

Macquarie Capital

Metro Martin Place

Stage 1 Amending DA - Crime
Prevention Through Environmental
Design Report

CSWSMP-MAC-SMA-SC-REP-999901

Rev A | 4 July 2018

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 247838

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1 Executive Summary

1.1 Methodology

In preparing this report, Arup has undertaken the following:

- Review of CPTED theory and how this can be typically applied to projects of this type;
- Collection and analysis of local and state crime statistics, obtained from open sources such as the Bureau of Crime Statistics and Research (BOCSAR), in order to better understand the external security environment;
- Collection and analysis of local demographic statistics, obtained from open sources from the Australian Bureau of Statistics, in order to better understand the external environment;
- Perform a review of the current architectural plans, and relevant reports, with an emphasis on the interfaces between the public domain and the project buildings and infrastructure; and
- Conduct a detailed CPTED review and detail the CPTED strategies, including providing detailed findings and recommendations.

1.2 Crime Context

A review of crime occurring in the precinct area (the Sydney LGA) was conducted to identify relevant trends. The majority of relevant crimes to the project have been decreasing over the last five years, with trespass and transport regulatory offences increasing within the CBD.

Trend information	2011	2012	2013	2014	2015	24mnth Trend	60mnth Trend
Steal from person	2881	2736	2225	1887	1661	-11.98	-42.35
Harassment, threatening behaviour and private nuisance	973	1023	1025	950	939	-1.16	-3.49
Transport regulatory offences	2382	3172	4948	3942	8755	122.1	267.55
Assault - non-domestic violence related	3772	3724	3576	3142	3121	-0.67	-17.26
Malicious damage to property	3599	3332	3343	2876	2691	-6.43	-25.23
Offensive conduct	1860	1682	1713	1318	1126	-14.57	-39.46
Steal from retail store	2290	2462	2276	2318	2185	-5.74	-4.59
Trespass	449	560	477	508	502	-1.18	11.8
Steal from motor vehicle	2713	2200	2351	2176	1686	-22.52	-37.85
Break and enter non-dwelling	807	819	934	590	450	-23.73	-44.24

Source: BOCSAR

1.3 Recommendations

Based on a design assessment and review of crime statistics for the Sydney LGA, several recommendations have been made including:

- Provide clear definition and designation of space in a manner that encourages and predicts authorised movement and does not cause conflict between the intended purpose of the space and the desired behaviour;
- Maximise passenger circulation areas by minimising built structures and avoiding clutter, particularly along pedestrian routes to the station concourse;
- Design and layout of building entrances and foyers to assist natural surveillance by reducing clutter and blind spots, positioning reception/concierge where they have clear sightlines of entrances, the general foyer areas, and waiting areas;
- Use of glass partitions wherever possible to improve site lines and the transmission of natural light, and be fitted with anti-graffiti coatings (where practical) where these partitions are accessible to the public.
- Durable public furniture and amenity construction, to limit damage and subsequent repairs over the life of the facility;
- Keep Macquarie Martin Place Station as clean, tidy and well-presented as possible in order to enhance the territoriality aspects of the site;
- The mixed use areas will help ensure regular and diverse use of the facility which also enhances the territoriality aspects of the site, whilst enhancing the opportunity for natural surveillance. Encouraging regular and diverse use of the site through these and other measures are recommended;
- Ensure adequate lighting is provided throughout the precinct;
- Treat the corridor on the Lower Concourse with appropriate security control measures such as CCTV to reduce the likelihood of opportunistic crime;
- Provide control points between each external interface point and the development (i.e. between the MLC centre and the underground project connection point);
- Ensure public realm lighting is appropriate for use at night;
- Provide signage throughout the precinct to remove excuses for loitering and littering, each being a significant detractor to territoriality; and
- Ensure signage is appropriate to improve way finding and reduce terrain vagueness within the precinct.

Implementing these recommendations will increase the perception of risk to criminals by increasing the presence of deter, detect, delay and response characteristics (physical and electronic security systems) to the precinct. Further, such measures will increase the effort required to commit crime by increasing the time, energy or resources which need to be expended while reduce the potential rewards of crime by minimising, removing and concealing rewards.

2 Introduction

2.1 Introduction

This report supports a State Significant Development (SSD) Development Application (DA) submitted to the Minister for Planning (Minister) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) on behalf of Macquarie Corporate Holdings Pty Limited (Macquarie), who is seeking to create a world class transport and employment precinct at Martin Place, Sydney.

The SSD DA seeks approval for an amended Concept Proposal (otherwise known as a Stage 1 DA) relating to the Martin Place Metro Station Precinct ('the Precinct'). An existing development consent (SSD 17_8351) for a Concept Proposal is in place for the Precinct, which approved the concept for two Over Station Development (OSD) commercial towers above the northern (North Site) and southern (South Site) entrances of Martin Place Metro Station. The Concept Proposal approved building envelopes, land uses, Gross Floor Areas (GFA) and Design Guidelines with which the detailed design (otherwise known as a Stage 2 DA) must be consistent.

This Stage 1 Amending DA is a concept development application made under Section 4.22 of the EP&A Act. It seeks to align the approved South Site building envelope with the new planning controls established for the precinct as a result of a site specific amendment to Sydney LEP 2012. The new controls permit greater building height (over a portion of the South Site only) and additional floor space (North Site and South Site).

Whilst the approved Concept Proposal related to the entire Precinct, this Amending DA relates principally to the building envelope of the **South Site**, in terms of amending the approved height and floor space.

