ALEXANDRIA PARK COMMUNITY SCHOOL

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

URBIS

PREPARED FOR NSW DEPARTMENT OF EDUCATION

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EXECUTIVE SUMMARY

This Crime Prevention Through Environmental Design (CPTED) Report has been prepared by Urbis on behalf of the New South Wales Department of Education, in relation to the State Significant Development Application SSD (8373) for the redevelopment of Alexandria Park Community School (APCS).

A CPTED assessment is an independent specialist study undertaken to analyse a design in relation to CPTED principles and to identify potential improvements which may help to reduce crime and anti-social behaviour. The four CPTED principles are:

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

THE PROPOSAL

APCS is located at 7 Park Road, Alexandria within the Sydney LGA. The site is situated within an established mixed-use precinct, surrounded by a range of residential, industrial, commercial and open space land uses.

COMMUNITY PROFILE

To understand the local context of the proposed development, the demographic profile for the suburb of Alexandria has been analysed based on 2016 Census data from the Australian Bureau of Statistics (ABS).

Key characteristics of the Alexandria population include:

- A median age of 33, with the largest 5-year age groups being 24-34 years and 35-44 years.
- The dominant family structure is households without children.
- More than half of the population were born in Australia and the majority of people speak only English at home.
- The area is relatively affluent, with higher personal and family incomes compared to the Sydney LGA.
- The majority of the population live in rented flats or apartments.

CRIME PROFILE

Crime data from the NSW Bureau of Crime Statistics and Research (BOCSAR) indicates that the suburb of Alexandria has higher rates of crime compared to NSW, which is indicative of its inner-city location. Crime trend data shows a stabilisation of all crime rates across the suburb, except for drug offences which has increased.

Consultation with Alexandria Park School indicated there are very low levels of crime associated with the current school operations.

CPTED ASSESSMENT AND RECOMMENDATIONS

The design has been assessed against the four CPTED principles and the following priority areas were identified:

Entry and exit points

Entry and exit points are a potential risk area for the proposed development as Alexandria has high rates of ‘malicious damage to property’ compared to NSW and the site is located in a hotspot for this crime category.

In finalising the design, it is important to consider the following:

- All entry/exit points should be clearly identifiable and inviting, and signage should be installed to direct visitors to report to the administration area of the school.
- Design entry/exit points to encourage natural surveillance from other areas of the school.
- Access control for entry and exit gates should be installed via the use of self-closing mechanisms or other control mechanisms, without restricting evacuation requirements.
- Entry/exit points should be secured outside of operating hours to prevent unauthorised access.
- Limit opportunities for unauthorised access through appropriate fencing around the school.
- Specify entry/exit points are built from resistant materials to prevent break and enters crime and vandalism.

Parking and pedestrians

Car parking is considered a priority area for the proposed development as Alexandria has higher rates of 'steal from motor vehicle' compared to both the City of Sydney LGA and NSW. The site is also within in a crime hotspot for motor vehicle related theft.

In finalising the design, it is important to consider the following:

- Install safe parking signage in the car park and school grounds to remind staff, visitors and students to secure their cars, bicycles and valuables.
- Install wayfinding signage throughout the car park to safely manage interactions between cars, pedestrians and children.
- Install traffic control signage (e.g. give way and stop signs) at all entry and exit points, to avoid conflicts between vehicles, cyclists and pedestrians both on the street and within the car park.
- Provide secure bicycle parking or lockers for cyclists.
- Implement a maintenance plan including regular rubbish and graffiti removal, repair of light fixtures and other necessary repairs of the car park areas.
- Educate staff, parents and children regarding any changes to the current pick/drop-off procedure.
- Pedestrian access to the school should be clearly marked with 'zebra' crossings.

Internal layout

Key internal layout considerations in regards to CPTED include interfaces between public and private space and the existence of 'dead space', 'areas of entrapment' and 'areas of concealment'.

In finalising the design, it is important to consider the following:

- The internal spaces of the school should provide passive surveillance of the external areas of the school such as playgrounds, gardens and entry/exit points.
- Avoid creating blind corners in stairwells and hallways and providing open or transparent materials on doors and stairwells to maximise the visibility of high risk areas.
- Toilets/amenity blocks should be located in areas with high passive surveillance.
- Rooms with valuable equipment should incorporate access control measures, such as swipe cards or locks, when not in use to minimise the risk of equipment being taken out of the building, lost or stolen.
- Rooms with restricted access should have adequate signs and be locked when not in use.

External layout

External layouts can resolve safety conflicts and improve activation of the urban environment. Key external layout considerations in regard to CPTED include visibility, activation and prevention of vandalism and graffiti.

In finalising the design, it is important to consider the following:

- Provision of access control measures to manage the movement of people between the school, community centre and childcare centre.
- Prevent unauthorised access to the school via Belmont Lane and encourage passive surveillance of Belmont Lane to avoid anti-social behaviour or creating an area where people can conceal themselves.
- Avoid areas of entrapment or concealment between the primary school building, high school building, garden store and the western boundary fence.
- Design landscaping to reduce opportunities for concealment and maintain opportunities for passive surveillance.
- Outdoor education and recreation areas located above the ground floor should be monitored for safety during use and access control measures put in place to manage access to this space.
- Design the entry garden to maintain sightlines from the administration area to the main entrance.
- Applying low maintenance and graffiti resistant materials on surfaces susceptible to graffiti.
- Install materials that prevent climbing and secure items that could be used as climbing aids e.g. bins.

Maintenance and management

Developments that are well managed are less likely to attract criminal activity. Maintenance establishes a sense of ownership and pride for those who live and work close by.

