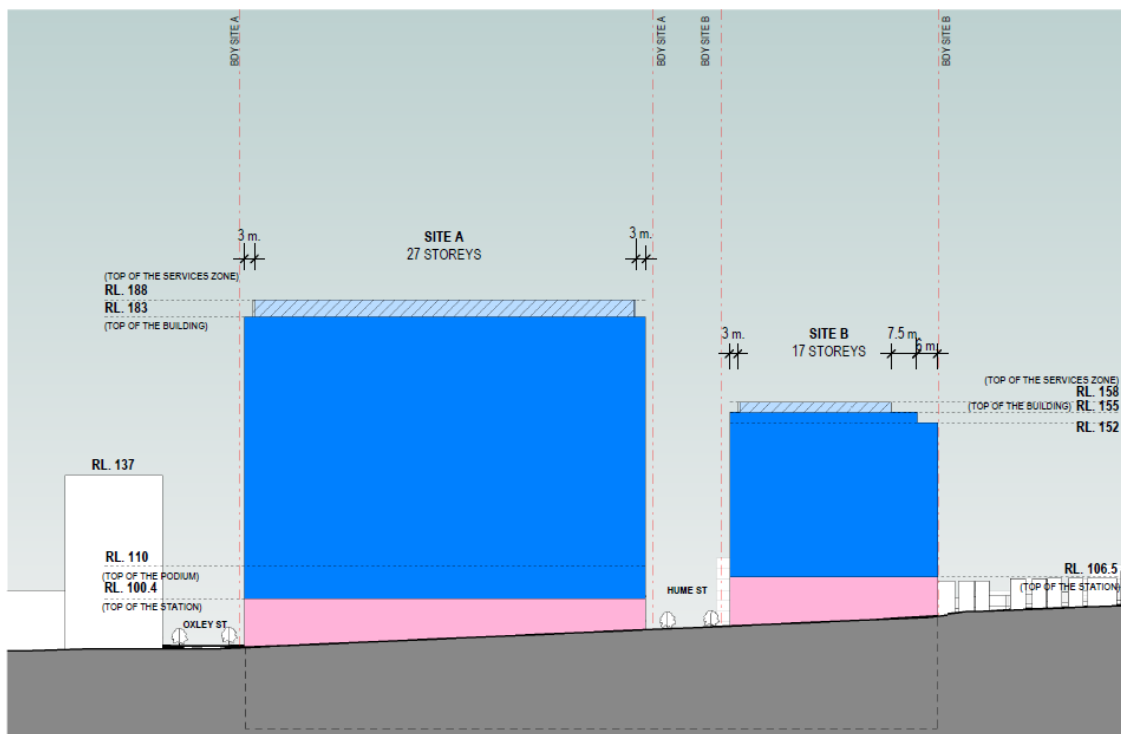


Figure 6A: Proposed Crows Nest OSD building envelopes – west elevation (Pacific Highway)