This application does not seek approval for elements of the Martin Place Station Precinct which relate to Stage 2 of the Sydney Metro infrastructure project, which is subject to a separate Critical State Significant Infrastructure (CSSI) approval. These include:

- Demolition of buildings on the North Site and South Site;
- Construction of rail infrastructure, including station platforms and concourses;
- Ground level public domain works; and
- Station related elements in the podium of the North Site and South Site building.

The approved Stage 1 Concept Proposal approved conceptual OSD areas in the approved Martin Place Station Structure, above and below ground level, which are classified as SSD as they relate principally to the OSD. These components are within the Metro CSSI approved station envelope that will contain some OSD elements not approved in the CSSI consent. Those elements include the end of trip

facilities, office entries, office space and retail areas, along with other office/retail plant and back of house requirements that are associated with the proposed OSD and not the rail infrastructure. This Amending DA does not propose to modify this.

Accordingly, this report is designed to provide commentary on indicative architectural plans in consideration of best security practices from a CPTED perspective. The report outlines the project, policy, and crime context for the project and makes recommendations about appropriate CPTED strategies to reduce the opportunity for crime to occur.

2.2 Context

The New South Wales (NSW) Government is implementing Sydney's Rail Future (Transport for NSW, 2012), a plan to transform and modernise Sydney's rail network so that it can grow with the city's population and meet the needs of customers in the future.

Sydney Metro is a new standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro Northwest (Stage 1) and Sydney Metro City & Southwest (Stage 2).

Stage 2 of the Metro entails the construction and operation of a new Metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and onto to Bankstown through the conversion of the existing line to Metro standards. The project also involves the delivery of seven (7) new Metro stations, including Martin Place.

This step-change piece of public transport infrastructure once complete will have the capacity for 30 trains an hour (one every two minutes) through the CBD in each direction catering for an extra 100,000 customers per hour across the Sydney CBD rail lines.

On 9 January 2017 the Minister approved the Stage 2 (Chatswood to Sydenham) Metro application lodged by Transport for NSW (TfNSW) as a Critical State Significant Infrastructure (CSSI) project (reference SSI 15_7400). Work is well underway under this approval, including demolition of buildings at Martin Place.

The OSD development is subject to separate applications to be lodged under the relevant provisions of the EP&A Act.

2.3 Site Description

The Sydney Metro Martin Place Station Precinct project relates to the following properties (refer to **Figure 1**):

- 50 Martin Place, 9 – 19 Elizabeth Street, 8 – 12 Castlereagh Street, 5 Elizabeth Street, 7 Elizabeth Street, and 55 Hunter Street (North Site);
- 39 – 49 Martin Place (South Site); and
- Martin Place (that part bound by Elizabeth Street and Castlereagh Street).

This Stage 1 Amending DA relates principally to the building envelope of the South Site, being land at 39 – 49 Martin Place, Sydney (refer to **Figure 1**).



Figure 1 – Aerial Photo of the North and South Site of the Martin Place Metro Station Precinct

2.4 Background

Sydney Metro Stage 2 Approval (SSI 15 7400)

On 9 January 2017, the Minister approved Stage 2 of the Sydney Metro project, involving the construction and operation of a metro rail line between Chatswood and Sydenham, including the construction of a tunnel under Sydney Harbour, links with the existing rail network, seven metro stations (including a station at Martin Place), and associated ancillary infrastructure. The project approves the demolition of existing buildings at Martin Place, excavation and construction of the new station (above and below ground) along with construction of below and above ground structural and other components of the future OSD, although the fit-out and use of such areas are the subject of separate development approval processes.

Modification 3 to the Sydney Metro consent, approved 22 March 2018, enabled the inclusion of Macquarie-owned land at 50 Martin Place and 9-19 Elizabeth Street within the Martin Place Station footprint, and other associated changes (including retention of existing MLC pedestrian link).

Planning Proposal (PP_2017_SYDNE_007_00) – Amendment to Sydney LEP 2012

The Planning Proposal (PP_2017_SYDNE_007_00) sought to amend the development standards applying to the Sydney Metro Martin Place Station Precinct through the inclusion of a site-specific provision in the Sydney LEP 2012. This site-specific provision reduced the portion of the South Site that was subject to a 55 metre height limit from 25 metres from the boundary to Martin Place, to 8 metres, and applies the Hyde Park North Sun Access Plane to the remainder of the South Site, forming the height limit of the tower. It also permitted a revised FSR of 22:1 on the South Site and 18.5:1 on the North Site (resulting in a combined permissible overall GFA of 153,141m²). These amendments were gazetted within Sydney LEP 2012 and reflect the new planning controls applying to the precinct.

Concept Proposal (SSD 17_8351)

On 22 March 2018, the Minister approved a Concept Proposal (SSD 17_8351) for the Precinct. The Concept Proposal established the planning and development framework through which to assess the detailed Stage 2 applications.

The approved Concept Proposal specifically encompassed:

- building envelopes for OSD towers on the North Site and South Site (see **Figure 3**) comprising:
 - 28+ storey building on the South Site, with a 25m setback to Martin Place above 55m in height, and a 40+ storey building on the North Site.
 - Concept approval to integrate the North Site with the existing/retained 50 Martin Place building (the former Government Savings Bank of NSW).
- predominantly commercial land uses on both sites, comprising office, business and retail premises;
- a maximum total GFA of 125,437m² across both sites;
- consolidated Design Guidelines to guide the built form and design of the future development.
- a framework for achieving design excellence.
- strategies for utilities and services provision, managing drainage and flooding, and achieving ecological sustainable development.
- conceptual OSD areas in the approved Martin Place Metro Station structure, above and below ground level¹.