In finalising the design, it is important to consider the following:

- The school's Plan of Management should include maintenance and repairing strategies, waste removal procedures and landscaping procedures.
- Include APCS open and closing procedures with the APCS Plan of Management and any shared use agreements for the School Hall.
- Procedures and strategies to manage the interaction between junior and senior students during break and exit times.
- Cash management strategies should be in place as required, especially for money raised from fundraising activities.
- Implementation of a safety and security induction for all staff and visitors to the school.

Construction

Construction activities and staging present a range of potential crime and safety issues, including malicious damage to property and safety risks to site users. Construction safety is particularly important to consider in a school environment.

In finalising the design, it is important to consider the following:

- Prepare and implement a Construction Management Plan (CMP) including strategies and procedures specific to a school environment, which may include working with children checks.
- Students and staff should be briefed on construction activities that may present a safety or health risk.
- Install appropriate lighting of construction areas and consider active security measures (e.g. security staff monitoring) during high risk times, such as weekends when no activity is occurring on site or outside of permitted construction hours.
- All tools and building materials must be stored securely with tamper proof security systems.
- Install appropriate security fencing of construction areas to present unauthorised access.
- Establish and enforce appropriate on-site vehicle speed limits and traffic control measures to manage interactions between construction vehicles, pedestrians (staff and students) and other vehicles.

CONCLUSION

Educational establishments may be targets for crime and vandalism because of their scale, variety of uses and landmark status.

Urbis has undertaken a CPTED Assessment for the proposed APCS against the four CPTED principles and has identified potential risk areas and recommendations which may help to reduce crime and anti-social behaviour.

The assessment has found that the design incorporates CPTED principles, including passive surveillance and site permeability and with potential community/shared use of facilities the site will also be activated outside of normal school hours.

Therefore, it is considered that the recommendations included in this report are adequate to minimise any crime risks related to the operation of the site.

1. INTRODUCTION

This Crime Prevention Through Environmental Design (CPTED) Report has been prepared by Urbis on behalf of the New South Wales Department of Education, in relation to the State Significant Development Application SSD (8373) for the redevelopment of Alexandria Park Community School (APCS).

A CPTED assessment is an independent specialist study undertaken to identify and analyse potential improvements to design which may help to reduce crime and anti-social behaviour as per the following four principles:

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

1.1. METHODOLOGY

The following key stages and tasks have been undertaken to inform this CPTED report.

Table 1 – Methodology.

Stage	Description
Policy and concept plan review	• Review of NSW Police CPTED Guidelines. • Review of best practice CPTED guidelines for schools • Review of concept plans and technical studies.
Baseline analysis	• Site visit, definition of Study Area and audit of surrounding context. • Consultation with Alexandria Park School. • Review of demographic profile and crime statistics to identify potential local crime issues.
CPTED assessment and recommendations	• Application of CPTED principles to the design plans. • Identification of potential crime risks associated with the proposed development. • Identification of potential mitigation measures. • Reporting.

2. THE SITE

The APCS (subject site) comprises six lots (Lot 11 in DP 615964; Lot 1 in DP 74696; Lot 2 in DP 69494; Lot 3 in DP 69494; Lot A in DP 109038; Lot B in 109038) known as 7 Park Road, Alexandria.

The site is located in the City of Sydney LGA and within an established mixed-use precinct, surrounded by a range of residential, industrial, commercial and open space land uses.

To the north of the site is Buckland Street, with predominately medium density terrace housing. To the east is Alexandria Park, an area of public open space for active and passive recreation. To the south is an area of commercial and industrial uses. Along the large portion of the western perimeter is Belmont Lane, a small pedestrian laneway which separates the site from neighbouring residential apartments on Belmont Street. The entire site is zoned as 'SP2 – Infrastructure: Educational Establishment'.

Figure 1 – Site layout.

Source: Urbis GIS

2.1. EXISTING DEVELOPMENT

The site currently contains the existing APCS, which services students from Kindergarten to Year 12. Originally located on two campuses (Park Road and Mitchel Street) the school has been consolidated within the Park Road campus.

2.2. SITE VISIT

A site visit was conducted by Urbis on 17th August 2017 between the hours of 2-3pm to assess the current site conditions, how the subject site interfaces with the surrounding land uses and the community and other situational crime prevention measures and safety impacts.

Photos from the site visit are included in **Appendix A.**

2.3. THE PROPOSAL

The proposed development includes new school buildings, staff carparking, sporting facilities and signage as outlined below:

- Demolition of all existing buildings on-site, including the temporary pop-up school;
- Construction of multiple school buildings arranged in a b-shape comprising:
  - Classroom home bases;
  - Collaborative learning spaces;
  - Offices for teachers and administrative staff;
  - Library; and
  - Student canteen.
- Construction of a sports hall and multiple outdoor sports courts;
- Construction of a new on-site car park (28 spaces) for teachers and staff;
- A total of 144 bicycle spaces for students, teachers and staff to park their bicycles;
- Site landscaping including green links, chain of ponds, community garden and open space; and
- Augmentation and construction of ancillary infrastructure and utilities as required.