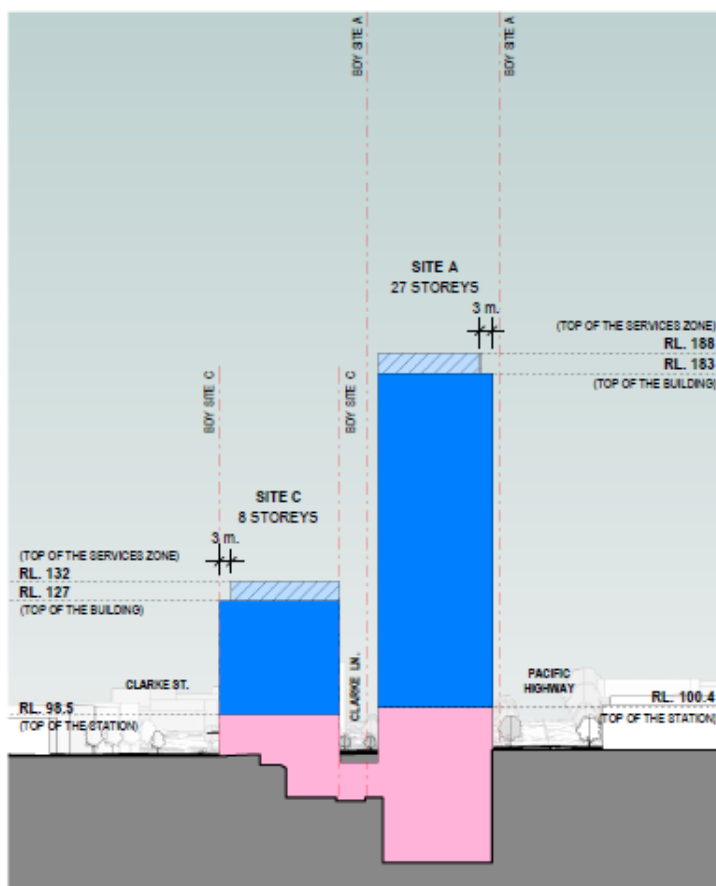


Figure 6B: Proposed Crows Nest OSD building envelopes – cross section through the site (east-west)



Figure 7: Crows Nest OSD indicative design

2.0 Scope of assessment

This report documents a CPTED assessment that has been undertaken for the OSD concept drawings prepared by Sydney Metro for the OSD at Crows Nest.

2.1 What is CPTED?

In 2001, the Minister introduced “Crime Prevention Guidelines” to Section 79C of the *Environmental Planning and Assessment Act 1979*. These guidelines require consent authorities to ensure that development provides safety and security to users and the community.

The goal of CPTED is to reduce opportunities for crime by using design and place management principles that decrease the likelihood of essential crime ingredients from intersecting in time and space. CPTED aims to create the perception that the risk of committing the crime is greater than the likely benefits. This is achieved 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.

In NSW there are four generally accepted key principles of CPTED:

- surveillance
- access control
- territorial reinforcement
- space and activity management.

These key principles are explained in further detail in the Section 4 (Assessment) below.

2.2 Contents of this report

This assessment provides a desktop analysis of indicative OSD design prepared by Sydney Metro, described in section 1.6 of this report. This indicative OSD design includes two residential buildings above the station box on Site A, a hotel or commercial development above the station box on Site B and a small commercial building above the secondary station entry on Site C. Opportunities for community uses on Sites A or C are also proposed.

A review of local crime statistics from the Bureau of Crime Statistics and Research (BOSCAR) has been conducted as part of this assessment.

2.3 Limitations

Generally a site inspection would be carried out to determine the site's current conditions and situational crime prevention measures. However, given that the site is under construction an inspection has not been completed.

It should be noted that the application of CPTED principles is not a guarantee that all criminal or anti-social behaviour can be prevented. While CPTED principles may not eliminate all criminal behaviour, application of the principles to a development can significantly reduce criminal and anti-social behaviour. Also, the application of such principles can heighten awareness and increase positive perceptions of personal and public safety.

The public domain and station levels (below and above ground level) on each site are approved under the CSSI Approval for the station, and the design of these approved levels will be resolved through the preparation of the Station Design and Precinct Plan (SDPP) (Condition E92). The SDPP will include consideration of the *Sydney Metro City & Southwest Design Guidelines* that specifically reference CPTED principles.

3.0 Nature of crime in the area

The NSW Bureau of Crime Statistics and Research (BOSCAR) provides criminal incidents recorded by the NSW Police. A review of the North Sydney Local Government Area for April 2016 to March 2018 found that the most common occurring within the North Sydney Local Government Area were (number of incidents recorded over two-year period):

- transport regulatory offences (995)
- fraud (992)
- malicious damage to property (682)
- liquor offences (604)
- possession and/or use of ecstasy (546)
- steal from dwelling (404)
- other left (384)
- assault (non-domestic) (377)
- steal from motor vehicle (376)
- steal from retail store (309).