¹ Refers to those components within the Metro CSSI approved station envelope that will contain some OSD elements not approved in the CSSI consent. Those elements include the end of trip

The Concept Proposal was prepared and determined prior to the site specific Sydney LEP 2012 amendment being gazetted and was developed based on the height development standards that applied to the South Site at the time. As a result, the approved Concept Proposal allows for a tower on the South Site that is now inconsistent with the building envelope envisaged through the Sydney LEP 2012.



Figure 2 – North Site and South Site Approved OSD Building Envelopes

2.5 Overview of the Proposed Development

The Stage 1 Amending DA seeks approval for an amended Concept Proposal for the Martin Place Metro Station Precinct, specifically a larger building envelope for the South Site compared to the building envelope approved by the Minister through SSD 17_8351. The amended South Tower envelope will reflect a building envelope that aligns with the new controls applying to the precinct under Sydney LEP 2012, including increased height and FSR limits. It is proposed to amend the South Tower building envelope, through:

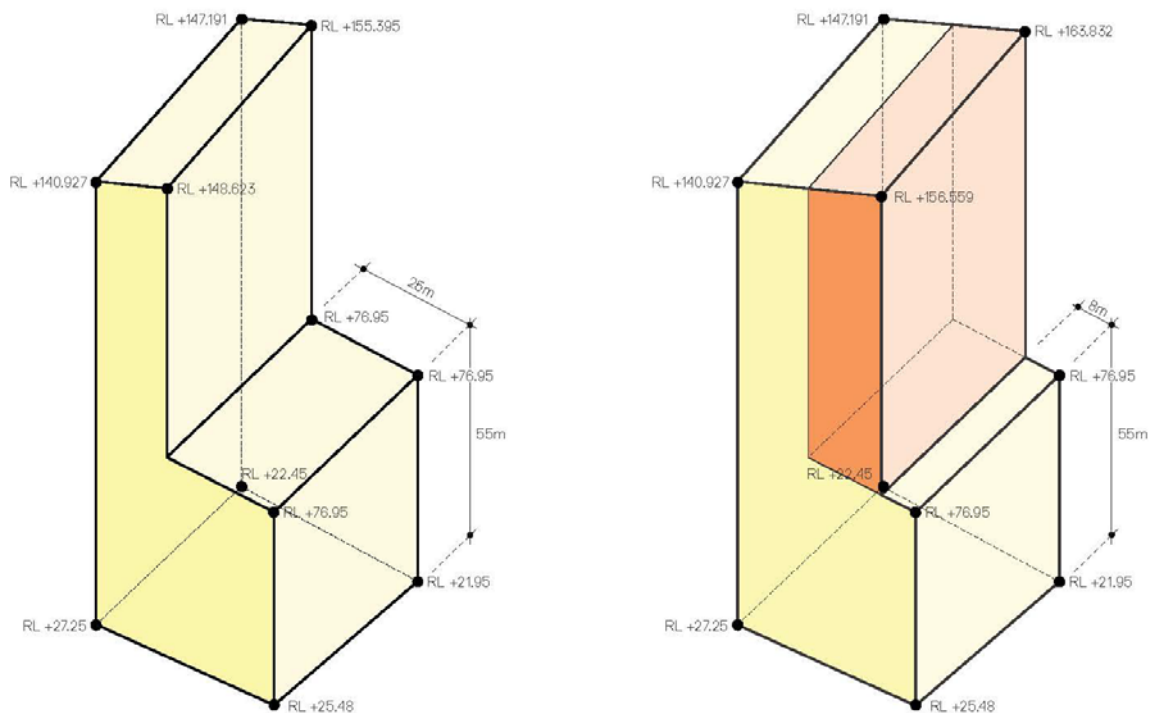
- a tower setback to Martin Place of 8 metres above the 55m podium height (reduced from 25 metres as approved within the Concept Proposal);

facilities, office entries, office space and retail areas, along with other office/retail plant and back of house requirements that are associated with the proposed OSD and not the rail infrastructure.

- a tower height that is consistent with the Hyde Park North Sun Access Plane beyond the 8m setback to Martin Place (constituting a generally taller tower than approved within Concept Proposal); and
- an increase in GFA/FSR for the South Site from approximately 23,700m² (12.5:1) up to approximately 41,700m² (22:1) - inclusive of all CSSI Station components.

Figure 3 below illustrates these proposed amendments to the South Site building envelope.

It is proposed that a condition be imposed on the Stage 1 Amending DA development consent pursuant to Section 4.17(1)(b) of the EP&A Act, requiring the modification of the original consent (SSD 17_8351) upon the commencement of the Stage 1 Amending DA Consent, in accordance with the procedures under Clause 97 of the *Environment Planning and Assessment Regulation 2000* (EP&A Regulation). This condition would address any inconsistency between the approved Concept Proposal and the Stage 1 Amending DA (and any subsequent detailed consents, i.e. the Stage 2 South Site DA).



Approved South Site Building Envelope *Proposed Amended South Site OSD Envelope (aligning with site specific amendment to Sydney LEP 2012)*

Figure 3 – Relationship between the approved and proposed amended South Site building envelope

2.6 Planning Approvals Strategy

State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) identifies development which is declared to be State Significant.

Under Schedule 1 and Clause 19(2) of SEPP SRD, development within a railway corridor or associated with railway infrastructure that has a capital investment value of more than \$30 million and involves commercial premises is declared to be State Significant Development (SSD) for the purposes of the EP&A Act.

The proposed amendment (involving commercial development that is both located within a rail corridor and associated with rail infrastructure) is therefore SSD.

