

## North Eveleigh Affordable Housing, Eveleigh

April 2013

Prepared for City West Housing



Crime Prevention through Environmental Design (CPTED) Review of Proposed Mixed Use Development

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## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Subject site	2
1.2	Proposed development	2
1.3	Local context	2
1.4	Authorship	3
1.5	Structure of this report	3
<b>2</b>	<b>Method to this CPTED Review</b>	<b>3</b>
<b>3</b>	<b>Police Consultation</b>	<b>4</b>
<b>4</b>	<b>Local community and crime profile</b>	<b>5</b>
4.1	Eveleigh and Sydney LGA profiles	5
4.2	Local crime profile	6
<b>5</b>	<b>Assessment of design against CPTED principles</b>	<b>7</b>
5.1	Surveillance	7
5.2	Access control	8
5.3	Territorial reinforcement	9
5.4	Space management	10
<b>6</b>	<b>Recommendations and conclusion</b>	<b>11</b>

## Tables

Table 1	Referenced Architectural Drawings	1
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### Quality Assurance

Reviewed by

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**6 February 2012**

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Date

This document is for discussion  
purposes only unless signed.



## 1 Introduction

This Crime Prevention Through Environmental Design (CPTED) Review is prepared by Architectus to review the proposed affordable housing residential development in the North Eveleigh Concept Plan precinct, Eveleigh, against the CPTED principles.

This CPTED Review accompanies a State Significant Development Application submitted to City the NSW Department of Planning and Infrastructure and will assist in assessing the likely safety and security impacts of the proposed development on the surrounding area.

This CPTED Review is prepared in accordance with *Crime Prevention and the Assessment of Development Applications* ('Safer by Design Guidelines'), published by the NSW Police, following consultation with the Redfern Command of the NSW Police.

This Review is based on the Architectural Drawings prepared by Architectus and Landscape Plans prepared by Aspect Studios provided as part of the Development Application and the associated documentation. The drawings used as part of this review are listed at **Table 1** below.

**Table 1 Referenced Architectural Drawings**

Drawing number	Drawing name	Prepared by	Issue	Date
<b>Architectural Drawings</b>				
DA0000	Cover Sheet	Architectus	A	27/03/2013
DA0001	Existing Site Plan	Architectus	A	27/03/2013
DA0001-A	Demolition Plan	Architectus	A	27/03/2013
DA0003	Existing Site Plan	Architectus	A	27/03/2013
DA0004	Site Plan	Architectus	A	27/03/2013
DA0005	Master Plan	Architectus	A	27/03/2013
DA0006	Site Analysis – Existing Plan	Architectus	A	27/03/2013
DA0007	Site Analysis – Master Plan	Architectus	A	27/03/2013
DA0008	GFA Calculations	Architectus	A	27/03/2013
DA1000	Basement 2	Architectus	A	27/03/2013
DA1001	Basement 1	Architectus	A	27/03/2013
DA1001-1	Basement 1 – Master Plan Stage	Architectus	A	27/03/2013
DA1001A	Basement Mezzanine	Architectus	A	27/03/2013
DA1002	Ground Floor	Architectus	A	27/03/2013
DA1002-1	Ground Floor – Master Plan Stage	Architectus	A	27/03/2013
DA1003	Level 1	Architectus	A	27/03/2013
DA1004	Level 2	Architectus	A	27/03/2013
DA1005	Podium Floor Plan Levels 3/5/7	Architectus	A	27/03/2013
DA1006	Podium Floor Plan Levels 4/6/8	Architectus	A	27/03/2013
DA1007	Level 9	Architectus	A	27/03/2013
DA1008	Typical Tower Floor Plan	Architectus	A	27/03/2013
DA1009	Level 14	Architectus	A	27/03/2013
DA1010	Plant	Architectus	A	27/03/2013
DA1011	Roof	Architectus	A	27/03/2013
DA1050	Lancer Barracks – Shadow Studies	Architectus	A	27/03/2013
DA1050-1	Lancer Barracks – Shadow Studies	Architectus	A	27/03/2013
DA1051	Lancer Barracks – Shadow Studies	Architectus	A	27/03/2013
DA1052	Civic Plance – Shadow Studies	Architectus	A	27/03/2013
DA2001	East West Section	Architectus	A	27/03/2013
DA2002	North South Section	Architectus	A	27/03/2013