All of the above crimes have remained stable over the two-year period, except for liquor offences, which have increased by 38.7 percent. These crimes are typical of dense urban areas such as the subject site and do not point to any known particular crime issues in the area.

As shown in the Figures 8 to 13, the site is located within a number of crime high-density “hotspots” related to:

- non-domestic assault
- domestic assault
- break and entering dwelling
- break and entering non-dwelling
- stealing from a dwelling
- malicious damage to property.

Hotspots are representative of the density of recorded criminal incidents per square metre across the target area. Maps are generally calculated using a 50-square-metre output cell.

It should be noted that the site's location within several hotspots is indicative of its general location within a dense urban area and does not point to any known particular characteristic of the Crows Nest area. As seen in the below figures, generally all dense urban areas in the vicinity are identified as hotspots.

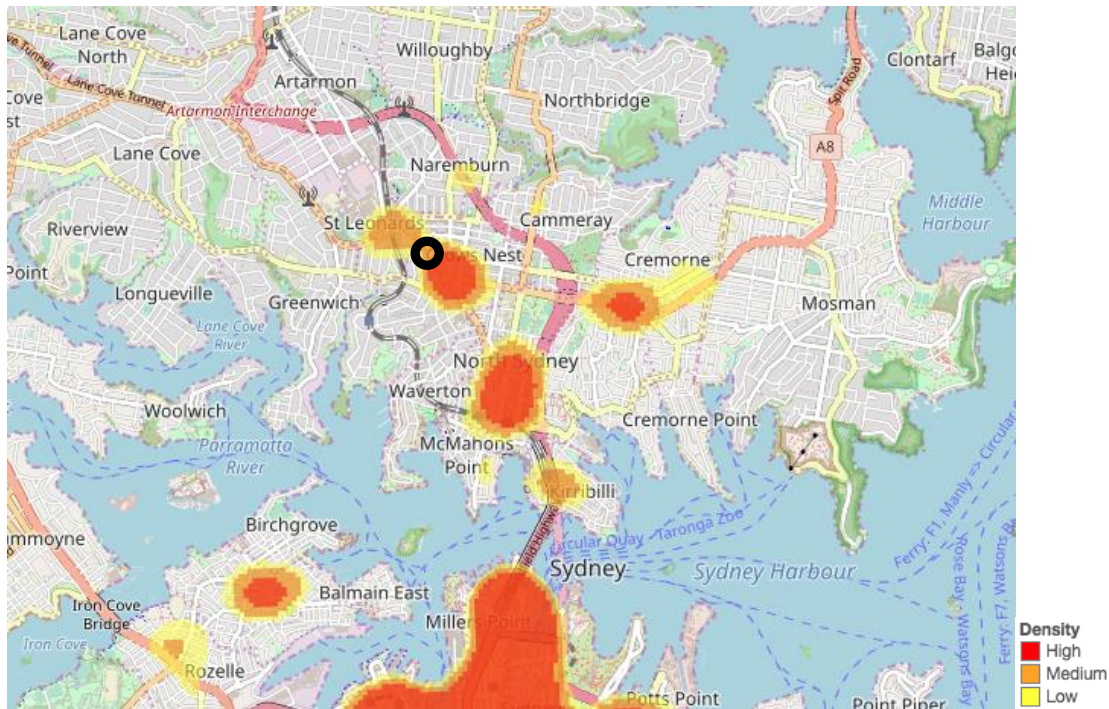