Submitted separately to this SSD DA are detailed proposals for the South Site (Stage 2 South Site DA) and North Site (Stage 2 North Site DA), which follow the approval of the Concept Proposal for the Precinct under Section 4.22 of the EP&A Act (formerly Section 83B). The Stage 2 detailed DA for the South Tower includes a design which is consistent with the envelope envisaged with this subject Stage 1 Amending DA and where it must only be determined following approval of the subject Stage 1 Amending DA.

Figure 4 below is a diagrammatic representation of the suite of key planning applications undertaken or proposed by Macquarie and their relationship to the subject application (the subject of this report).

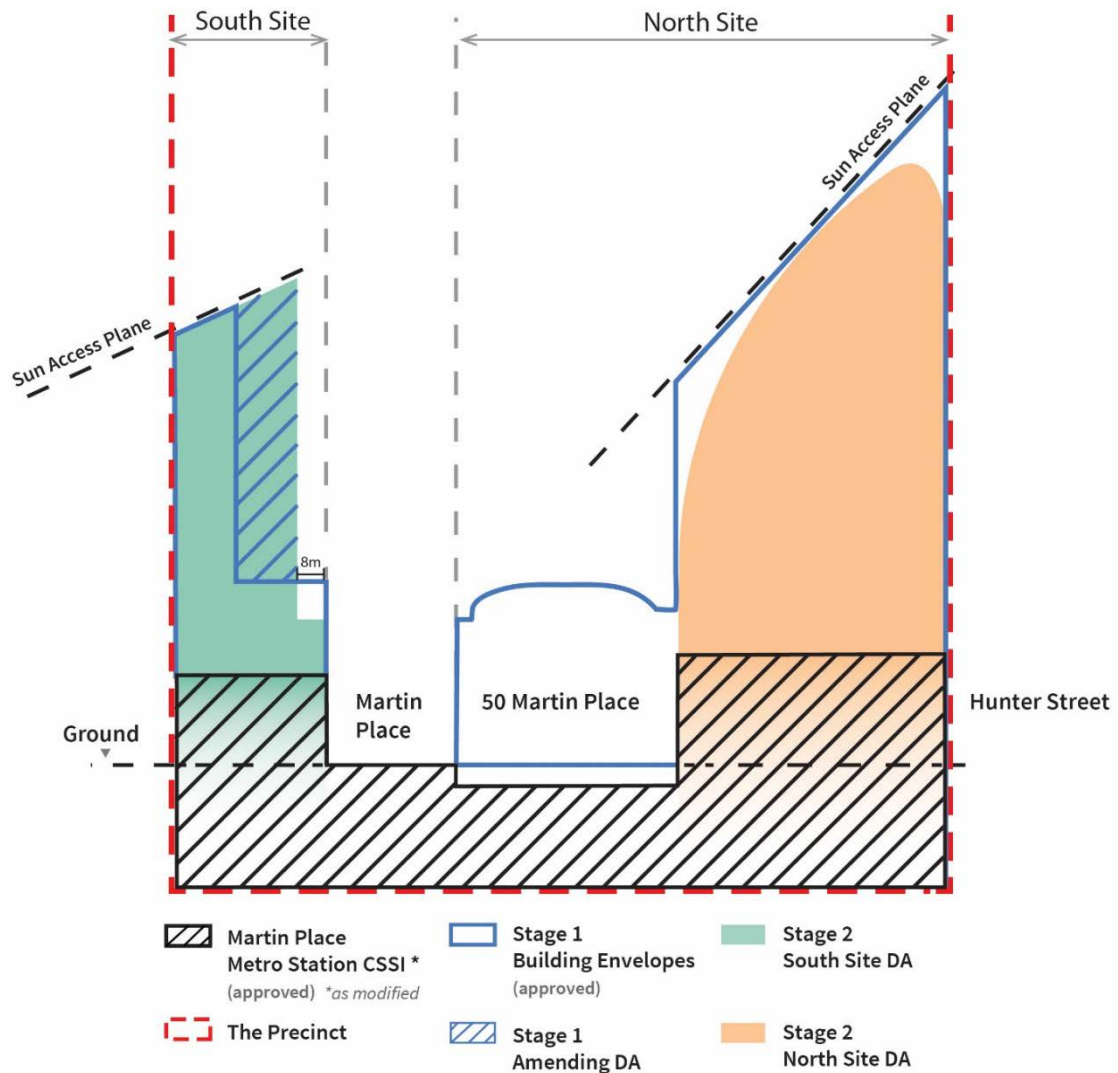


Figure 4 – Relationship of key planning applications to the Stage 1 Amending DA (this application)

The Department of Planning and Environment have provided Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development. This report has been prepared having regard to the SEARs as follows:

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *EP&A Regulation 2000*. Provide these as part of the EIS rather than as separate documents.

In addition, the EIS must include the following:

- CPTED/security assessment (where relevant).

3 Policy Context

3.1 Overview

As a major development within the City of Sydney (CoS) and the state of NSW, the requirements detailed in the sections that follow have been for the Sydney Metro Martin Place Station Precinct.

3.2 Local Council Requirements

The Sydney Metro Martin Place Station Precinct development should meet the security and crime prevention requirements of the Safe City Strategy. As the Sydney Metro Martin Place Station Precinct is a development within the CoS, meeting the requirements outlined in the Safe City Strategy would be considered best practice.