Drawing number	Drawing name	Prepared by	Issue	Date
<b>Architectural Drawings</b>				
DA2010	Section Details	Architectus	A	27/03/2013
DA2011	Section Details	Architectus	A	27/03/2013
DA3001	North Elevation	Architectus	A	27/03/2013
DA3002	East Elevation	Architectus	A	27/03/2013
DA3003	South Elevation	Architectus	A	27/03/2013
DA3004	West Elevation	Architectus	A	27/03/2013
<b>Landscape Drawings</b>				
12030 DA01	Extent of works	Arcadia Landscape Architects	A	25/03/2013
12030 DA02	Streetscapes + Library Interface	Arcadia Landscape Architects	A	25/03/2013
12030 DA03	Central Plaza	Arcadia Landscape Architects	A	25/03/2013
12030 DA04	Central Plaza View	Arcadia Landscape Architects	A	25/03/2013
12030 DA05	Through-Site Link	Arcadia Landscape Architects	A	25/03/2013
12030 DA06	Level 8 Roof Terrace	Arcadia Landscape Architects	A	25/03/2013

### 1.1 Subject site

The subject site is located within the North Eveleigh Rail Yards, which have been approved for red-development for mixed uses. The site is located to the west of the existing Carriageworks building. The site is bounded by a proposed residential street to the southwest, the proposed Carriageworks Way to the north, an existing rail corridor to the southeast and a proposed street directly to the northeast of the site.

The site is within the City of Sydney Local Government Area (LGA).

### 1.2 Proposed development

The Development Application seeks consent for the construction of an affordable housing residential development. The proposal comprises:

- Development of the site for affordable housing residential use, including:
  - 10 studio units;
  - 37 1-bedroom apartment units;
  - 36 2-bedroom apartment units; and
  - 5 3-bedroom apartment units.
- Gross floor area of 5,932.8m<sup>2</sup> of residential and associated operations use; and
- Car parking for 39 vehicles and bicycle parking within the basement beneath the proposed building footprint.

### 1.3 Local context

The proposed development will be located:

- Within an urban renewal precinct;
- Adjacent to Carriageworks, which is a heritage-listed industrial building that has been converted into multi-use for the arts;
- Adjacent to a major railway corridor;
- 500 metres to University of Sydney;

- 950 metres to Redfern Railway Station and Transport Interchange;
- 650 metres to Macdonaldtown Railway Station; and
- 125 metres to Darlington Public School.

#### 1.4 Authorship

This CPTED Review has been prepared by Max Stember-Young, Assistant Planner/Urban Designer and Camille Lattouf, Urban Planner. This document has been reviewed by Tara Day, Senior Consultant of GHD, who has been engaged by City West Housing to assess the social impacts of the proposed residential development.

#### 1.5 Structure of this report

This CPTED Review is structured as follows:

- **Section 1:** Introduction
- **Section 2:** Consultation with Redfern Local Command of NSW Police
- **Section 3:** Methodology for preparation of this CPTED review
- **Section 4:** Social and crime profile of the locality
- **Section 5:** Assessment of the proposed development against CPTED principles
- **Section 6:** Recommendations and conclusion

## 2 Method to this CPTED Review

This CPTED Review has been prepared in accordance with the following methodology:

1. Site visit to understand site and its context;
2. Consultation with Redfern Local Command of NSW Police;
3. Review community profile and local crime statistics;
4. Review architectural drawings;
5. Provide an assessment of the proposal against the CPTED principles taking into consideration the local context, community profile and local crime occurrence; and
6. Make recommendations necessary to enhance safety, security and crime prevention.

### 3 Police Consultation

Following consultation with the Redfern Command of the NSW Police, the following key issues were raised by police officers in relation to the proposal:

1. Lack of on-site parking provision may result in tensions and damage to property crime occurrences if the development increases the demand for on-street parking in the surrounding area;
2. Ground floor units facing the street should balance an active street frontage whilst ensuring that apartments cannot be broken into;
3. Surveillance of public domain surrounding the site;
4. Design quality should be achieved;
5. Concern with the concentration of social housing;
6. Possible implementation of safe window design to prevent children falling out and breaking in; and
7. All units should be adequately lockable from doors and windows. Balconies should not be easily accessible by climbing.