Figure 8: Hot spot map – assault
Source: BOSCAR

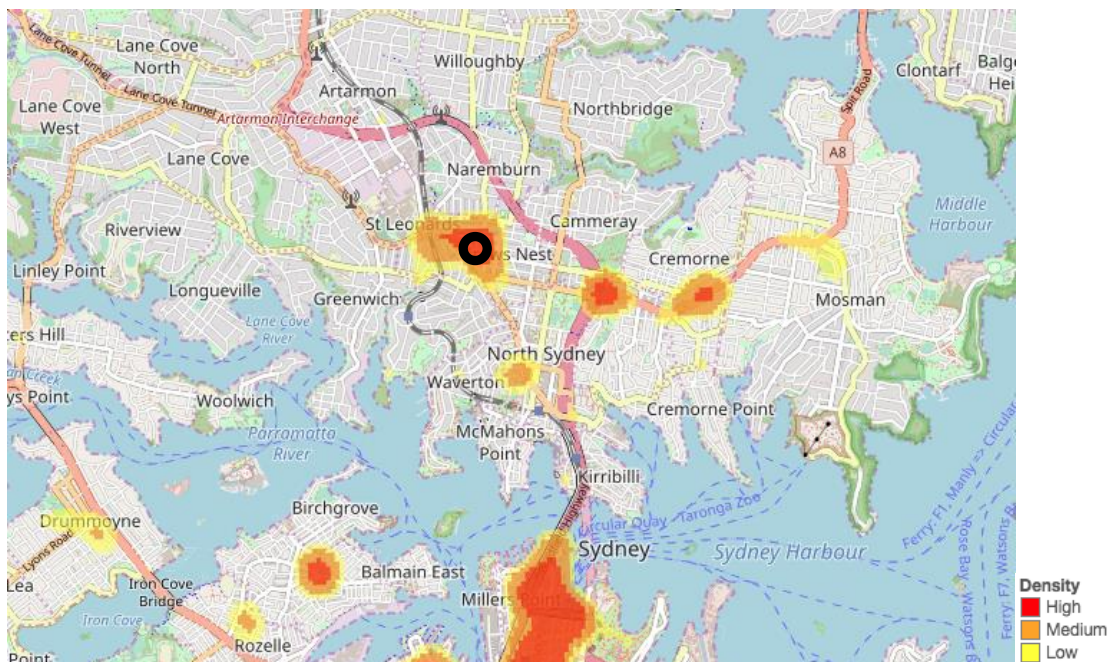


Figure 9: Hot spot map – robbery
Source: BOSCAR

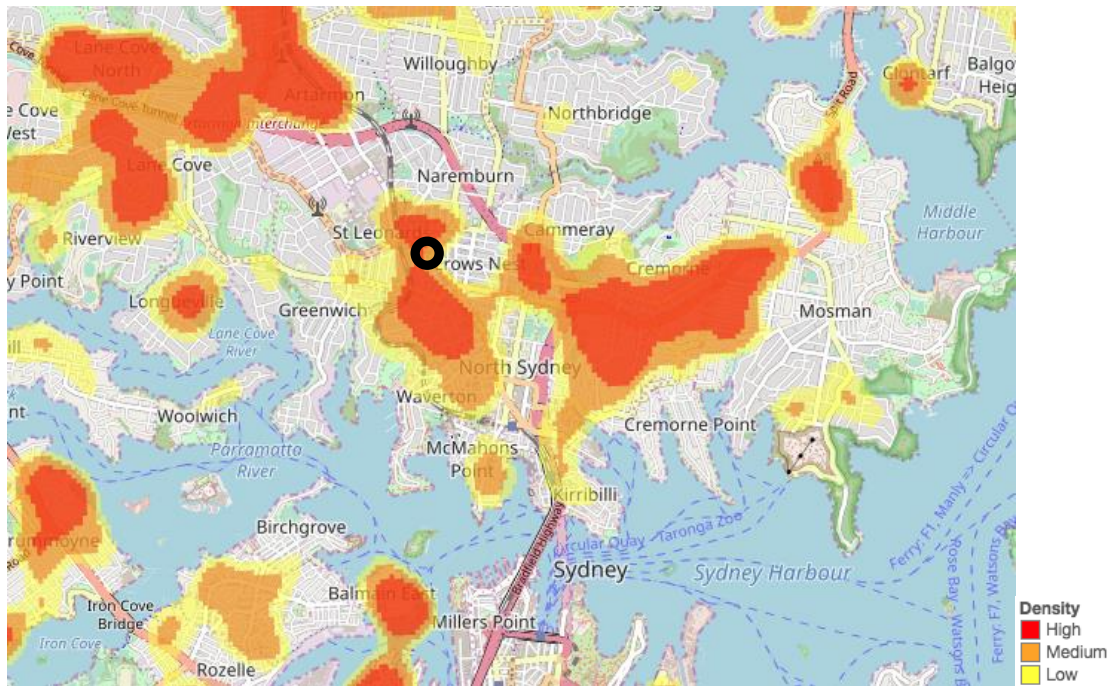


Figure 10: Hot spot map – breaking and entering (dwelling)
Source: BOSCAR

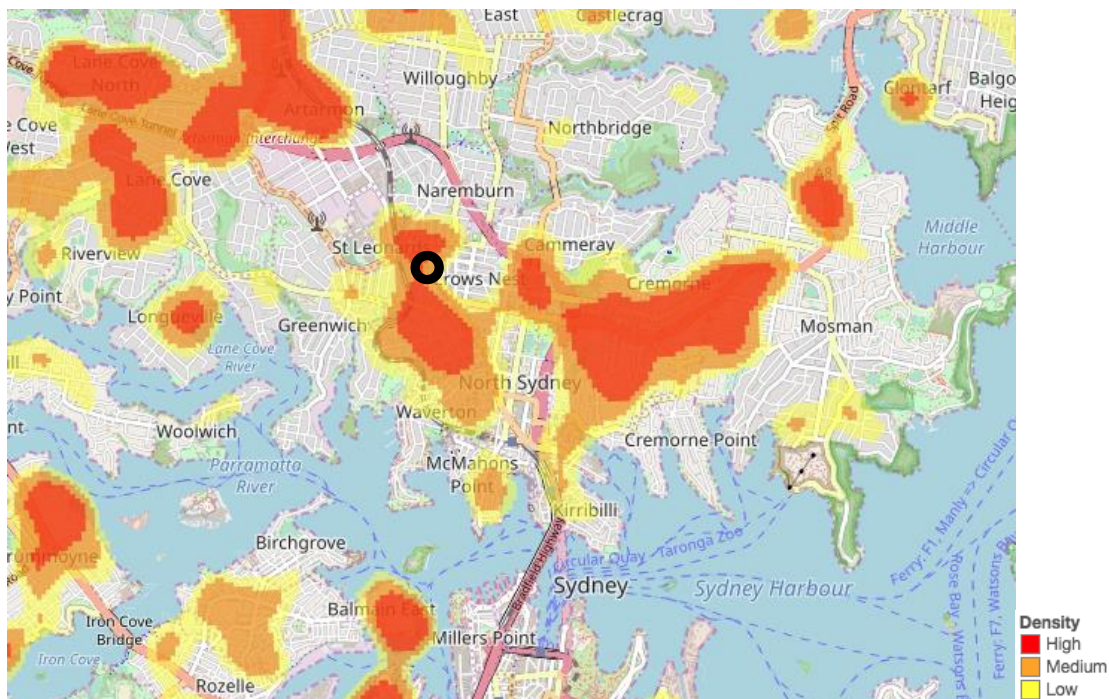


Figure 11: Hot spot map – breaking and entering (non-dwelling)
Source: BOSCAR

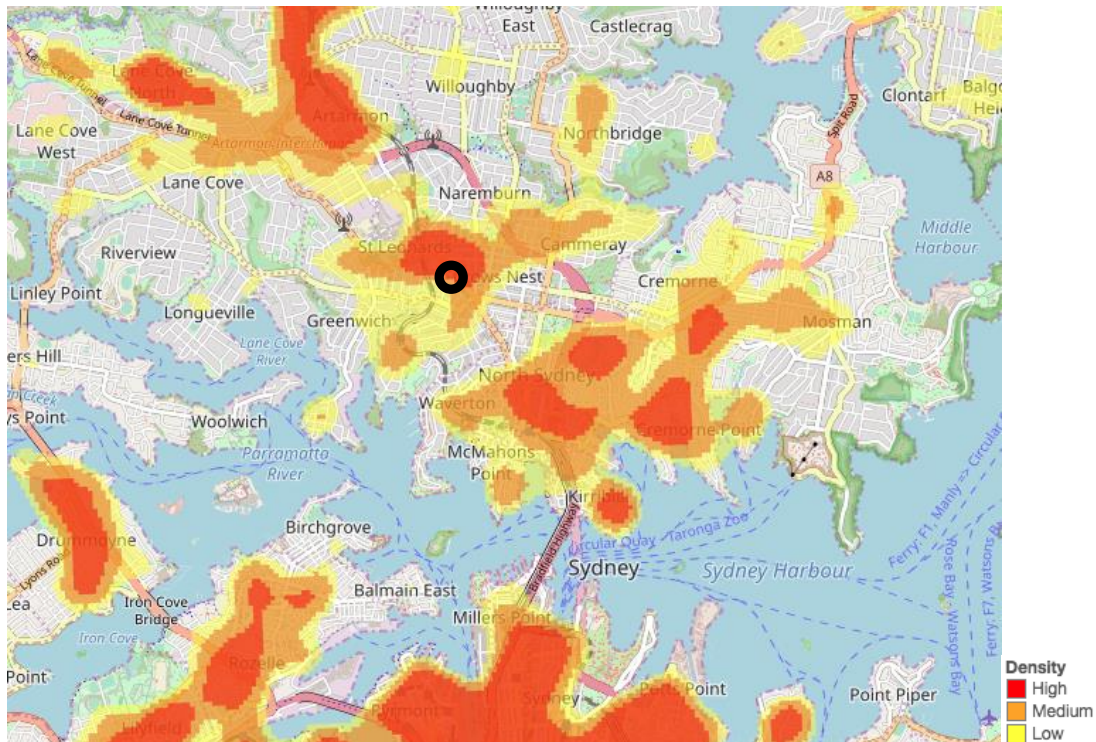


Figure 12: Hot spot map – steal from a motor vehicle
Source: BOSCAR

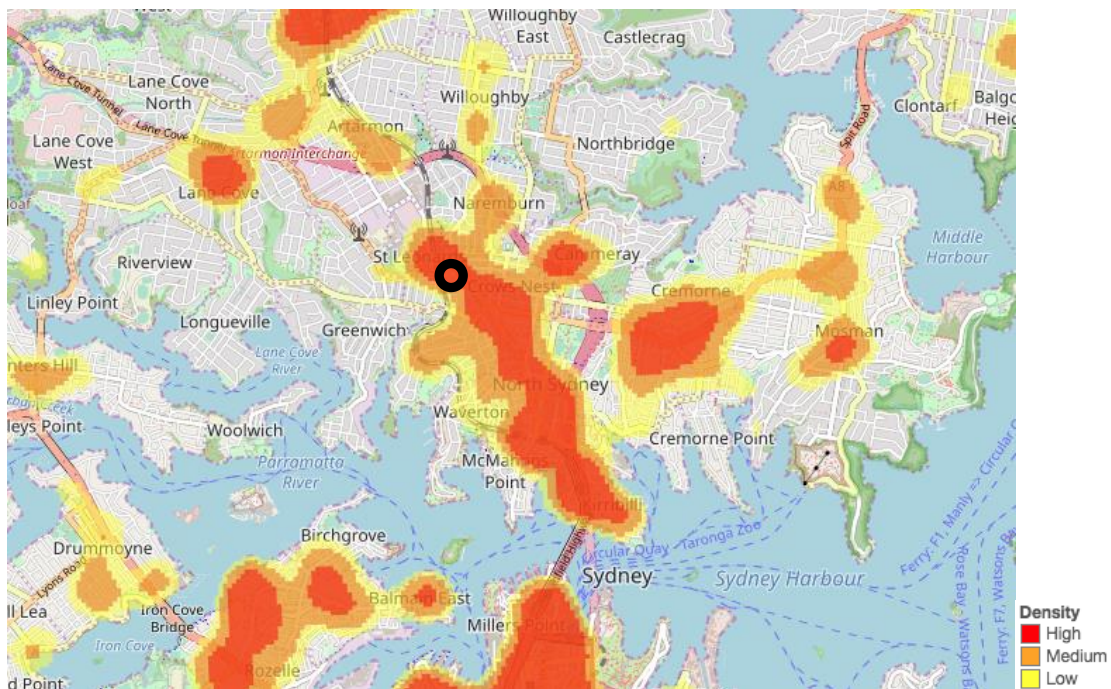


Figure 13: Hot spot map – malicious damage to property
Source: BOSCAR

4.0 Assessment

This section provides an assessment of the four key principles of CPTED (surveillance, territorial reinforcement, access control and space/ activity management) in relation to the concept proposal for OSD above Crows Nest Metro Station.

4.1 Surveillance

Surveillance is a design strategy to keep potential offenders under observation through well-planned, well-designed and well-used space. Surveillance can be achieved naturally through design elements, technically through measures such as lighting and CCTV, or through organised methods such as building staff.