The City of Sydney Safe City Strategy is a multi-faceted strategy, combining a number of different types of approaches to crime prevention based on ‘best practice’. The key objectives of the strategy are to:

- Reduce crime and anti-social behaviour – including addressing domestic and non-domestic assaults, targeting steal from motor vehicle offences, reducing steal from person offences, reducing fraud, tackling victimisation of international students and visitors and providing crime prevention information to residents and business;
- Tackle complex crime and safety issues in areas of public housing – including delivering the Creating a Safer Community Project aimed at addressing fear of crime and social exclusion, Council representation at relevant forums and creating a Public Housing Liaison Officer position;
- Improve the look and feel of the built environment – by delivering good urban design, on-going CPTED Protocol Referral with NSW Police, extending the CCTV Street Safety Camera Network, initiating community safety audits, rapid graffiti removal, delivering high quality cleansing services, improved street lighting and the reactivation of laneways and public parks;
- Deliver primary prevention and early intervention initiatives – including increasing opportunities for recreation and learning and investing in programs which increase the chances of vulnerable children and young people and their families at key transition points in life;
- Target risk factors associated with offending behaviours – including supporting ex-offenders to successfully reintegrate in to the community;
- Strengthen communities and increase opportunities for people to engage in legitimate activities – by recognising the specific needs and developing appropriate responses to key community groups including Aboriginal people, Culturally and Linguistically Diverse Communities (CALD), Older People, Gay, Lesbian, Bisexual and Transgender (GLBT) communities and Women; and

- Advocate to higher levels of Government for more resources aimed at crime prevention – in recognition that the City has an important role to play in ensuring that Federal and State Government continue to support initiatives aimed at reducing and preventing crime at the local level.

3.3 SSSDA Requirements

State Significant Development Applications (DA's) within NSW typically require a crime prevention through environmental design assessment to be conducted.

This is a requirement of the Environmental Planning and Assessment Act 1979, and further detailed in the following Guideline produced by the NSW Department of Urban Affairs and Planning;

- Crime Prevention and the Assessment of Development Applications - Guidelines under Section 79C of the Environmental Planning and Assessment Act 1979.

As detailed in the Guideline specified above, before a decision can be made on a development application, a consent authority must consider the application under Section 79C of the Environmental Planning and Assessment Act 1979. Included in Section 79C are subsections requiring the consent authority to consider;

- The likely impacts of that development, including the environmental impacts on the natural and built environments, and social and economic impacts on the locality; and
- The public interest.

Crime prevention falls under these subsections of 79C.

The SEARs for this development require a CPTED assessment as part of the plans and documents. This report addresses this requirement.

4 Underlying Principles

4.1 Overview

Crime Prevention through Environmental Design (CPTED) is the use of design and space management principles in order to influence human behaviour. CPTED is a crime prevention strategy based on the proper planning, design and structure of cities, neighbourhoods, precincts or individual sites to create an effective use of the built environment which can lead to a reduction in the fear and incidence of crime, as well as an improvement in quality of life.

The design of a particular space has to ensure that the intended activity can function properly, as well as directly support the control of behaviour, in order to reduce the opportunity for crime. The design of the precinct should strive to incorporate the three overlaying CPTED strategies – Natural Access Control, Natural Surveillance and Territorial Reinforcement (Figure 4).

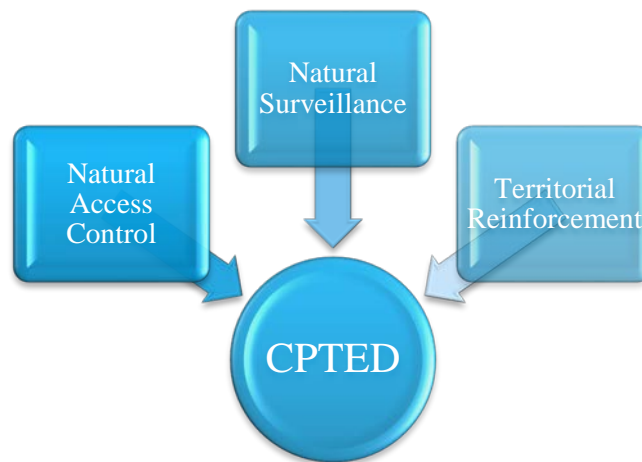


Figure 1. Crime Prevention through Environmental Design (CPTED)

4.2 Natural Access Control

Natural access control involves decreasing opportunities for crime by controlling access to a potential target and by creating a perception of risk to an offender. Physical and symbolic barriers can be used to attract, channel or restrict the movement of people.

Effective natural access control can be achieved by creating:

- Designed landscapes and physical locations e.g. footpaths that direct pedestrians into and throughout target areas;
- Public spaces which attract people into the area and discourage intruders;
- Restrict access to internal areas or high-risk areas like car parks or other rarely visited areas (e.g. by having doors, shrubs, fences and gates); and

- Selectively placed entrances and exits, fencing, lighting and landscaping to control the flow of access or to limit access.

Where practical, the intent of these natural access control measures should be incorporated into the project plans, and on-going precinct operations.

4.3 Natural Surveillance

Natural surveillance is about creating environments that keep intruders under observation. It aims to provide opportunities for people engaged in their normal daily business to observe the space around them.

Natural surveillance means creating clear sightlines. It works by designing the placement of physical features, activities and people in such a way so that maximum visibility and positive interaction occurs among legitimate users of the space.

Quality surveillance can be achieved or improved by considering the following design principles:

- Streets and public spaces can be observed from nearby buildings;
- Clear sightlines exist between public and private places;
- Open plan and minimalist (clutter-free) designs;
- Effective lighting of public places is adopted;
- Spots that facilitate entrapment are eliminated;
- Attractive and well maintained landscaping, with proper light and clear sight lines, is used to prevent offenders finding a place to hide or entrap victims; and
- Activation of the space or surrounding areas that encourages regular and diverse use of the space.

