Star City Casino – Crime Prevention through Environmental Design

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urbis

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Urbis Social Planning and Social Research team has received ISO 20252 certification, the new international quality standard for Market and Social Research, for the provision of social policy research and evaluation, social planning, community consultation, market and communications research.

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Executive Summary

Introduction

Star City Casino engaged Urbis Social Policy to conduct a Crime Prevention through Environmental Design assessment in relation to a proposed Multi-use Entertainment Facility (MUEF) at Star City Casino, Pyrmont.

This CPTED assessment has been prepared to guide and inform the final design of the MUEF by considering in detail the design, treatment and security measures required to maximise public safety.

The study explores the public safety implications of the development upgrade in its entirety and provides guidance to support a design process that is responsive to community safety requirements, and proactive about limiting crime in the vicinity.

The CPTED includes:

- Contextual social and demographic data, which identifies the level and type of crime most likely to occur in or around the development.
- Assessment of the *function* of the development and recommendation of management measures to increase community safety.
- Assessment of the *design* of the development to identify the type of security measures which will increase community safety.

Aims of this study

CPTED aims to influence the design of buildings and places by:

- Increasing the perception of risk to criminals 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 (NSW Department of Urban Affairs and Planning, 2001).

Methodology

The following tasks were undertaken in the preparation of this CPTED assessment:

- Review of key literature on CPTED and analysis of the applicability of this literature to the proposed MUEF.
- Progressive review and input of the proposed plans and design with the consultant team.
- Collection and analysis of local and NSW state crime statistics from the Bureau of Crime Statistics and Research (BOSCAR).
- A safety audit including an assessment of the proposed design, to identify security and safety measures to increase community safety.

Conduct of a safety audit in the current NSW policy and practice environment involves consideration of the following regulation and assessment principles:

- CPTED principles endorsed by NSW Police
- Section 79C of the NSW Environmental Planning and Assessment Act, 1979 (EP&A Act), which includes guidelines for the consideration of safety issues in the development approvals process

- NSW Department of Urban Affairs and Planning's *Crime Prevention and the Assessment of Development Applications* (2001).

Note that, extensive consultation activities were undertaken as part of the original Part 3A application for Star City Casino (2008) and no further consultation with City Central Local Area Command has been undertaken as part of this Section 75W modification.

Crime in the City of Sydney

The City of Sydney LGA has a higher than average incident of reported crime and is considered a special case, as the population used to calculate the rate is much lower than the population using the area for work and entertainment.

The five most reported offences occurring within the City of Sydney LGA during 2009 were:

- Theft – steal from motor vehicle (4,174 offences)*
- Theft – fraud (4,039 offences)
- Assault – non-domestic violence related (3,778 offences)*
- Driving offences – exceeding legal speed limit (3,680 offences)*
- Malicious damage to property (3,671 offences)*

The incorporation of recommendations included in this report into the design would ensure that the proposed development does not become attractive to perpetrators of these types of crimes.

Pro-active responses to crime and safety in and around the Star City Casino and the MUEF would include:

- Secure car parking and facilities
- Traffic management and managing the interface between loading docks and car park entrance/egress
- Passive surveillance
- Active surveillance

CPTED Assessment outcomes

Section 5 of this report details how design measures in the proposed redevelopment ensure safety and comfort for those patronising the proposed MUEF. Briefly these design measures include:

- Lighting key areas such as entry/exit points and ensuring that lighting in all locations is not obscured creating dark spots
- Maximising natural surveillance in all areas of the development, both internal and external
- Use of signage to direct pedestrians around the site and to inform them of security measures
- Access and traffic control for car parking areas to deter unauthorised access after hours
- Ensure there is an appropriate plan of management that includes access and crowd control
- Ensure internal design layout is legible and that the locations of public amenities are in highly visibly areas with regular thoroughfare and natural surveillance.

The key areas where these strategies need to be considered are car parking areas, pedestrian pathways (entries/exits) and maintenance and management.

In addition to the above design measures, the development of a management plan will further enhance the safety and security of the proposed MUEF. The combination of design and management of the area will determine the actual and perceived level of safety of the MUEF.

1 Introduction

Star City Casino engaged Urbis Social Policy to conduct a Crime Prevention through Environmental Design assessment in relation to a proposed Multi-use Entertainment Facility (MUEF) at Star City Casino, Pyrmont.

Star City Casino has commenced significant works as part of their 2008/09 approved Part 3A application to improve the service offering and overall aesthetics of the Casino. The proposal was for:

- the development of a new hotel
- extensions to the gaming floor
- provision of additional on site parking
- redevelopment of the existing retail arcade
- changes to existing building facades and entrances.

Urbis was extensively involved throughout the process, providing both Urban Planning and Social Planning inputs for a number of proposals.