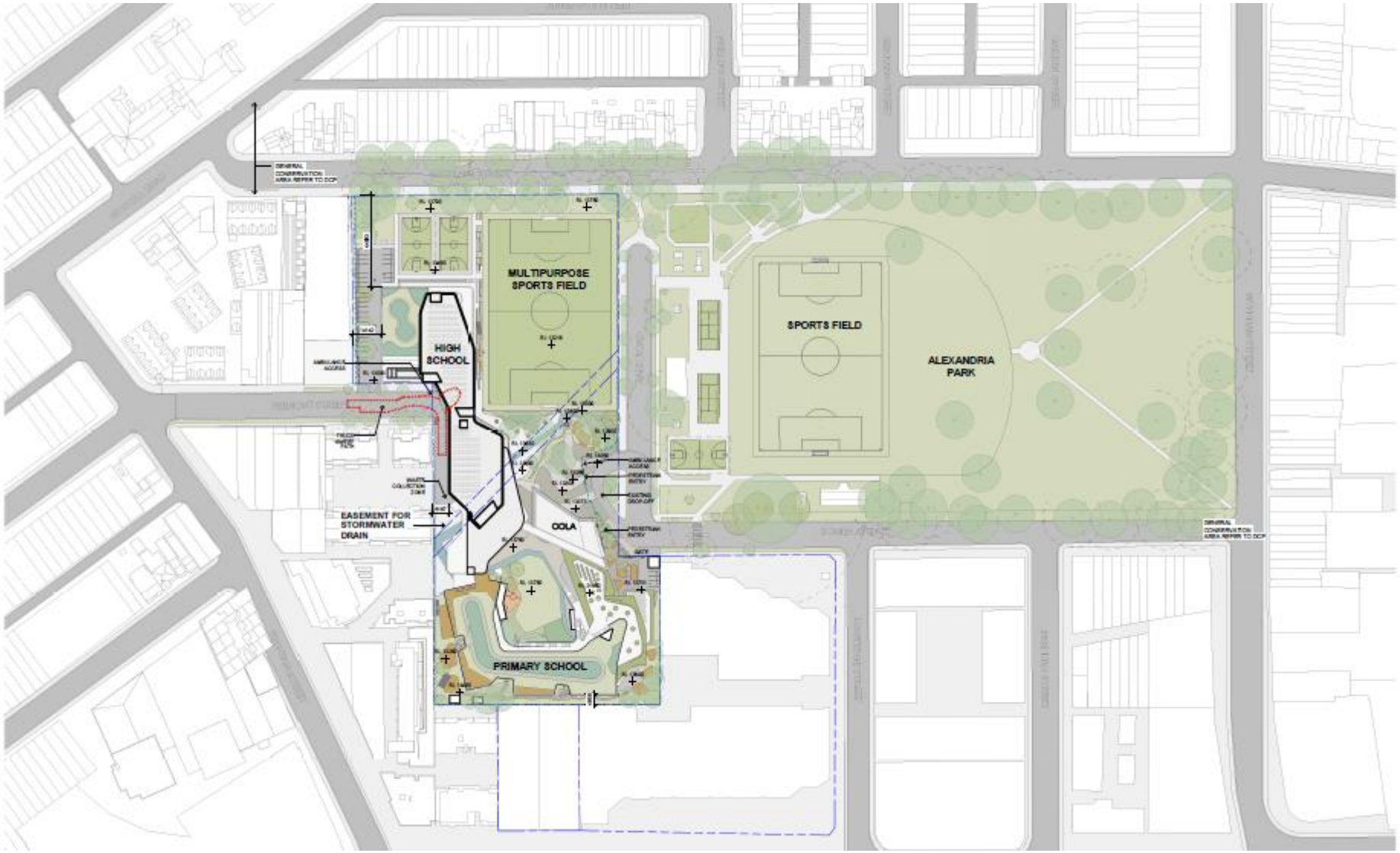
The future school is also proposed to provide public access to amenities in order to become a community hub. At the time of this report the arrangements for this shared-used were not available.

2.4. ACCESS

The proposed development will contain the access points outlined below:

- Vehicle access to the on-site carpark and loading dock off Belmont Street;
- Dedicated drop off/pick up zone for buses off Power Avenue and Park Road;
- Proposed on-site out of school hours (OOSH) service drop off/pick up zone off Power Avenue; and
- Pedestrian access is proposed to be provided via entry/exit points located off Belmont Street, Park Road and Power Avenue.

Figure 2 – Proposed site plan.



Source: Tanner Kibble Denton

3. POLICY REVIEW

The following documents were reviewed to inform this assessment:

- NSW State Priorities.
- Crime prevention and assessment of development applications (NSW Department of Planning).
- NSW Police Safer by Design Guidelines.
- National and international best practice CPTED guidelines for schools.

3.1. NSW STATE PRIORITIES

The NSW Government in its 'State Priorities NSW: Making It Happen' identifies the priority to create safer communities in NSW. Goals include:

- Reducing violent crime – LGAs to have stable or falling violent crime rates by 2019;
- Reduce adult re-offending by 5% by 2019; and
- Reduce road fatalities by at least 30% from 2011 levels by 2012.

3.2. NSW POLICE SAFER BY DESIGN GUIDELINES

The Safer by Design evaluation process is used by NSW Police to identify and quantify crime risks. The evaluation measures statistical probability of crime, consequence, 'hotspots' analysis and situational opportunity. The four key principles to minimise the opportunity for crime are outlined below.

Table 2 – CPTED principles.

Principle	Description
Surveillance	Maximising opportunities for passers-by or residents to observe what happens in an area (the 'safety in numbers' concept).
Access control	Control of who enters an area so that unauthorised people are excluded, for instance, via physical barriers such as fences, grills etc.
Territorial reinforcement / ownership	People are more likely to protect territory they feel they own and have a certain respect for the territory of others. This can be expressed through installation of fences, paving, signs, good maintenance and landscaping. Territoriality relates to the way in which a community has ownership over a space.
Space management	Ensures that space is appropriately utilised and cared for. Space management strategies include: activity coordination (i.e. having a specific plan for the way different types of activities are carried out in space), site cleanliness, rapid repair of vandalism and graffiti, the replacement of burned out lighting and the removal or refurbishment of decayed physical elements.

Source: *Crime prevention and the assessment of development applications*, NSW Government Department of Planning, 2000

3.3. CRIME PREVENTION AND ASSESSMENT OF DEVELOPMENT APPLICATIONS

The Crime Prevention and Assessment of Development Applications guidelines seeks to influence building design assessed under the NSW Environmental Planning and Assessment Act (EPAA) 1979.