Where practical, the intent of these natural surveillance measures should be incorporated into the project plans, and on-going precinct operations.

4.3.1 Territoriality

Territoriality or territorial reinforcement is about clearly defining private space from semi-public and public space, and by attracting legitimate users to an area in order to create a sense of ownership. The created ownership shows that the owner has a vested interest in the location, which increases the actual and perceived risk of detection of offenders.

Fences, change in pavements, signs, lighting and landscaping can be used to define public, semi-public and private space. Care is necessary to ensure that territorial reinforcement is not achieved by making public spaces into private spaces, through gates and enclosures.

Territorial reinforcement can be achieved through:

- Design with a clear distinction between public and private spaces by using physical barriers (e.g. fences) and symbolic barriers (e.g. vegetation);
- Design that encourages people to gather in a public space and to feel some responsibility for its use and condition;
- Environmental markers (e.g. signage, walkways, pavers, lighting, bollards and fencing) which define intended use and ownership; and
- Regular maintenance of vegetation, infrastructure, and prompt removal of graffiti and vandalism.

Where practical, the intent of these territorial reinforcement measures should be incorporated into the project plans, and precinct operations.

5 Crime Profile

5.1 Overview

Sydney Metro Martin Place Station Precinct is located in the Sydney Local Government Area (LGA). It should be noted that the crime figures included in this section of the report were those crimes recorded by NSW Police. These figures do not necessarily represent all crimes committed in the Sydney LGA as not all crimes are reported to Police.

The offences listed below make up the most prevalent crimes that are relevant to the Sydney Metro Martin Place Station Precinct. Their five year trend is also included in order to identify if the security risks that they pose is likely to increase or decrease in the future. It is these offences that CPTED and other security measures employed within the Sydney Metro Martin Place Station Precinct are most likely to have to protect against.

While a snapshot of the crime profile has been included in this report to provide contextual understanding for the CPTED analysis and treatment measures identified, a more detailed assessment of the Sydney Metro Martin Place Station Precinct's crime profile has been conducted in the Security Risk Management Report (SRA01).

5.2 NSW Crime Profile

According to the Bureau of Crime Statistics and Research (BOCSAR), in the 24 months to June 2016, two of the 17 major offences showed a significant upward trend across NSW, nine were trending downward and the remaining six offences were stable. The offences trending upward were steal from retail store (up 6.3%) and fraud (up 1.7%).

The nine offences which showed a downward trend over the last 24 months were:

- Murder (down 32.1%);
- Robbery without a weapon (down 25.9%);
- Robbery with a firearm (down 41.7%);
- Robbery with a weapon not a firearm (down 22.2%);
- Break and enter dwelling (down 7.2%);
- Motor vehicle theft (down 12.6%);
- Steal from dwelling (down 6.6%);
- Steal from person (down 9.9%); and
- Malicious damage to property (down 3.2%).

Due to these trends, 12 major categories of crime in NSW are now at their lowest level in 20 years.

The 12 categories of crime at their lowest in 20 years are:

- Murder;
- Robbery without a weapon;
- Robbery with a firearm;
- Robbery with a weapon not a firearm;
- Break and enter dwelling;
- Break and enter non-dwelling;
- Motor vehicle theft;
- Steal from motor vehicle;
- Steal from retail store;
- Steal from dwelling;
- Steal from person; and
- Malicious damage to property.

Shootings are also at the lowest level in 20 years.

5.3 Local Crime Profile

The following is a list of the most prevalent crimes to occur in the City of Sydney LGA that are relevant to Sydney Metro Martin Place Station Precinct, based on total number of offences. A ranking of how the City of Sydney LGA crime rates compared to the other 141 LGA's cannot be provided because its residential population does not accurately reflect the number of people present in the area each day.

Offence Category	Number
Transport regulatory offences	8755
Assault - non-domestic violence related	3121
Malicious damage to property	2691
Steal from retail store	2185
Steal from motor vehicle	1686
Steal from person	1661
Offensive conduct	1126
Harassment, threatening behaviour and private nuisance	939
Trespass	502
Break and enter non-dwelling	450

Source: BOCSAR

The terrorism based security risks relevant to Sydney Metro Martin Place Station Precinct include the following:

- Person Borne Improvised Explosive Device (PBIED) / Placed IED;
- Vehicle Borne Improvised Explosive Device (VBIED);
- Hostile Vehicle Attack;
- Active Shooter;
- Melee Attack (including knife);
- Hostage / Siege Scenario; and
- Chemical / Biological / Radiological Attack (CBR).

5.4 Five Year Trend

As can be seen in the five year crime trend table below, seven of the ten most prevalent offences applicable to Sydney Metro Martin Place Station Precinct have reduced in occurrence over the previous five year period.

Based on these trends, the likelihood of these seven offences occurring in the future should generally either remain the same as currently assessed, or reduce.

