Department of **Planning, Lands and Heritage**

GOVERNMENT OF WESTERN AUSTRALIA

ACTIVE

IN FORCE

Western Australian Planning Commission

Safer Places by Design

Crime Prevention through Environmental Design Planning Guidelines

The Department of Planning, Lands and Heritage acknowledges the traditional owners and custodians of this land. We pay our respect to Elders past and present, their descendants who are with us today, and those who will follow in their footsteps.

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Guideline Summary

Part 1. Why Crime Prevention Through Environmental Design (CPTED)?

The Western Australian Planning Commission's (WAPC) *State Planning Policy 7.0 Design of the Built Environment* (SPP 7.0) (WAPC 2019) provides a framework to promote quality design across WA. The policy identifies Ten Design Principles that are applied to create a consistent framework for informing and assessing development design quality across WA. CPTED relates to all ten principles, but particularly the principle of 'safety'.

Safer Places by Design (the Guidelines) support these Ten Design Principles and the creation of well designed built environments through the principles of CPTED.

CPTED is the application of best practice principles and processes to the design of the built environment to minimise crime and fear of crime for enhanced community safety. The use of CPTED supports high quality design outcomes to create safer environments, and great places for community enjoyment.

Part 2. The Four CPTED Principles

There are four Principles in the Guidelines. Under each of the Principles, there are **Objectives** that state the desired outcome of that principle.

Under each of the objectives are ***Considerations*** which identify how the Objectives may be achieved through appropriate design responses, either in a new design or through retrofitting, and some advice on what to ***Avoid***. Figure 2.1 shows the Objectives for the four CPTED Principles (refer Part 2).

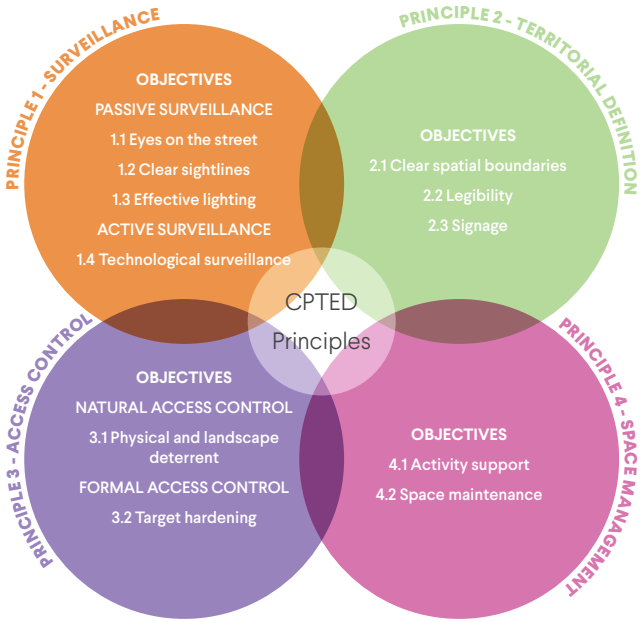


Figure 2.1 CPTED Principles

Part 3. CPTED Process

The recommended six-step process for integrating CPTED into project design, assessment and delivery. CPTED should be considered holistically and the design should respond to site specific considerations, including local crime risk, intended function and use, and design objectives. At each step, consultation with relevant stakeholders and decision markers (where appropriate) is important. Below is a summary of the CPTED Process (Refer Part 3).

Part 4. Scenarios

Scenarios provide CPTED guidance for specific land use and development examples. Each scenario illustrates the key considerations which address the CPTED principles for the situation/scenario.