The EPAA requires consent authorities to ensure that developments provide safety and security to users and the community 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.

3.4. SYDNEY DEVELOPMENT CONTROL PLAN, 2012

Section 3.13.1 states an objective to provide a safe environment and minimise opportunities for criminal and anti-social behaviour. Relevant provisions include:

- In commercial, retail or public buildings, facilities such as toilets and parents rooms are to be conveniently located and designed to maximise casual surveillance to facility entries.
- Minimise blind-corners, recesses and other external areas that have the potential for concealment or entrapment.
- Building entries are to be clearly visible, unobstructed and easily identifiable from the street, other public areas and other development. Where practicable lift lobbies, stairwells, hallways and corridors should be visible from the public domain.
- Ground floors of non-residential buildings, the non-residential component of mixed use developments, and the foyers of residential buildings are to be designed to enable surveillance from the public domain to the inside of the building at night.
- Building details such as fencing, drainpipes and landscaping are to be designed so that illegitimate access is not facilitated by the opportunity for foot or hand-holds, concealment and the like.

3.5. BEST PRACTICE GUIDELINES FOR SCHOOLS

Educational establishments may be targets for crime and vandalism because of their scale, variety of uses and landmark status. Specific design elements which may affect crime and vandalism in schools include:

- Schools often have multiple entry points.
- They often have up to date (valuable) equipment.
- They frequently back onto houses.
- They have low levels of activity on weekends, school holidays, public holidays and after-hours. [1]

Many of the crimes that affect schools are opportunistic and can be minimised through the adoption of appropriate CPTED principles.

[1] *National Clearinghouse for Educational Facilities (2006) Safe School Facilities Checklist.*

4. COMMUNITY PROFILE

The following section provides a community profile for the suburb of Alexandria, in order to understand the local context for the proposal. For comparison purposes, the Sydney Local Government Area (LGA) and the Greater Sydney Statistical Area (Greater Sydney) have been included. Demographic data is based on 2016 Census data from the Australian Bureau of Statistics (ABS).

A full demographic summary table is provided at **Appendix B**.

4.1. CURRENT POPULATION

Alexandria has a population of around 8,262, which has increased from 7,015 people in 2011, a growth rate of around 12%.

Key characteristics of the Alexandria population are:

- Alexandria has a younger population compared to Greater Sydney. The median age for the Alexandria area is 33 years of age, compared to 36 years for Greater Sydney. The largest 5-year age groups are 24-34 years and 35-44 years.
- Households without children (62.2%) are the dominant family structure in the study area, which is in line with the Sydney LGA (63.1%).
- More than half (58.8%) of the population were born in Australia, which is significantly higher than the Sydney LGA (39.4%) and in line with Greater Sydney (57.1%).
- The majority of people in the study area (71.7%) speak only English at home, which is significantly higher than the Sydney LGA (51.5%) and Greater Sydney (58.4%).
- The area is relatively affluent, with higher weekly personal and family income ($1,341; $2,904) compared to the Sydney LGA ($953; $2,524) and Greater Sydney ($719; $1,988). The area is also characterised by a high rate of employment (96.5%).
- The majority of the population live in flats or apartments (61.3%). Generally, dwellings are rented (50.3%) or owned with a mortgage (34.2%).

4.2. SEIFA

SEIFA index results indicate that the suburb of Alexandria is within the 10% most advantaged areas, except for in the economic resources index. The lower score is influenced by the small number of owned homes in the suburb.

Table 3 – SEIFA Index.

Heading	Advantage and Disadvantage		Disadvantage		Economic Resources		Education and Occupation	
	Score	Decile	Score	Decile	Score	Decile	Score	Decile
Alexandria	1117	10	1098	10	1008	5	1175	10

Source: SEIFA, 2011.

5. CRIME PROFILE

Educational establishments may be targets for crime and vandalism because of their scale, variety of uses and landmark status. Consultation with Alexandria Park School indicated there are very low levels of crime associated with the current school operations, with only one occurrence of malicious damage to property (vandalism) recorded within the last five years.

Crime data from the NSW Bureau of Crime Statistics and Research (BOCSAR) was analysed to identify the crime profile at a suburb level (Alexandria) and an LGA level (City of Sydney) and compared this to the NSW average to help assess risk compared to state-wide averages.

5.1. TYPES OF CRIME

Table 4 outlines major offences that took place in the study area between April 2016 to March 2017. Alexandria generally has higher rates of crime compared to NSW, which is indicative of its inner-city location. However, in comparison to the City of Sydney LGA, Alexandria generally has lower levels of crime. The five most crime types with highest rate of occurrence in Alexandria are:

- Drug offences.
- Fraud.
- Steal from motor vehicle.
- Malicious damage to property.
- Steal from retail store.

Stealing related crimes and damage to property are generally crimes that that can be managed and minimised through the adoption of appropriate CPTED principles.

Table 4 – Crime rates per 100,000 people (April 2016-March 2017).

Crime Type	Alexandria	City of Sydney	NSW
Drug offences	3031.0	4387.4	777.9
Fraud	2220.4	2522.2	644.7
Malicious damage to property	963.3	1297.9	816.4
Steal from motor vehicle	1116.1	745.1	529.8
Harassment, threatening behaviour and private nuisance	305.5	531.8	395.9
Domestic assault	246.7	480.2	379.7
Break and enter – dwelling	411.2	373.5	383.6
Break and enter – non-dwelling	469.9	279.5	150.4
Steal from retail store	798.9	1351.4	310.6
Non-domestic assault	599.2	1567.2	415.2
Motor vehicle theft	422.9	168.0	172.5
Steal from dwelling	693.1	517.7	277.9
Receiving/ handling stolen goods	188.0	579.0	105.1

5.2. CRIME TRENDS

Table 5 below presents the 2-year crime trends (July 2015 to June 2017) for key crime types in the study area. Overall this area has seen a stabilisation in crime rates over the last 2 years, however there has been an increase of drug offences and non-domestic assault.