Trend information	2011	2012	2013	2014	2015	24mnth Trend	60mnth Trend
Steal from person	2881	2736	2225	1887	1661	-11.98	-42.35
Harassment, threatening behaviour and private nuisance	973	1023	1025	950	939	-1.16	-3.49
Transport regulatory offences	2382	3172	4948	3942	8755	122.1	267.55
Assault - non-domestic violence related	3772	3724	3576	3142	3121	-0.67	-17.26
Malicious damage to property	3599	3332	3343	2876	2691	-6.43	-25.23
Offensive conduct	1860	1682	1713	1318	1126	-14.57	-39.46
Steal from retail store	2290	2462	2276	2318	2185	-5.74	-4.59
Trespass	449	560	477	508	502	-1.18	11.8
Steal from motor vehicle	2713	2200	2351	2176	1686	-22.52	-37.85
Break and enter non-dwelling	807	819	934	590	450	-23.73	-44.24

Source: BOCSAR

General statistical information related to crime types was sourced from BOCSAR relating to crime incidents that have occurred in the City of Sydney LGA. These statistics are not detailed to suburb or street level and therefore they may not provide a complete representation of historic incidents around the site.

6 CPTED Analysis

6.1 Overview

An analysis of some of the key factors that can impact on the CPTED characteristics of the project are detailed below.

6.2 Lighting Impacts

Improved lighting may cause a reduction in crime. Improved lighting leads to increased surveillance of potential offenders (both by improving visibility and by increasing the number of people on the street) and hence to increased deterrence of potential offenders. Improved lighting also signals community investment in the area and that the area is improving, leading to increased community pride, community cohesiveness, and informal social control.

It is important to ensure adequate lighting is provided throughout the precinct, particularly around the interfaces between the station and the public domain to reduce crime opportunity at night.

A meta-analysis on the lighting-crime link has shown that improved lighting led to a significant (21%) decrease in crime in experimental areas compared with comparable control areas. Furthermore, other studies have found that the financial savings from reduced crimes greatly exceeded the financial costs of the improved street lighting.

6.3 Mixed Use Activation

Mixed use activation of a precinct is an effective CPTED strategy that enhances the opportunity for natural surveillance, and encourages territorial reinforcement. A mixed use area increases the diversity of individuals using the space, encouraging a safer and more welcoming environment. Conversely, a single use area, such as a business park, tends to have high use during business hours on week days, but remains largely vacant on the weekends and outside of business hours. These low use times increase security risk, as criminals are less likely to be seen committing offences. By encouraging mix use, opportunity for crime can be reduced due to the natural increase in surveillance by every-day users.

6.4 Territoriality

Territoriality should be encouraged in users of the space and reinforced by the owner/operator as much as possible. By maintaining the project area throughout its life, providing a clean and accessible space, and encouraging mixed use, opportunity for crime can be reduced. Train stations naturally attract crimes against property, and such crimes (particularly graffiti, scratching, or etching) should be cleaned or removed as quickly as possible to encourage legitimate users to continue to care for the space.

7 Design Assessment

This section will discuss observations about the indicative scheme for the SSDA application from a natural surveillance, territoriality, and natural access control perspective. The CPTED assessment has been conducted for both the Southern and Northern Towers.

7.1 Southern Tower

7.1.1 Natural Surveillance

The southern Tower receives good natural surveillance from the public realm, particularly due to the mixed use activity experienced along Martin Place. The area around this entrance is generally busy throughout the day and night, which attracts a wide variety of individuals to the area, bolstering surveillance and reducing the opportunity for crime.

The location of retail, cafes, and offices throughout the precinct significantly reduce the likelihood of crime during business hours. Importantly, the location of the Southern Tower is bordered by taxi ranks, bus stops, and heavily used streets. This all contributes to strong natural surveillance and a reduction in opportunistic crime.

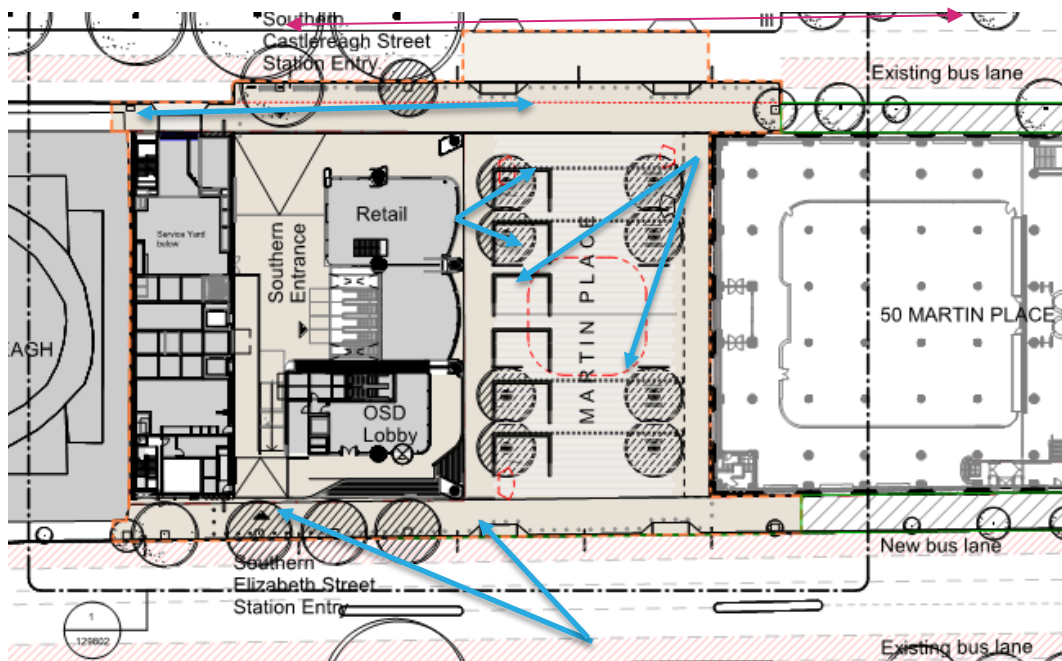


Figure 2. Southern tower natural surveillance

7.1.2 Natural Access Control

The tower layout is well positioned to naturally control access to a few controlled points, and does not encourage individuals to enter the space without a legitimate

reason. As opposed to the North Tower, the South Tower provides stronger natural access control due to the layout and natural path of travel for individuals within Martin Place.