In 2009, an amended CPTED report was prepared in relation to revisions to the above proposal. Areas of key concern at the time related to crime and safety, traffic management and pedestrian accessibility, impact on commercial and retail business, responsible environmental management, local residential amenity and the provision of adequate support services for problem gamblers and drug and alcohol abuse.

1.1 Aims of this study

According to the NSW Department of Urban Affairs and Planning (2001), CPTED aims to influence the design of building and places by:

- increasing the perception of risk to criminals 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.

This CPTED assessment will identify and report on impacts associated with the proposed MUEF, considering CPTED principles as well as issues such as accessibility, traffic and pedestrian safety and impacts on local amenity. Where negative impacts are identified, prospective mitigation measures and recommendations will be provided in accordance with professional standards and statutory obligations.

1.2 Methodology

The CPTED process requires a detailed review of the development design plans, identification of current crime levels or ‘hotspots’, and an assessment of the performance of the proposed project design against CPTED principles.

The following tasks were undertaken in the preparation of this CPTED assessment:

- Review of key literature on CPTED and analysis of the applicability of this literature to the proposed ballroom expansion.
- Progressive review and input of the proposed plans and design with consultant team.
- Collection and analysis of local and NSW state crime statistics from the Bureau of Crime Statistics and Research (BOSCAR).

- A safety audit including an assessment of the proposed design, to identify security and safety measures to increase community safety.

Conduct of a safety audit in the current NSW policy and practice environment involves consideration of the following regulation and assessment principles:

- CPTED principles endorsed by NSW Police
- Section 79C of the NSW Environmental Planning and Assessment Act, 1979 (EP&A Act), which includes guidelines for the consideration of safety issues in the development approvals process
- NSW Department of Urban Affairs and Planning's Crime Prevention and the Assessment of Development Applications (2001).

Note that, extensive consultation activities were undertaken as part of the original Part 3A application for Star City Casino (2008).

2 Site and Surrounding Area

2.1 Site description

The Star City Casino site is located in Pyrmont, a suburb that lies within the City of Sydney Local Government Area. The site comprises the irregularly proportioned street block bounded by Edward Street, Pyrmont Street, Union Street, Pirrama Road and Jones Bay Road.

The site accommodates the existing Star City Casino as well as a bus interchange, the Light Rail (LR) line and the Casino LR station within the Casino building near the Pirrama Road frontage.

The Casino is located in a major tourism precinct close to the Sydney Central Business District (CBD) and is itself a significant tourist facility. The immediate context of the site is highly varied in terms of land use and built form and includes high density residential, new buildings and refurbished former maritime and industrial buildings, landscaped foreshore parks, mixed retail and commercial high rise, remnant heritage hotels and heritage listed terrace houses.

2.2 The proposal

Star City Casino has commenced significant works as part of their 2008/09 Part 3A application which sought to improve the service offering and overall aesthetics of the casino. This application forms part of the Section 75W Modification of the previous Part 3A approval.

The proposed modifications include:

- Expansion of the approved ballroom (capacity 1,200 seated - 1,500 standing) into a multi use entertainment facility (3,000 seated - 4,000 standing).
- Creation of a new 'pre-function' space surrounding the existing glass cone of the approved external entertainment deck on Level 03.
- The provision of associated services such as loading dock, lift and stair accesses, new substation and switch room, storage, plant room facilities and other related services.
- Additional patron access and amenity facilities to meet BCA and DDA requirements.
- Provision of service corridor between back of house areas and new plant and storage enclosure on Level 03.
- Conversion of the existing Level 17 'Astral' Bar and Dining Room into Private Gaming Areas.
- Deletion of the previously proposed glazed cladding to the existing tower buildings.
- Addition of a pergola structure over the roof terrace to the Pirrama Road infill building.
- Replacement of the existing external lift, lift overrun enclosure and roof signage to the existing hotel tower.

The proposed MUEF is designed to encompass a generous internal space and volume to enable a wide range of entertainment options from concert performances to general corporate and private banquet-style events, as currently hosted within the existing ballroom facilities.

2.3 Snapshot of local community

The following section provides a summary of key social and demographic characteristics of Pyrmont and the neighbouring suburb of Ultimo. These characteristics are considered against those of the City of Sydney LGA and the greater Sydney metropolitan area. Data has been derived from the 2006 ABS Census and the City of Sydney Community Profile and Forecast ID data. Refer to the *Urbis 2010 Social Impact Assessment* prepared as part of the Section 75W Modification for further detail on the demographic data.

There is a total of 17,467 persons residing in the Harris Street area*. The population is forecast to grow by approximately 6.1% to 18,527 persons by 2021. Table 1 below provides a summary of age distribution in Pyrmont, Ultimo, the City of Sydney LGA and Sydney metropolitan area.