Natural surveillance

The concept proposal demonstrates the following natural surveillance attributes:

- multiple street frontages with glazed facades, offering opportunity for overlooking the surrounding public domain
- passive surveillance from the upper building levels to the surrounding public domain include Hume Street Park
- clear sight lines between the building entries and the public domain
- building layout does not result in “blind” spots or areas for hiding
- active frontages at ground level would help create an environment for people to be engaged in their normal behaviour while observing the space around them, essentially creating natural community policing of the precinct.

It is expected that the principle of natural surveillance would be carefully considered during the detailed design of the building, including glazing and entry design.

It is noted that the ground plane is being designed and delivered under the CSSI Approval for the station and is therefore outside the scope of this concept proposal.

Lighting and technical surveillance

Effective lighting contributes to public perception by reducing fear, increasing community activity, improving visibility, defining activity spaces and increasing the chance that offenders will be detected and apprehended.

Lighting and security measures for the station and the surrounding public domain will be key elements to be resolved during the preparation of the SDPP under the terms of the CSSI Approval. Condition E104 (lighting) and Condition E105 (CCTV cameras) of the CSSI Approval are also relevant to the safety and security of the site and include a requirement for the NSW Police to be consulted regarding the final placement of CCTV cameras.

Organised surveillance

The development provides opportunity for organised surveillance including concierge desks in the lobbies, retail staff and building management. Though not directly employed for security purposes, these persons would provide surveillance in and around the development.

4.2 Territorial reinforcement

Territorial reinforcement aims to clearly define the types of spaces and to delineate between public and private areas. Areas displaying strong ownership and territorial cues are less likely to be improperly used than those without such cues.

The overall design of the development is conducive to territorial reinforcement, with each building component servicing a specific purpose i.e., residential, hotel or commercial. This separation of uses would assist in providing distinctive materials, architectural and language for further differentiating between uses.

At ground level, the proposed uses are clearly defined through the use of separate entries distinct from one another and from the station uses. The distinct entries would direct persons to the intended locations. The separate entries allow for the inclusion of various design cues at the detailed design stage, including colours, materials, landscaping, signage and other elements, to further reinforce the specific uses.

It is noted that the majority of territorial reinforcement design cues would be incorporated at the ground plane, which is being designed and delivered under the CSSI Approval for the station and is therefore outside the scope of this concept proposal.