Table 5 – Two-year crime trends in Alexandria

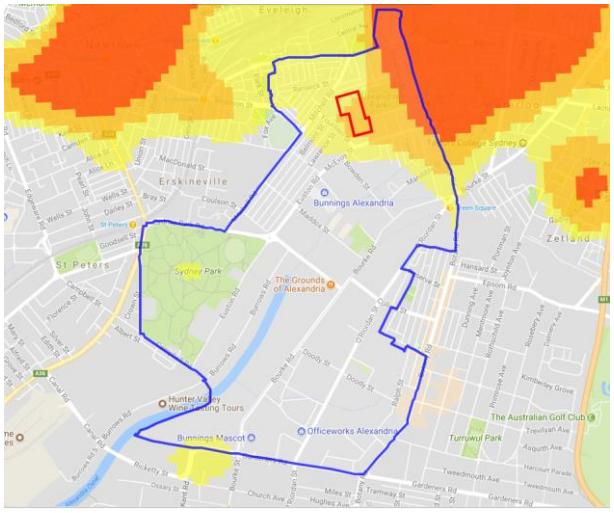
Crime	2-year trend (July 2015 – June 2017)
Drug offences	Up 41.8% per year
Fraud	Stable
Malicious damage to property	Stable
Steal from motor vehicle	Stable
Harassment, threatening behaviour and private nuisance	NA
Domestic assault	Stable
Break and enter – dwelling	Stable
Steal from retail store	Stable
Non-domestic assault	Up 25% per year
Motor vehicle theft	Stable
Steal from dwelling	Stable
Receiving/handling stolen goods	NA
Break and enter – non-dwelling	Stable

5.3. CRIME HOTSPOT MAPS

BOCSAR publishes 'hotspot' maps to illustrate areas of high crime density relative to crime concentrations across NSW. The 'hotspot' maps below show that there are hotspots for a range of crimes in the vicinity of the subject site, including:

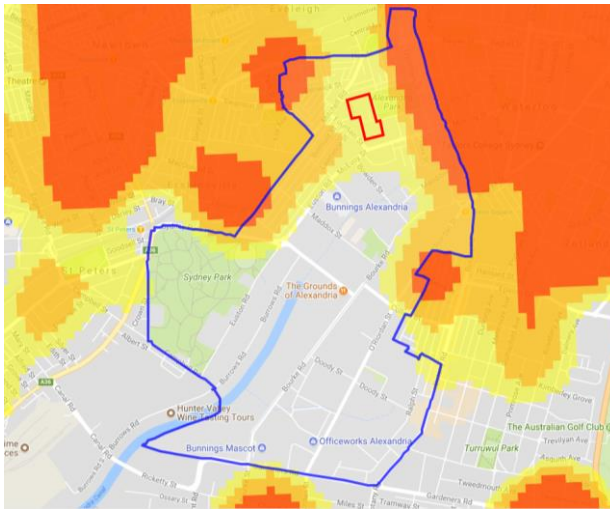
- Break and enter dwelling;
- Break and enter non-dwelling;
- Motor-vehicle theft;
- Steal from motor-vehicle;
- Steal from dwelling;
- Malicious damage to property;
- Domestic assault; and
- Non-domestic assault.

Figure 3 – Crime hotspots for Alexandria, July 2016 to June 2017.



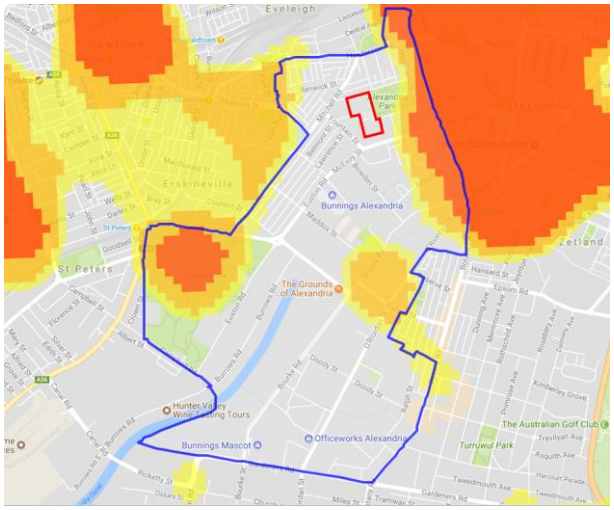
Picture 1 – Incidents of assault – non-domestic.

Source: BOSCAR



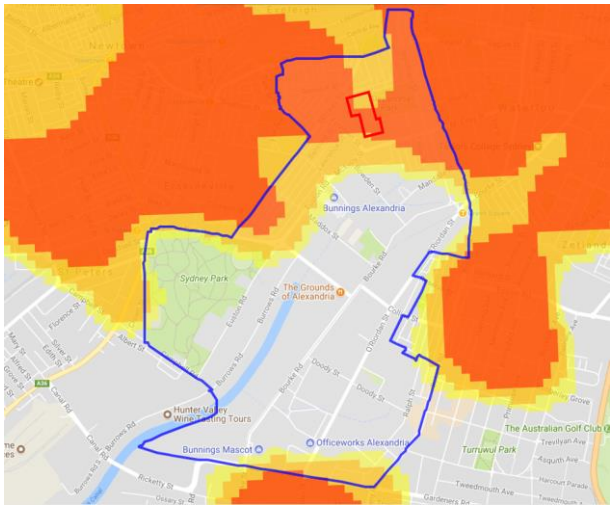
Picture 2 – Incidents of assault – domestic.