Table 1 – Age Distribution for Pyrmont, Ultimo, City of Sydney LGA and the Sydney metropolitan area, Census 2006

Characteristics	Pyrmont	Ultimo	Ultimo/Pyrmont Combined	City of Sydney LGA	Sydney Metropolitan Area
Aged 0 – 4	3.8%	2.3%	3.3%	3.3%	6.6%
Aged 5 – 9	2.2%	2.0%	2.1%	2.0%	6.4%
Aged 10 – 14	1.5%	1.8%	1.6%	1.9%	6.4%
Aged 15 – 19	3.4%	5.7%	4.2%	4.2%	6.5%
Aged 20 – 29	34.8%	45.1%	38.2%	30.2%	15.1%
Aged 30 – 44	31.9%	24.5%	29.4%	31.0%	23.6%
Aged 45 – 59	14.4 %	10.9%	13.2%	15.8%	19.2%
Aged 60 +	8.0%	7.7%	7.9%	11.6%	16.2%

Source: ABS Census 2006

Pyrmont and Ultimo were once industrial precincts of the inner west part of Sydney and a vital component of Sydney's waterfront. Today, this area is a mixed use area, with industrial, entertainment and increasing residential land uses due to redevelopment and has come to accommodate inner Sydney's new social profile of incoming young professionals, university and TAFE students, and a large number of Chinese born residents. Other significant trends in Pyrmont and Ultimo include:

- the population density is 10 times denser than the average for the Sydney metropolitan area
- young professionals account for nearly half the population
- 8.5% of residents are Chinese born
- 60% of residents are couple families without children
- most residents rent privately
- 8.4% of housing in Pyrmont and 10.4% in Ultimo is classified as public housing
- many residents are university or TAFE students
- the most common occupations of graduates are property and business services
- there is a higher than average number of residents who work casually in the hospitality industry
- approximately one third of residents walk to work
- there is a higher than average proportion of single young men (aged 25-34 years)

* The Harris Street area is bounded by the shore of Johnstons Bay and Darling Harbour in the north, Murray Street, the Metro Light Rail line, and the former Darling Harbour goods railway in the east, George Street and Broadway in the south and Wattle Street and the shore of Blackwattle Bay in the west. This small area includes the suburb of Pyrmont and part of the suburb of Ultimo. (id 2010 for City of Sydney)

3 Crime and Safety

It is necessary to consider the prevalence and nature of crime within the local area of the proposed development. Australian Bureau of Statistics 2006 Census data has been used to provide a local context of offences and crime rates, whilst 2009 statistics from the Bureau of Crime Statistics and Research (BOCSAR) have been analysed to provide the broader context of crime rates and trends relative to New South Wales. It is difficult however to attribute incident data and trends to events specifically within, or in the immediate surrounds of Star City Casino.

3.1 City of Sydney – Key policies and plans

It is important that wherever possible, the final proposal should respond to, and support the local council's intentions for the site and for the City of Sydney more broadly. This section reviews the key policy and planning documents produced by the City of Sydney Council to promote public safety and crime prevention. The relevant information from these documents has been summarised below, and has informed the report's final recommendations for the proposal.

3.1.1 Safe City Strategy 2007-2012

The Safe City Strategy 2007-2012 provides an overarching framework to guide the City of Sydney and its partners in dealing with crime and safety issues affecting the LGA. The City of Sydney has a higher than average incidence of crime due to its transient population. The daily workforce and visitors to the area are not taken into account in official crime data.

The key objectives of the Strategy are to:

1. Reduce crime and anti-social behaviour
2. Tackle complex crime and safety issues in areas of public housing
3. Improve the look and feel of our built environment
4. Deliver primary prevention and early intervention initiatives
5. Target risk factors associated with offending behaviours
6. Strengthen communities and increase opportunities for people to engage in legitimate activities
7. Advocate to higher levels of Government for more resources aimed at crime prevention

Objective 3 - *Improve the look and feel of our built environment* - forms the basis for any consideration of the safety and social impacts associated with the Star City Casino upgrade. In particular, good urban design, ongoing 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 are principal facets to achieving a safer city.

The Star City Casino upgrade will need to take into consideration both Crime Prevention through Environmental Design (CPTED) protocol and improved street lighting (detailed in the Exterior Lighting Strategy) which focuses on lighting for pedestrian safety and the introduction of closed circuit video surveillance.

The City's approach to urban design is based on the principles of CPTED which provide guidelines for Council both when planning its own developments and when considering private development applications. A key component of the guidelines is the notification of relevant development applications to NSW Police Local Area Commands in the Council area. In this way Police can provide comment on the development from a crime prevention perspective prior to the application being considered by Council.

Similarly, street lighting is an integral part of enhancing feelings of safety and attracting people to a site, thus promoting an overall safer environment through natural surveillance and reducing feelings of fear.