The above issues are addressed where appropriate throughout this CPTED Review, and in some instances in the Environmental Impact Statement.



## 4 Local community and crime profile

This section provides a brief summary of the local community profile and crime occurrence based on Australian Bureau of Statistics and NSW Bureau of Crime Statistics data.

### 4.1 Eveleigh and Sydney LGA profiles

Eveleigh is a post-industrial neighbourhood within the Sydney Local Government Area. Below is a summary of key statistics and future profile sourced from the Australian Bureau of Statistics 2011 data for the City of Sydney LGA and Sydney Metropolitan Strategy:

- The Sydney Metropolitan Strategy identifies the North Eveleigh site as part of the Redfern Waterloo urban renewal centre. The centre is identified as part of the economic corridor and an area with opportunities for residential renewal and cultural recognition. The Strategy targets 61,000 new dwellings in the subregion (Sydney LGA) by 2036.
- The population is currently 169,505 and is expected to increase to 256,825 in 2031 within the Sydney LGA.
- 59.7% of residents also work in the LGA.
- Sydney LGA absorbs a large number of new residents from overseas.
- In the LGA, 44% of residents were Australian born. In the Erskineville-Eveleigh City of Sydney small area, within which the site is located, 67.5% of the population is Australian-born.
- Migrants' countries of birth include the United Kingdom (8%), New Zealand (4.5%), Ireland (1.7%), Vietnam (1.4%), China (1.2%) and USA (1%). Aboriginal Australians make up 0.4% of the population.
- Within the Erskineville-Eveleigh City of Sydney small area, there is a high proportion of:
  - Labour force participation (82.3%) and labour force participants employed (96.1%);
  - Persons with university qualifications;
  - Households with incomes above the LGA average; and
  - Persons who take the train to work.
- The median age in the Erskineville-Eveleigh small area is between 30 and 34 years of age.
- Within the Erskineville-Eveleigh City of Sydney small area, there is a low to moderate proportion of:
  - Housing stress (6.4%);
  - Disengaged youth (0.6%); and
  - Youth unemployment (0.6%).
- City of Sydney LGA scores 1026 on the SEIFA index of disadvantage, indicating it is less disadvantaged than the national average based on a range of socio-economic census characteristics (2006 Census). The Erskineville-Eveleigh small area scored 1070 on the SEIFA index, indicating it is less disadvantaged than the City of Sydney LGA average.

Due to the site's proximity to the boundary of the Erskineville-Eveleigh City of Sydney small area, the Darlington small area should be considered in this CPTED report. Below is a summary of statistics from the Darlington small area:

- Australian-born residents comprise of 56.3% of the small area population, which is higher than the Sydney LGA average. Within the Darlington small area, there are moderate populations of people born in China (4.1%), the United Kingdom (4.0%), New Zealand (2.8%), Malaysia (2%), the United States of America (1.6%), Hong Kong (1.1%) India (1.1%) and France (1.0%). Aboriginal and Indigenous Australian's make up 2.1% of the population.
- Within the Darlington small area, there is a high proportion of:
  - Persons attending university;
  - Persons who cycle to work; and
  - Recent arrivals to Australia.
- The median age in the Darlington small area is less than 30 years of age.
- Within the Darlington small area, there is a moderate proportion of:
  - Labour force participation;
  - Housing stress;
  - Youth unemployment; and
  - Persons with university qualifications.
- The Darlington small area scored 1048 of the SEIFA index, indicating it is less disadvantaged than the national average, City of Sydney LGA average and more disadvantaged than the Erskineville-Eveleigh average.

#### 4.2 Local crime profile

The area surrounding the subject site and the local area generally experiences a high level of occurrences of the following reported crime (sourced from the NSW Bureau of Crime Statistics 2010 data):

- Assault – domestic violence related;
- Breaking and entering, dwellings;
- Breaking and entering, non-dwellings;
- Graffiti;
- Malicious damage to property;
- Motor vehicle theft;
- Robbery;
- Theft from dwelling;
- Theft from motor vehicle.

The above crime incidents are taken into consideration as part of the assessment of the proposal against the CPTED principles at **Section 4**.