Source: BOSCAR



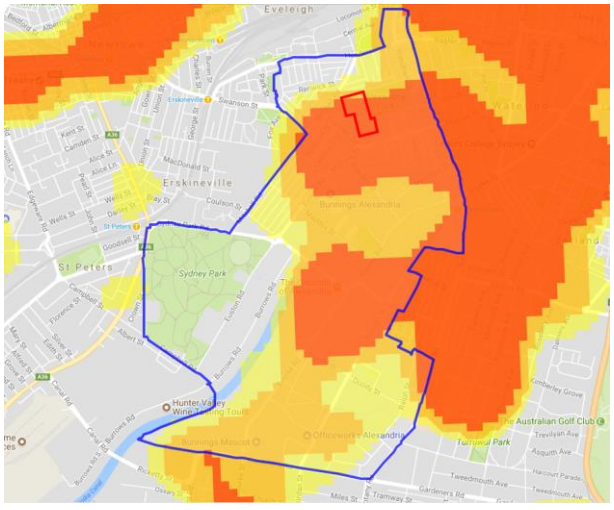
Picture 3 – Incidents of robbery.

Source: BOSCAR



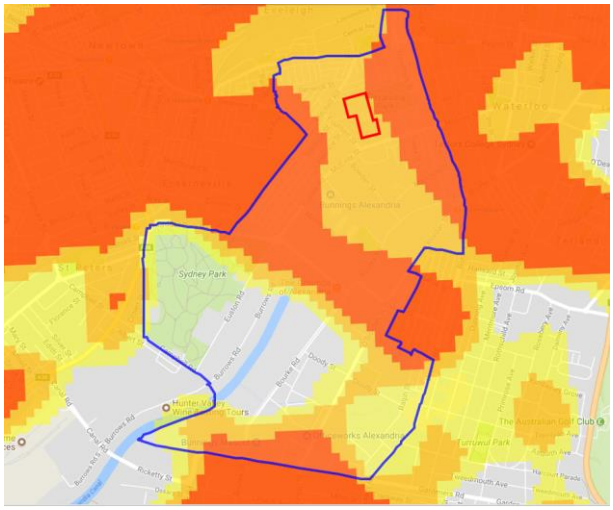
Picture 4 – Incidents of break and enter dwelling.

Source: BOSCAR



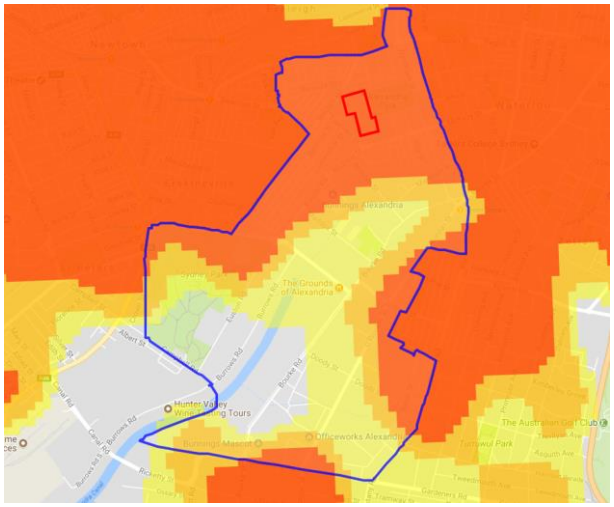
Picture 5 – Incidents of break and enter non-dwelling.

Source: BOSCAR



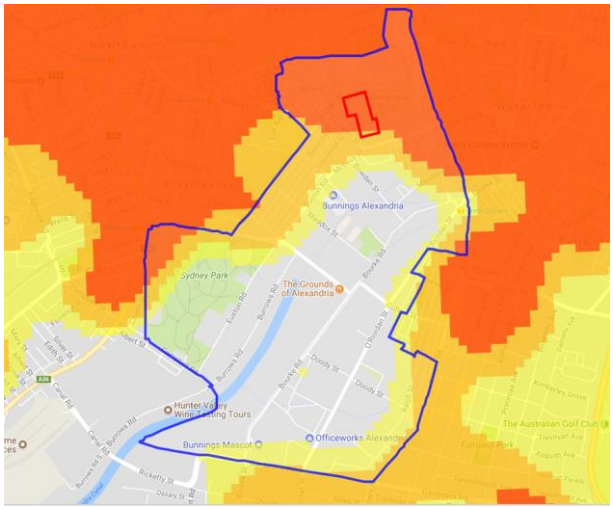
Picture 6 – Motor vehicle theft.

Source: BOSCAR



Picture 7 – Steal from motor vehicle.

Source: BOSCAR



Picture 8 – Malicious damage to property.

Source: BOSCAR

6. CPTED ASSESSMENT AND RECOMMENDATIONS

The following is a detailed assessment of the following CPTED priority areas:

- Entry and exit points;
- Car parking and traffic;
- Internal Layout;
- External Layout;
- Construction;
- Maintenance; and
- Materials.

6.1. ENTRY AND EXIT POINTS

Entry and exit points are a key consideration for CPTED assessments because of the interface they provide with the surrounding land uses and community. Entry and exit points are a potential risk area for the proposed development as Alexandria has high rates of 'malicious damage to property' compared to NSW and the site is located in a hotspot for this crime type.

Table 6 – Entry and exit points.