3.1.2 The City of Sydney Exterior Lighting Strategy

The Exterior Lighting Strategy sets the basic objectives, strategies and standards for lighting of the public domain for the City of Sydney. The strategy highlights the importance of adequate lighting levels as a key crime prevention measure. The need for a higher level of pedestrian safety and the desire to improve the quality of the pedestrian environment at night has formed the basis of the upgrading of standards for public and pedestrian areas in the LGA.

The overall objectives of the Strategy are:

- to improve the illumination of the City of Sydney at night to ensure public safety, public enjoyment, architectural appreciation, and night-time entertainment
- to establish the City of Sydney as Australia's premier city and one of world recognition for the lighting of the public realm
- to create a greater sense of civic pride in the City at night, encouraging more frequent visits by residents and tourists
- to seek an expression of Australian and Sydney City culture and custom, to mark Sydney's unique role as a gateway destination and to give emphasis to the character of individual precincts within the City
- to provide best practice guidelines for exterior lighting design
- to implement high environmental lighting standards, including the use of sustainable energy where feasible
- to promote a glare free environment for traffic and pedestrians
- to utilise the latest technology for effective conversion of light into illumination
- to create an aesthetic appearance for night-time illumination and lighting infrastructure during daylight hours.

Street lighting and lighting of public and pedestrian spaces will require consideration in relation to the design features of the ballroom expansion (e.g. external facade and general access points).

The minimum standard required for the lighting of all public and pedestrian areas, including footpaths on streets, is to comply with the new Australian Standard AS/NZS 1158 3.1:1999 Pedestrian Area (Category P) Lighting.

3.2 Local Crime Statistics – City of Sydney LGA

The proposed development is located in Pyrmont which is part of the City of Sydney Local Government Area (LGA). The crime figures discussed in this section of the report are those crimes that have been recorded by NSW Police, not necessarily all crimes committed in the Sydney LGA. Levels of crime are sensitive to the willingness or ability of people to report crime, levels and nature of police activity and actual levels of criminal activity.

The incorporation of recommendations included in this report into the design would ensure that the proposed development does not become attractive to perpetrators of these types of crime.

3.2.1 Reported offences in City of Sydney LGA

The City of Sydney LGA has a higher than average incident of reported crime and is considered a special case, as the population used to calculate the rate is much lower than the population using the area for work and entertainment.

The five most reported offences occurring within the City of Sydney LGA during 2009 were:

- Theft – steal from motor vehicle (4,174 offences)*
- Theft – fraud (4,039 offences)
- Assault – non-domestic violence related (3,778 offences)*
- Driving offences – exceeding legal speed limit (3,680 offences)*
- Malicious damage to property (3,671 offences)*

Measures recommended as a response to crime in the public domain would include:

- secure car parking facilities
- passive surveillance
- active surveillance
- anti-graffiti measures
- anti-vandalism measures

Decrease in the crime rate per 100,000 population for the LGA 2005 -2009

There was a significant decrease in the crime rate for the following offences in City of Sydney LGA between 2005 and 2009. The following figures indicate the crime rate per 100,000 of the population for the LGA during 2009 and the average annual percentage change:

- Robbery with a weapon not a firearm (119.3 down by 17.8%)
- Break and enter – non-dwelling (568.7 down by 16.4%)
- Robbery without a weapon (418.1 down by 13.8%)
- Motor vehicle theft (421.0 down by 11.7%)
- Break and enter – dwelling (917.3 down by 9.8%)
- Steal from motor vehicle (2,417.1 down by 6.1%)
- Robbery with a firearm (24.9 down by 6.0%)
- Steal from dwelling (530.4 down by 5.8%)
- Steal from person (2,080.1 down by 5.1%).

NOTE: Between 2008 and 2009 the following offence categories experienced a decrease in the crime rate:

- Steal from motor vehicle (down by 26.6% to 2,417.1 offences)
- Motor vehicle theft (down by 26.3% to 421.0 offences)
- Break and enter non-dwelling (down by 23.9% to 568.7 offences)
- Robbery without a weapon (down by 20.9% to 418.1 offences)
- Robbery with a weapon not a firearm (down by 20.8% to 119.3 offences)
- Malicious damage to property (down by 16.5% to 2125.8 offences)
- Assault – non-domestic violence related (down by 11.7% to 2187.8 offences)

Increase in crime rate per 100,000 population for the LGA 2005 -2009

There were only two recorded increases in crime for the City of Sydney LGA between 2005 and 2009:

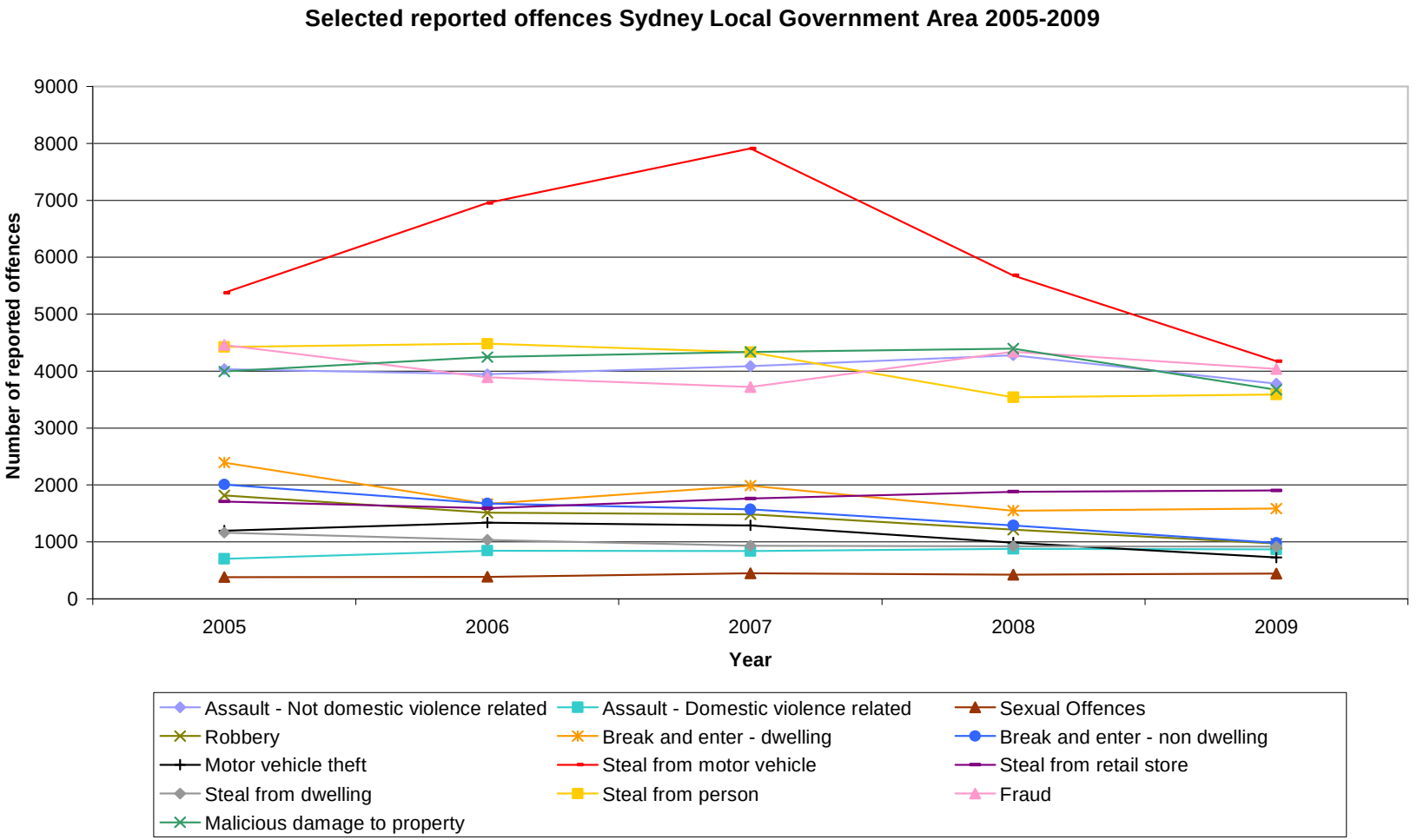
* These offences occur in the public domain and would be sensitive to CPTED measures.

- Assault – domestic violence related (501.5 up by 5.4%)
- Steal from retail store (1100.3 up by 2.7%).

NOTE: There were no annual increases in the crime rate from 2008 to 2009; and all other offences were 'stable' for this period.

Crime trend data for the period 2005-2009 for Sydney LGA are represented in Figure, on the following page. The number of offences listed above (in addition to data represented in Figure 1) indicates an overall decrease in the crime trend for the City of Sydney LGA in recent years.

Figure 1 – Selected reported offences Sydney Local Government Area 2005-2009



The NSW Bureau of Crime Statistics and Research also publishes crime statistics for NSW as a whole. Table 2 below compares the NSW 2009 recorded criminal incidents with those recorded in the City of Sydney LGA per type of offence during that year. This selection of offences has been chosen as those most directly related to CPTED issues and would be expected to respond most effectively to the proposed design recommendations.