## 5 Assessment of design against CPTED principles

This section of the report assess the proposed development against the following CPTED principles referred to in the Safer by Design Guidelines:

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

These guidelines require consent authorities to ensure that development provides safety and security to users and the community.

### 5.1 Surveillance

The Safer by Design guidelines state in relation to the principle 'Surveillance':

*"The attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical.*

*Good surveillance means that people can see what others are doing. People feel safe in public areas when they can easily see and interact with others. Would be offenders are often deterred from committing crime in areas with high levels of surveillance.*

*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."*

Surveillance in and around the subject site is of particular importance, given the identification of crime occurrences in the local area and proximity to a school, university, Carriageworks and other educational, cultural, and entertainment uses.

The proposed development provides clear lines of sight between the residential lobby and main lift core, and the proposed Carriageworks Way, providing a sense of surveillance between the public and private domain. Apartment balconies and windows are oriented to all site frontages, providing opportunity for casual surveillance to Carriageworks Way (the new internal road to be built to the north of the site) and the surrounding public domain.

Landscaping will be of a nature that does not obstruct sight lines or provide the opportunities for concealment, particularly adjacent to entrances and the street frontage to the building.

Although secure, the proposed basement car park and rooftop terrace may present surveillance concerns. To provide surveillance to these areas, it is recommended that CCTV cameras be installed to monitor the activities in these spaces. Such measures will complement active control measures (discussed further in this report). CCTV should particularly be located at the basement entry both looking toward the entry gate and looking up the ramp, given the potential for cars to be 'followed' into the basement.

It is recommended that an appropriate condition be imposed requiring the lighting network to be in accordance with the relevant Australian Standards to ensure effective lighting of the basement and communal open space areas.

The proposed ground floor communal open space is to be enclosed and access to this space will be restricted. Clear sight lines should be maintained between the building, the proposed streets to the southwest and northeast and the communal open space.

#### **Surveillance recommendations:**

- CCTV cameras should be installed in the parking area, basement entry point, terrace rooftop and pedestrian entry points.
- Ceilings and walls in the basement parking area should be painted a light colour.
- Lighting should be provided at entry points (vehicular and pedestrian) and to all communal open space and public areas. This lighting should be automatically controlled by time clocks and/or sensors where appropriate, and to provide an energy efficient and controlled lighting environment. Lighting should be provided in accordance with the relevant Australian Standards.
- Landscaping on the site is to be maintained to a density and height that allows clear sight lines from the street. Large trees should provide adequate shade, whilst low shrubs maintain the necessary sight lines.

## 5.2 Access control

The Safer by Design guidelines state in relation to the principle 'Access control':

*"Physical and symbolic barriers can be used to attract, channel or restrict the movement of people. They minimise opportunities for crime and increase the effort required to commit crime.*

*By making it clear where people are permitted to go or not go, it becomes difficult for potential offenders to reach and victimise people and their property. Illegible boundary markers and confusing spatial definition make it easy for criminals to make excuses for being in restricted areas. However, care needs to be taken to ensure that the barriers are not tall or hostile, creating the effect of a compound.*

*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 rarely visited areas). This is often achieved through the use of physical barriers."*

Access into the building from the street will be secure from the entry of the foyer and from the secured basement parking areas. An intercom system will be installed at the building entry points so that visitors will require authorisation from a resident to enter.

Internal areas of the building are to be appropriately secured via lockable doors. All doors should be fitted with locks suitable for their purpose and level of usage to ensure appropriate access control is maintained at all times.

Access to the basement will be secured to prevent unauthorised access. This access should be controlled by a suitable and secure means such as a swipe card.

Private balconies on the ground floor could allow for unauthorised access from the street. The change in the floor height between the balconies and the street of 800mm plus and additional balustrade height of 1.1 metres is considered an appropriate deterrent for such unauthorised access without compromising clear sight lines from the dwellings to the street.

The balustrade design will also prevent climbing into ground floor apartments, with the retaining wall and balustrade designed to be flush up to a height of 1.9 metres. This is to address the concern that such unauthorised access may occur in the local area.

### Access control recommendations

- The main entry/exit doors and fire exit doors should be fitted with appropriate locksets, intercoms and central access measures to restrict unauthorised access to the building.
- Secure basement access should be controlled using a swipe card and/or intercom to restrict unauthorised access to both pedestrians and motorists.