About the development
The proposal includes two main access points to the school, vehicle and pedestrian access to the carpark and loading dock via Belmont Street and a main 'Entry Hub' on Power Avenue and Park Road. The service entrance on Belmont Street is in a residential area that provides good levels of passive surveillance. The main entry is in close proximity to the public reception and there is clear line of site from this administration area to the main entry/exit point. The existing metal fence around the boundary of the school is to be maintained around the southern and western boundaries of the school perimeter.
Recommendations
In finalising the design, it is important to consider the following recommendations: • All entry/exit points should be clearly identifiable and inviting, and signage should be installed to direct visitors to report to the administration area of the school. • Design entry/exit points to encourage natural surveillance from other areas of the school. • Access control for entry and exit gates should be installed via the use of self-closing mechanisms or other control mechanisms, without restricting evacuation requirements. • Entry/exit points should be secured outside of operating hours to prevent unauthorised access. • Limit opportunities for unauthorised access through appropriate fencing around the school. • Specify entry/exit points are built from resistant materials to prevent break and enters crime and vandalism.

6.2. PARKING AND PEDESTRIANS

Car parking areas can be common spaces for offences against property or persons and interactions between vehicles and pedestrians can present a safety risk. Car parking is considered a priority area for the proposed

development as Alexandria has higher rates of ‘steal from motor vehicle’ compared to both the City of Sydney LGA and NSW. The site is also within in a crime hotspot for ‘steal from motor vehicle’ and ‘motor vehicle theft.

Table 7 – Parking.

About the development
The proposed development includes construction of an outdoor car park (28 spaces) for teachers and staff and total of 144 bicycle spaces for students, teachers and staff to park their bicycles. Access to the car park is via Belmont Street, and is in a residential area that provides good levels of passive surveillance.
Recommendations
In finalising the design, it is important to consider the following recommendations: • Install safe parking signage in the car park and school grounds to remind staff, visitors and students to secure their cars, bicycles and valuables. • Install wayfinding signage throughout the car park to safely manage interactions between cars, pedestrians and children. • Install traffic control signage (e.g. give way and stop signs) at all entry and exit points, to avoid conflicts between vehicles, cyclists and pedestrians both on the street and within the car park. • Provide secure bicycle parking or lockers for cyclists. • Implement a maintenance plan including regular rubbish and graffiti removal, repair of light fixtures and other necessary repairs of the car park areas. • Educate staff, parents and children regarding any changes to the current pick/drop-off procedure. • Pedestrian access to the school should be clearly marked with ‘zebra’ crossings.

6.3. INTERNAL LAYOUT

Key internal layout considerations in regards to CPTED include interfaces between public and private space and the existence of ‘dead space’, ‘areas of entrapment’ and ‘areas of concealment’.

Table 8 – Internal layout.

About the development
Internally the school will provide a range of learning and recreation spaces with the senior students located in the north-west area of the campus and junior student areas located in southern area. The proposed school also includes provision for an existing preschool and community centre. The child care centre has access via a separate entrance and exit point off Power Avenue. This is considered good CPTED practice, as it contributes to the monitoring of people who access the child care centre.
Recommendation
In finalising the design, it is important to consider the following recommendations: • The internal spaces of the school should provide passive surveillance of the external areas of the school such as playgrounds, gardens and entry/exit points.

- Avoid creating blind corners in stairwells and hallways and providing open or transparent materials on doors and stairwells to maximise the visibility of high risk areas.
- Toilets/amenity blocks should be located in areas with high passive surveillance.
- Rooms with valuable equipment should incorporate access control measures, such as swipe cards or locks, when not in use to minimise the risk of equipment being taken out of the building, lost or stolen.
- Rooms with restricted access should have adequate signs and be locked when not in use.

6.4. EXTERNAL LAYOUT

External layouts can resolve safety conflicts and improve activation of the urban environment. Key external layout considerations in regard to CPTED include visibility, activation and prevention of vandalism and graffiti. Developments that are built using aesthetic materials are less likely to attract criminal activity through establishing a sense of ownership and pride for those who live and work close by.

Table 9 – External layout.

About the development

The subject site is located opposite Alexandria Park and is bound by areas of medium-density housing and commercial properties. Belmont Lane runs immediately adjacent to the western boundary of the site, separating the site from residential apartments. The lane features lighting and public art to activate this space.

The proposed school layout includes multiple buildings ranging from 3 – 5 storeys in height. At the ground level, there is separation between the buildings, creating permeability and visual connectivity thorough the site.

A Landscape Plan has been prepared by Context consultants which indicates a range of high quality outdoor spaces will be provided that are inspired by the Aboriginal heritage of the site. It is designed to promote a positive image of the school and encourages parents, students and the community to have pride and engage with their school.

Recommendation

In finalising the design, it is important to consider the following recommendations:

- Provision of access control measures to manage the movement of people between the school, community centre and childcare centre.
- Prevent unauthorised access to the school via Belmont Lane and encouraging passive surveillance of Belmont Lane to avoid anti-social behaviour or creating an area where people can conceal themselves.
- Avoid areas of entrapment or concealment between the primary school, high school buildings, garden store and the western boundary fence.
- Design landscaping to reduce opportunities for concealment and maintain opportunities for passive surveillance.
- Outdoor education and recreation areas located above the ground floor should be monitored for safety during use and access control measures put in place to manage access to this space.
- Design the entry garden to maintain sightlines from the administration area to the main entrance.
- Applying low maintenance and graffiti resistant materials on surfaces susceptible to graffiti.

- Install materials that prevent climbing and secure items that could be used as climbing aids e.g. bins.

6.5. MAINTENANCE AND MANAGEMENT

Developments that are well managed are less likely to attract criminal activity. Maintenance establishes a sense of ownership and pride for those who live and work close by. Active security measures are key to managing ongoing crime risks.

Table 10 – Maintenance and management

About the development
The Operational Management Plan prepared by Foresight Environmental outlines the maintenance procedures for the school. These include the following indoor and outdoor waste management zones and organic waste recovery areas. These procedures will be complemented by APCS plan of management which will be updated in accordance with the approved development proposal.
Recommendation
In finalising the design, it is important to consider the following recommendations: • The school's Plan of Management should include maintenance and repairing strategies, waste removal procedures and landscaping procedures. • Include APCS open and closing procedures with the APCS Plan of Management and any shared use agreements for the School Hall. • Procedures and strategies to manage the interaction between junior and senior students during break and exit times. • Cash management strategies should be in place as required, especially for money raised from fundraising activities. • Implementation of a safety and security induction for all staff and visitors to the school.