7.2 Northern Tower

7.2.1 Natural Surveillance

The Northern Tower provides substantial mixed use immediately adjacent to the main entry with several retail stores providing natural surveillance oversight for users entering and exiting the space. There are good sightlines from the street corners around the two entry points along Hunter Street, reducing the opportunity for opportunistic crime from loiterers.

The retail stores will attract users to the space who will increase the amount of activity in the area during shopping hours, bringing more 'eyes on the street' to report and monitor potential crime during their normal activities.

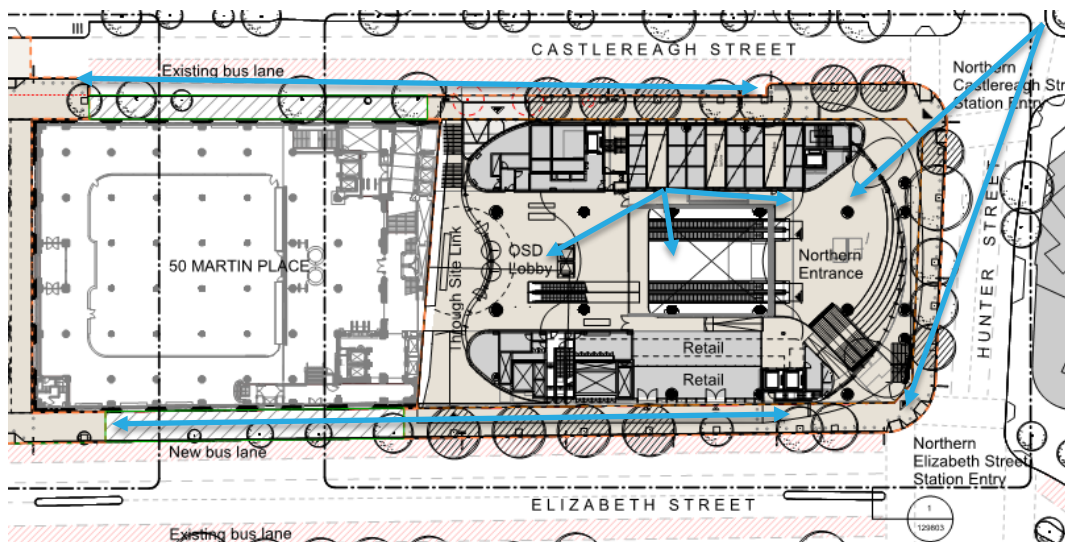


Figure 3. Northern tower natural surveillance

Overall the location of this tower is ideal from a natural surveillance perspective, with lots of street activity throughout the day, including busses, private vehicles, taxi ranks, and several surrounding office buildings.

7.2.2 Natural Access Control

The Northern Tower is slightly less controlled than the Southern Tower, as the mixed use interior will attract individuals who are not necessarily wanting to use the building proper. This is both a positive and negative, as increased foot traffic and through traffic can lead to higher likelihood of crime, however the increase in user diversity and number of people encourages the feeling of safety and natural surveillance.

7.3 Territoriality

As a whole, the development is designed in such a way that users are naturally funnelled towards their intended destinations, however this should be strongly reinforced with appropriate way finding tools. Way finding signage reduces terrain-vagueness, encouraging users to feel safe and in control, which in turn reduces the opportunity for crime to occur.

Importantly, loitering and littering should be treated where possible, as these activities reduce user ownership of the space and reduce comfort.

Lighting in the public realm and throughout the development is very important in providing a safe and secure space, particularly at night. Adequate lighting should be provided at all entry and exit points of the development, and throughout the concourse levels.

8 Recommendations

In consideration of the design assessment, several recommendations are suggested. These recommendations include the implementation of several natural surveillance, natural access control, and territoriality measures to improve the CPTED characteristics of the current plans.

These recommendations are:

- Provide clear definition and designation of space in a manner that encourages and predicts authorised movement and does not cause conflict between the intended purpose of the space and the desired behaviour;
- Maximise circulation areas by minimising built structures and avoiding clutter, particularly along pedestrian routes;
- Design and layout of building entrances and foyers to assist natural surveillance by reducing clutter and blind spots, positioning reception/concierge where they have clear sightlines of entrances, the general foyer areas, and waiting areas;
- Use of glass partitions wherever possible to improve site lines and the transmission of natural light, and be fitted with anti-graffiti coatings (where practical) where these partitions are accessible to the public.
- Durable public furniture and amenity construction, to limit damage and subsequent repairs over the life of the facility;
- Keep the surrounds as tidy and well-presented as possible in order to enhance the territoriality aspects of the site;
- The mixed use areas will help ensure regular and diverse use of the facility which also enhances the territoriality aspects of the site, whilst enhancing the opportunity for natural surveillance. Encouraging regular and diverse use of the site through these and other measures are recommended;
- Ensure adequate lighting is provided throughout the precinct;
- Ensure public realm lighting is appropriate for use at night;
- Provide signage throughout the precinct to remove excuses for loitering and littering, each being a significant detractor to territoriality; and
- Ensure signage is appropriate to improve way finding and reduce terrain vagueness within the precinct.

CPTED is only one part of a holistic security strategy, and the implementation of physical, electronic, and operational security controls will be required to provide effective security protection for the site.