Table 2 –Selected recorded criminal incidents and rates per 100, 000 population Sydney LGA and NSW

Area	Malicious damage	Rate per 100,000 pop.	Robbery	Rate per 100, 000 pop.	Motor Vehicle theft	Rate per 100,000 pop.	Steal from motor vehicle	Rate per 100,000 pop.
Sydney LGA	3,671	2125.8	971	187.4	727	421.0	4,174	2417.1
Total NSW	101,236	1449.5	5,873	28.0	22,322	319.6	46,961	672.4

Area	Steal from retail store	Rate per 100,000 pop.	Assault	Rate per 100,000 pop.	Liquor offences	Rate per 100,000 pop.
Sydney LGA	1,900	1100.3	4,050	1,172.7	3,454	2000.2
Total NSW	20,514	293.7	42,711	305.8	18,052	258.5

Source: NSW Bureau of Crime Statistics and Research

Note:

- Assault is non-domestic violence related.
- Robbery includes robbery without a weapon, robbery with a firearm, robbery with a weapon not a firearm.
- Sydney LGA has a higher than average incident of reported crime and is considered a special case as the population used to calculate the rate is much lower than the population using the area for work and entertainment.

3.3 Crime Hotspots in Sydney (focus on Ultimo/Pyrmont)

The NSW Bureau of Crime Statistics and Research published a Local Government Area Crime Report Series for Sydney in 2006. Part of this crime report uses kernel density maps to illustrate areas of high and low crime concentration within the LGA. The data in this report were extracted from the NSW Police Force's Computerised Operational Policing System (COPS) which is a live database.

Based on the density maps, Pyrmont experienced a medium - higher proportion of criminal offences for the following:

- Steal from motor vehicle (high) – most commonly committed weekdays (Monday – Friday) from 6pm – 12am
- Malicious damage to property (med-high) – occurred most often Friday to Sunday between 6pm and 6am
- Break and enter – dwelling (med-high) – occurred most often weekdays , 6am-12pm
- Motor vehicle theft (med) – most commonly committed Thursday to Sunday
- Steal from dwelling (med) – most commonly committed weekdays, 6am-12pm and weekends.
- Break and enter (med) – non-dwelling – most commonly committed, Sunday to Friday 12-6am

3.4 Stakeholder consultation

Extensive consultation activities were undertaken as part of the original Part 3A application for Star City Casino (2008) including consultation with City Central Local Area Command. No Consultation was undertaken with the City Central Local Area Command as part of this Section 75W Modification submission.

3.5 Implications for the Proposal

Perceptions of crime and safety are potentially as critical to consider as *actual* crime and safety, as they can govern the behaviour of individuals in public and private spaces. It is therefore important to consider the perceptions of key stakeholders in this regard.

In relation to the presentation of data regarding crime hotspots, occurrences of property-related crimes occur at a medium to higher rate, which may suggest the need for mitigation measures, in particular, regarding advice to patrons using the Casino car park. It is advised, however, that future discussions with the Local Area Command be undertaken. This would provide a more current update on intelligence in relation to specific crime hot spots or actual crimes within the area. This would allow the Casino an opportunity to consider any proposed CPTED measures which might ensue from that discussion.

4 Crime Prevention through Environmental Design – Criteria and Assessment

4.1 Assessment criteria

There are a number of criteria to be considered when assessing CPTED principles as part of an application. Given that this application is an expansion of the current ballroom, minimal change will occur. The following CPTED criteria and principles will reflect this.

CPTED aims to influence the design of buildings and places by:

- increasing the perception of risk to criminals 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

(NSW Department of Urban Affairs and Planning, 2001)

CPTED applies knowledge about situational crime prevention to the planning and design stages of buildings, public spaces and so on. Four key principles are considered in the assessment of applications to minimise the opportunity for crime. They include:

- Surveillance
- Access control
- Territorial reinforcement/ownership
- Space management

The following are of particular importance to the expansion of the ballroom:

Surveillance

There are three main types of surveillance:

- Natural surveillance is achieved when normal space users can see and be seen by others. This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting. Natural surveillance is a by-product of well-planned, well-designed and well-used space.
- Technical/mechanical surveillance is commonly used as a 'patch' to supervise isolated, higher risk locations. There is a proven correlation between poor lighting, fear of crime, the avoidance of public places and crime opportunity. Australian and New Zealand Pedestrian Lighting Standard 1158.1 requires lighting engineers and designers to consider crime risk and fear when selecting lamps and lighting levels. Good lighting can assist in increasing the usage of the area.
- Formal (or Organised) surveillance is achieved through the tactical positioning of guardians. An example would be the use of on-site supervisors at higher risk locations.

Access control

Access control refers to the management of who enters an area so that unauthorised people are excluded, for instance, via physical barriers such as fences and grilles.

Space management

Ensures that space is appropriately utilised and cared for. Space management strategies include; activity coordination, site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out lighting and the removal or refurbishment of decayed physical elements.

It is also important to distinguish between 'passive' security measures (better lighting, enhancing natural surveillance) and 'active' security (security guards, closed circuit television or CCTV). Effective use of the former can reduce the need and associated cost of the latter.

Situational crime prevention involves changing various aspects of the environment so that the efforts and risks required to commit crime are increased, and offender's perceived rewards are reduced. Situational crime prevention is based on the assumption that people commit crimes for rational motives, and that people will only commit a crime when they perceive the benefits outweigh the risks.