6.6. CONSTRUCTION

Construction activities and staging present a range of potential crime and safety issues, including malicious damage to property and safety risks to site users. Construction safety is particularly important to consider in a school environment.

Table 11 – Construction.

About the development
Alexandria Park school will be constructed in four stages and students will remain on the Park Street Campus during this process. The site is also located next to an area of public open space used for recreation. During construction, the primary construction vehicle access to the site will be via Belmont Street, where no student drop-offs and pick-ups will be allowed.
Recommendation
In finalising the design, it is important to consider the following recommendations: • Prepare and implement a Construction Management Plan (CMP) including strategies and procedures specific to a school environment, which may include working with children checks.

About the development

- Students and staff should be briefed on construction activities that may present a safety or health risk.
- Install appropriate lighting of construction areas and consider active security measures (e.g. security staff monitoring) during high risk times, such as weekends when no activity is occurring on site or outside of permitted construction hours.
- All tools and building materials must be stored securely with tamper proof security systems.
- Install appropriate security fencing of construction areas to present unauthorised access.
- Establish and enforce appropriate on-site vehicle speed limits and traffic control measures to manage interactions between construction vehicles, pedestrians (staff and students) and other vehicles

7. CONCLUSION

Educational establishments may be targets for crime and vandalism because of their scale, variety of uses and landmark status.

Urbis has undertaken a CPTED Assessment for the proposed APCS against the four CPTED principles and has identified potential risk areas and recommendations which may help to reduce crime and anti-social behaviour.

The assessment has found that the design incorporates CPTED principles, including passive surveillance and site permeability and with potential community/shared use of facilities the site will also be activated outside of normal school hours.

Therefore, it is considered that the recommendations included in this report are adequate to minimise any crime risks related to the operation of the site.

DISCLAIMER

This report is dated 30 November 2017 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Department of Education (**Instructing Party**) for the purpose of CPTED (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A SITE VISIT

Figure 4 – Site visit 17 August 2017.

Picture 9 – Buckland Street entry point.

Source Urbis Pty Ltd

Picture 10 – Belmont Lane – Western Frontage.

Source: Urbis Pty Ltd

Picture 11 – Community Entry – Power Avenue and Park Street.

Source: Urbis Pty Ltd

Picture 12 – Bus Bay Entry – Park Road.

Source: Urbis Pty Ltd

Picture 13 – Park Road Play Area.

Source: Urbis Pty Ltd

Picture 14 – Belmont Street Entry and Exit Point.

Source: Urbis Pty Ltd

APPENDIX B DEMOGRAPHIC PROFILE

Characteristics	Alexandria		Sydney LGA		Greater Sydney	
	No.	%	No.	%	No.	%
Total persons	8,262	NA	208,374	NA	4,823,991	NA
Aboriginal and/or Torres Strait Islander people	143	1.7%	2,413	1.2	70,135	1.5
Age groups						
0-4 years	445	5.4	6,977	3.3	310,173	6.4
5-14 years	428	5.2	7,063	3.4	590,126	12.2
15-19 years	166	2.0	8,370	4.0	288,362	6.0
20-24 years	614	7.4	28,589	13.7	340,737	7.1
25-34 years	2,800	33.9	68,867	33.0	774,405	16.1
35-44 years	1,745	21.1	33,856	16.2	696,037	14.4
45-54 years	1,052	12.7	21,469	10.3	627,580	13.0
55-64 years	587	7.1	16,072	7.7	524,011	10.9
65-74 years	280	3.4	10,462	5.0	372,488	7.7
75-84 years	116	1.4	4,860	2.3	204,051	4.2
85 years and over	35	0.4	1,790	0.9	96,022	2.0
Median age of persons	33	NA	32	NA	36	NA
Family structure						
Couple family without children	1,283	62.2	25,791	63.1	416,588	33.4
Couple family with children	572	27.7	9,365	22.9	617, 424	49.5
One parent family	154	7.5	4,071	10.0	190, 048	15.2
Other family	55	2.7	1,658	4.1	22,992	1.8
Birthplace						
Australia(b)	4,854	58.8	82,098	39.4	2,752,169	57.1
Elsewhere(c)	2,739	33.2	99,761	47.9	1,773,496	36.8

Characteristics	Alexandria		Sydney LGA		Greater Sydney	
Language spoken at home						
English only	5,972	72.3	107,287	51.5	2,816,815	58.4
Other language	1,638	19.8	75,390	36.2	1,727,574	35.8
Income and repayments						
Median total personal income ($/weekly)	1,341	NA	953	NA	719	NA
Median total family income ($/weekly)	2,904	NA	2,524	NA	1,988	NA
Median mortgage repayment ($/monthly)	2,500	NA	2,499	NA	2,167	NA
Median rent ($/weekly)	590	NA	565	NA	440	NA
Household structure						
Separate house	122	3.4	1,717	2.0	924,225	56.9
Semi-detached	1,227	34.1	16,834	19.7	227,235	14.0
Flat or apartment	2,205	61.3	65,882	77.1	456,231	28.1
Other dwelling	16	0.4	421	0.5	9,132	0.6
Tenure						
Owned outright	457	12.7	11,964	14.0	472,635	29.1
Owned with a mortgage	1,227	34.2	16,964	19.9	539,917	33.2
Rented	1,805	50.3	53,121	62.2	553,249	34.1
Other	17	0.5	559	0.7	14,183	0.9
Average household size	2.1	NA	2.0	NA	2.8	NA

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