### 5.3 Territorial reinforcement

The Safer by Design guidelines state in relation to the principle 'Territorial reinforcement':

*"Community ownership of public space sends positive signals. People often feel comfortable in, and are more likely to visit, places which feel owned and cared for. Well used places also reduce opportunities for crime and increase risk to criminals.*

*If people feel that they have some ownership of public space, they are more likely to gather and to enjoy that space. Community ownership also increases the likelihood that people who witness crime will respond by quickly reporting it or by attempting to prevent it.*

*Territorial reinforcement can be achieved through:*

- *design that encourages people to gather in public space and to feel some responsibility for its use and condition; and*
- *design with clear transitions and boundaries between public and private space 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."*

The building edge provides a clear distinction of public and private areas at the ground level with private tenancy and communal areas secured and defined by access control, the building line and balustrades on balconies. The basement area will also be defined by secure access at its entry.

The fencing that is proposed to surround the rear communal area defines the space as a private area.

Measures should be taken to deter pedestrians from entering the subterranean car park via the proposed ramp to the west of the site. Signage indicating CCTV monitoring of entries will assist as a deterrent. It is also noted that visitors will generally not be permitted into the basement, unless accompanied by a resident with basement access.

The location of the proposed development provides passive surveillance to the public domain and surrounding area.

Other measures such as signage should be used to minimise the potential for the spaces surrounding the proposed development to be used for anti-social or criminal behaviour.

Further, with the planned enhancement of the surrounding public domain, there will be a clear distinction between the subject site and public space, with the provision of pathways and formalised public access roads.

### **Territorial reinforcement recommendations**

- Signage should be provided at entry/exit points to public spaces including:
  - **Warning:** These premises are under constant CCTV surveillance.

### **5.4 Space management**

The Safer by Design guidelines state in relation to the principle 'Space management':

*"Popular public space is often attractive, well maintained and well used space. Linked to the principle of territorial reinforcement, space management ensures that space is appropriately utilised and well cared for.*

*Space management strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out pedestrian and car park lighting and the removal or refurbishment of decayed physical elements."*

Appropriate recommendations are made to ensure that the site is well maintained and therefore less attractive to anti-social behaviour and criminal activity.

### **Space management recommendations**

- Graffiti and vandalism should be removed/ repaired as soon as practicable following such incidents.
- Any burnt out lighting should be replaced as soon as practicable.
- Landscaping should be maintained to a high standard on a regular basis.
- Regular cleaning of public space and collection of rubbish should occur.

## 6 Recommendations and conclusion

This report provides an assessment of the proposed residential development at Carriageworks Way, North Eveleigh against the Crime Prevention Through Environmental Design Principles.

The proposed development is considered acceptable from a crime prevention, safety and security perspective and is not considered to have a detrimental impact on the safety and security of the surrounding area, subject to the following recommendations:

### Prior to issue of Occupation Certificate

- CCTV cameras should be installed in the parking area, basement entry point, terrace rooftop and pedestrian entry points.
- Ceilings and walls in the basement parking area should be painted a light colour.
- Lighting should be provided at entry points (vehicular and pedestrian) and to all communal open space and public areas. This lighting should be automatically controlled by time clocks and/or sensors where appropriate, and to provide an energy efficient and controlled lighting environment. Lighting should be provided in accordance with the relevant Australian Standards.
- The main entry/exit doors and fire exit doors should be fitted with appropriate locksets, intercoms and central access measures to restrict unauthorised access to the building.
- Secure basement access should be controlled using a swipe card and/or intercom to restrict unauthorised access to both pedestrians and motorists.
- Signage should be provided at entry/exit points to public spaces including:
  - **Warning:** These premises are under constant CCTV surveillance.

### Operational phase

- Graffiti and vandalism should be removed/repaired as soon as practicable following such incidents.
- Any burnt out lighting should be replaced as soon as practicable.
- Landscaping on the site is to be maintained to a density and height that allows clear sight lines from the street. Large trees should provide adequate shade, whilst low shrubs maintain the necessary sight lines.
- Regular cleaning of public space and collection of rubbish.

### Other comments

- There is uncertainty of future layout and uses surrounding the site which hinders a full CPTED assessment of the proposed development.