Situational crime prevention is more effective for some types of crimes, such as those motivated by greed or opportunistic crimes. Crimes such as vandalism, assault, break and enter, theft, trespassing, and motor vehicle theft tend to be more responsive to situational crime prevention strategies. These are the types of crimes that most commonly occur in public spaces.

4.2 CPTED Assessment

The plans of the proposed ballroom expansion have been assessed in accordance with CPTED principles. Our assessment of the design identified those areas which require specific attention to ensure maximum safety within the overall development. These have been considered in detail to ensure that the combination of design, treatment and security measures maximises public safety.

It should be noted that design is only one aspect that should be considered in the establishment of a safe and inviting physical environment. It is stressed that the combination of design and management of an area will determine the level of actual and perceived safety. Ideally design supports and accommodates good management practices. Our assessment therefore considers the design of the expansion of the ballroom in terms of broad CPTED principles and proposes management practices which aim to enhance the overall safety.

A previous CPTED assessment was undertaken by Urbis in 2008 as part of the Part 3A application for the redevelopment of the existing Star City Casino complex.

This CPTED assessment focuses specifically on the expansion of the ballroom. As the proposed expansion of the ballroom forms part of the Star City Casino complex it is vital to ensure that the previous CPTED recommendations are considered. The following provides an overview of the recommendations of the preceding CPTED assessment, most notably those that are relevant to the current CPTED assessment of the proposed ballroom expansion. They included:

- Maintenance of clear and prominent signage that provides patrons with important information and guidance
- Consideration of use of adequate lighting within and around the complex
- Continuation of after hours management measures (ie CCTV, roving security patrols) to address potential loitering or malicious damage to property
- Use of robust materials be used in finishes to mitigate against potential malicious damage
- Use of traffic control personnel at the main entries and exits to marshal pedestrians during peak times or events.

These proposed mitigation measures should be considered as part of the CPTED assessment for the expansion of the ballroom.

4.2.1 All entry/exit areas

Entry/exit areas and vertical movement systems such as stairs or elevators should be located adjacent to areas which offer high levels of visibility, opportunities for surveillance and a number of alternate pedestrian exit routes. Entry areas in the proposed expanded ballroom are activity generators. The proposal indicates that the entries to the ballroom foyer and ballroom auditorium have good natural surveillance.

It is important to ensure that fire exits are for emergency use only. To avoid people accessing the fire escape unnecessarily, these should be alarmed to alert security when a door to the fire passage has been opened. All fire exits from fire passages are to be brightly lit.

Although this CPTED focuses primarily on the expansion of the ballroom, it is also important to consider the communal areas located within close proximity to the ballroom to ensure the connectivity of these spaces is appropriate. It is imperative to provide opportunities for natural surveillance of communal and public areas. It is proposed that people entering the ballroom will do so through existing entrances, pathways and escalators via the vertical circulation cone.

A connecting structure will join the pre-function area and main escalator entry point with the ballroom, via a designated pathway. Entries and exits should be clearly signposted and provide suitable egress for all users.

Recommendations: Entry and egress

- *All entries and exits to the ballroom are to be clearly signposted.*
- *Lighting in entry areas should comply with the relevant Australian Standards.*
- *Installation of CCTV where possible at entry and exit points of the ballroom, pre-function room and external entertainment deck.*
- *Pedestrian routes to be clearly defined and accessible for people with a disability.*
- *Fire exits are for emergency use only and doors are to be alarmed to alert security, these exits are to be brightly lit and free of obstructions to sightlines.*
- *Appropriate active security/ushers located at entries and exits to control crowd movement.*

4.2.2 Internal design assessment

There should be a continuous accessible path of travel to and within any building to provide access to all required facilities.

Direct access into the auditorium will be via a connecting structure from the pre-function area. Access to the MUEF will be via a circulating escalator from Pirrama Street as well as the appropriate lift access for wheelchair access. The layout of the ballroom ensures easily accessible entry and exit points between all four levels, the lobby and pre-function area. Amenities are located on each level of the venue and within the lobby. The ground level of the ballroom provides a multi-purpose space that contains retractable seating and floor space that can be used for a banquet or concert style seating options. For further detail on access please refer to the *Access Review* prepared by Morris-Goding Accessibility Consulting (MGAC).

Service corridors have also been identified as part of the plans. They provide linkages to fire exits or ‘back-of-house’ rooms. It is important that these corridors are short, direct and well illuminated. Clear signage that is easily readable should provide patrons with the appropriate directions to amenities, entry and exits doors as well as fire exits.

MGAC state the importance of developing an emergency management plan for the MUEF.