4.3 Access control

The concept proposal provides a number of access control opportunities, including natural, technical and organised access control.

Natural access control

In terms of natural access control, the ground plane features distinct and easily identifiable access points for individual uses, serving to channel persons into the intended locations. Although the detailed internal layout is unknown at this preliminary stage, corridors within each building would also serve to funnel person to the intended locations.

It is anticipated that the specific design of these measures would be developed at the detailed development application phase.

Technical access control

It is anticipated signage and security doors would be used to control access to restricted areas. Boom gates would also be used to restrict access to loading and station basement areas.

It is noted that specific measures relating to the ground plane would be designed and delivered under the CSSI Approval for the station.

Organised access control

Similar to organised surveillance, the development provides opportunity for organised access control including concierge desks in the lobbies, staff and facility managers. Though not directly employed for security purposes, these persons would provide surveillance in and around the development.

It is noted that specific measures relating to the ground plane would be designed and delivered under the CSSI Approval for the station.

4.4 Space and activity management

Varying environments can impact on a person's sense of safety, stimulating interest in potential offenders or avoidance by others. Generally, maintenance communicates care and guardianship and discourages crime and makes it easier to identify unwelcome persons.

The concept proposal involves no impediments to proper environmental maintenance. It is presumed that ongoing maintenance would be provided by the future building manager.

In terms of activity, it is likely that the proposed active street frontages, including the station entry and retail opportunities provided under the terms of the CSSI Approval in addition to the various lobbies for the OSD land uses, would naturally attract users and extend activity in the area beyond core business hours. Generally, mixed use developments also offer extended hours of trade and around-the-clock use of space. This increased activity increases the risks for potential offenders or intruders.

5.0 Mitigation Measures

The following general recommendations have been provided to improve the safety and security of the future development and its future users:

Surveillance:

- entry points should be designed to maximise surveillance opportunities to and from these areas
- apartment, hotel room and office layouts should be designed to encourage overlooking of the surrounding public domain
- the development should be designed to minimise the number of concealment or entrapment areas

Territorial reinforcement:

- appropriate signage should be installed around the precinct to define uses and to provide clear directions

Access control:

- blind bends and corners should be avoided in building corridors and walkways whenever possible, and where they cannot be avoided, surveillance can be enhanced through the use of vandal-resistant mirrors, windows (where applicable), and bright, evenly distributed lighting
- signage and security doors should be installed to controls access to restricted areas
- concierge/help desks should be considered in lobby areas

Space and activity management:

- ensure a maintenance plan is put in place to take care of all buildings in the precinct.

Should the above recommendations be considered in the future detailed design of the precinct, it is considered that the general crime risk of the future development is likely to be low.

A CPTED report would be submitted with the future detailed SSD Application in order to assess the more detailed design proposed in that application and provide further recommendations for implementing CPTED principles.

CPTED treatments to the public domain and station areas will be implemented through the CSSI Approval process, in particular through incorporation of the *Sydney Metro City & Southwest Chatswood to Sydenham Design Guidelines* (June 2017), which have been developed to establish the design standards for the Sydney Metro Chatswood to Sydenham project. These guidelines include consideration of CPTED principles (at sections 1.6, 3.15, 3.26) and will be utilised to inform the detailed design of the station. A key requirement in the guidelines is that '[a] Crime Risk Assessment audit must be applied to the precinct design to ensure that all precinct areas comply with CPTED guidelines'.

6.0 Conclusion

This report presents the results of a CPTED assessment of the OSD above Crows Nest Station.

This report has been prepared to outline the opportunities for reducing crime at the future development and to specifically respond to the SEARs issued for the concept SSD Application.

The assessment has found that the concept proposal provides adequate opportunity for the implementation of CPTED principles in the future design. The proposed mitigation measures should be considered during the preparation of the future detailed State Significant Development Application.