Recommendations: Internal ballroom layout

- *Entry and exit to public amenities are located in areas of high activity, are easily accessible and offer clear sightlines to promote natural surveillance.*
- *Ensure that the internal design of the venue does not include areas of entrapment, particularly in and around public amenities and service corridors.*
- *Clear and unambiguous signage should be used in all areas of the venue including egress points, public amenities and information/help desks.*
- *There should be clear definition between public and private access areas. Clear definition of space avoids confusion about appropriate activities and behaviour in different areas.*
- *Ensure disabled access is available throughout the ballroom complex and is in accordance with Australian Standards.*

4.2.3 Access control and crowd management

Access control measures restrict, channel and encourage people into and out of a specific space. Access control and movement predictors will be essential to manage the flow of patrons into and out of the venue, particularly when the venue is at capacity. Way-finding, desire lines and formal/informal routes are important crime prevention considerations.

Access control is used to increase the time and effort required to commit crime and to increase the risk to criminals. Natural access control relates to design measures such as building configuration: formal and informal pathways, landscaping, fencing and gardens while technical/mechanical access control includes the employment of security hardware and formal (or organised) access control such as on-site employed security officers.

Consideration must be given to the movement of people entering and leaving the venue. Council expressed concern about the potential for significant movements of large numbers of patrons leaving the facility together on conclusion of an event. Following discussion, it was concluded that, as the site is permeable and there are sufficient egress points, this is less likely to be a concern at the proposed venue than it is for other major facilities, such as the Opera House.

It was suggested that crowd control will be vital to the safety of patrons as well as the safety and amenity of the surrounding neighbourhood. The Access Review undertaken by MGAC provides a number of recommendations with regard to crowd control and public safety. This may be further informed by the Casino's Security/Plan of Management and Crown Control Policy when available. Please also refer to the MGAC report for the standard compliance and recommended access provisions for the proposed MUEF.

Venue staff and security should be present to facilitate path finding between the pre-function area, outdoor terrace and the MUEF.

While patrons are required to access the level three venue from Pirrama Road via the vertical circulation cone, the opportunity exists for patrons to access other uses within the Casino upon departure (such as the main casino, restaurants and bars, shopping arcade) allowing for the dispersion of patrons to more than one area. The opportunity for patrons to access other parts of the Casino after an event will limit potential noise impacts and large congregations that could occur in public areas outside the Casino were there to be one main street entrance/exit.

Recommendations: Access control and movement predictors

- *Pedestrian pathways are free of obstacles such as large planter boxes which may obscure sight lines.*
- *Pedestrian access routes are clearly marked with signage, particularly between public and private transport stations and the venue.*
- *Information is displayed at entrances to the ballroom or pre-function area advising people where to go for help.*
- *The installation of appropriate CCTV within key movement areas to monitor crowds if necessary.*
- *The introduction of appropriate active security measures during events within the ballroom, pre-function area and entertainment deck.*

4.2.4 Management and maintenance

The management of Star City Casino will play an important role in protecting patrons from crime. The maintenance and 'image' of an area can have a major impact on the perception, feel and presence of the area. It can also have a major impact on whether it will become targeted.

Star City Casino management is responsible for the maintenance and management of the MUEF and surroundings which is a main predictor of creating a safe and secure environment.

Recommendations: Management and maintenance

- *Maintain high visual quality within and around ballroom.*
- *Keep ballroom interior and exterior wall clean and repaired.*
- *Ensure lighting is constantly maintained.*

5 Concluding Comments

This report has considered the proposed MUEF development in relation to CPTED principles supported by an assessment of available policy, crime data and associated consultant reports.

To improve the safety outcomes for patrons, neighbours and the broader community, initial recommendations have been made to the design team. Plans could potentially be modified where possible to improve the overall safety and security of the proposed MUEF. This assessment has been based on the final plans to be lodged to the Department of Planning as part of the Section 75W modification to approved Major Project Approval MP 08_0098.

Overall, we regard the design of the proposed MUEF development to comply with key CPTED principles. While precaution should be taken with regard to patron movement and control it is considered that the functional planning and design of the proposed MUEF will provide an environment which is safe and legible for users.

Some of the key design features that will add to the safety and amenity of the area include:

- Maintenance of clear and prominent signage that provides patrons with important information and guidance.
- Consideration of use of adequate lighting within and around the complex.
- Continuation of after hours management measures (ie CCTV, roving security patrols) to address potential loitering or malicious damage to property.
- Use of robust materials be used in finishes to mitigate against potential malicious damage.
- Use of traffic control personnel at the main entries and exits to marshal pedestrians during peak times or events.

A number of recommendations have been made in this report to ensure that the design of the proposed MUEF provides a safe and secure environment for its patrons. The sense of place and location of the patrons within the MUEF is also crucial to the success of CPTED and the sustainability of a safe venue.

Extensive consultation was undertaken for the original Part 3A approval, however, it is recommended that consultation be undertaken to include City Central Local Area Command. The consultation process is both desirable and will assist in implementing the recommendations included in this report.

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