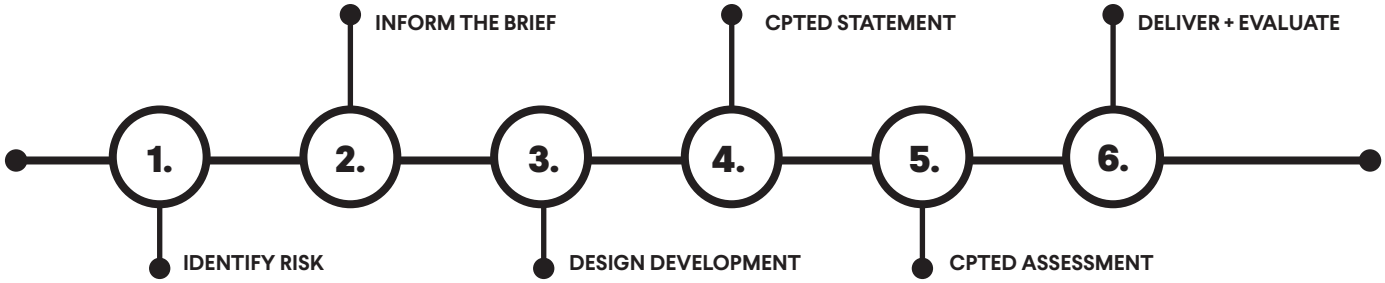
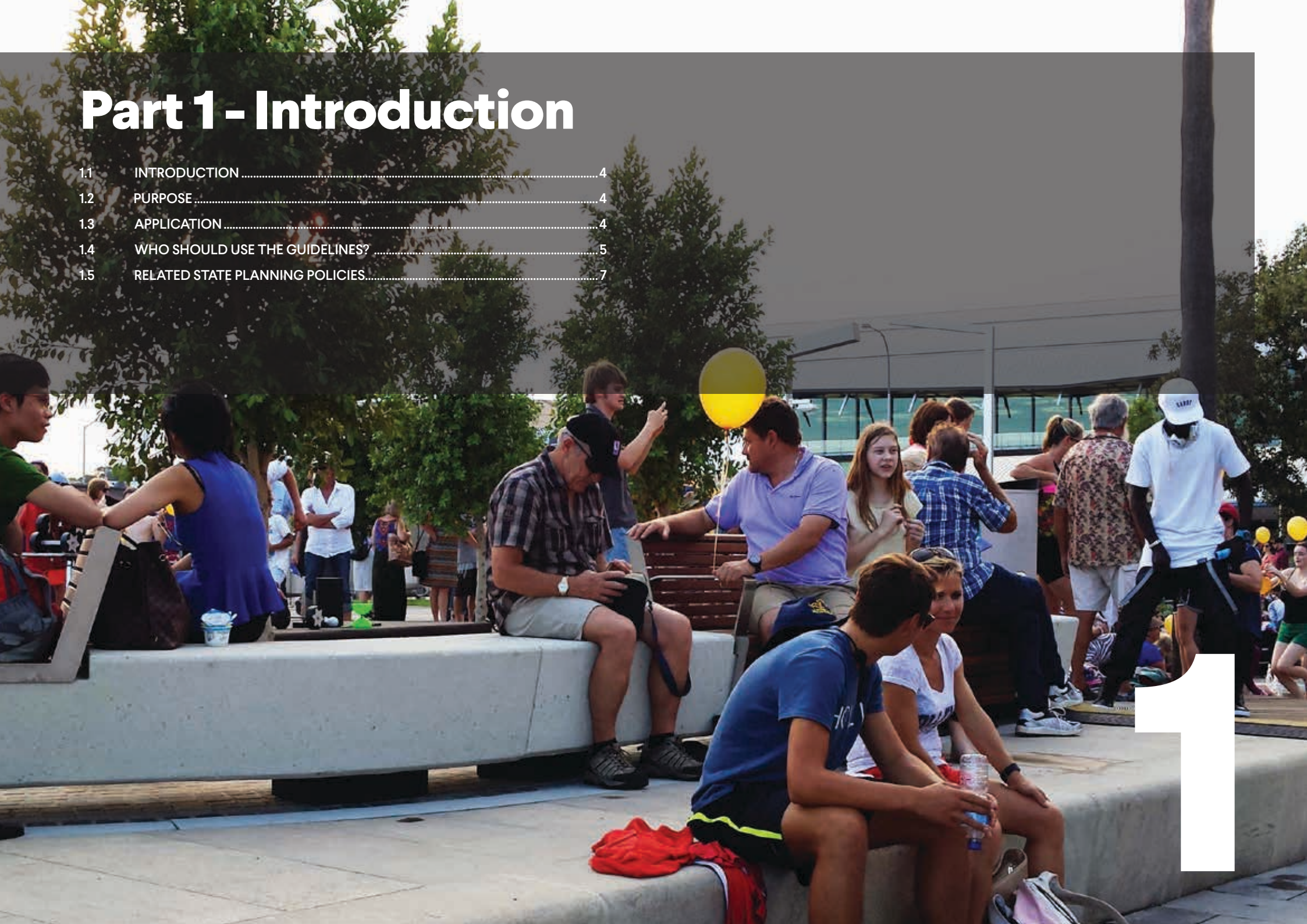


Figure 3.1 The 6-Step CPTED Process

Part 1 - Introduction



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Introduction

1.1 Introduction

Safer Places by Design (the Guidelines) supports the creation of well-designed built environments through the principles of 'crime prevention through environmental design' (CPTED).

CPTED is the application of best practice principles and processes to the design of the built environment to minimise crime and fear of crime for enhanced community safety. All people have an equal right to safely experience public spaces. The use of CPTED supports high quality, contextually appropriate design outcomes to create safer, vibrant, welcoming environments for all, and great places for community enjoyment.

While the risk of crime can be influenced by a range of factors and is not simply prevented through well designed places alone, CPTED is an important tool with proven benefits. To be most effective, CPTED needs to be considered as part of a holistic crime prevention strategy incorporating social, environmental and community development considerations that together contribute towards improved community wellbeing and liveability. In most cases, when implemented well, CPTED is a passive tool that mitigates the need for active crime reduction strategies which sometimes result in hostile spaces.

The Guidelines recommend principles and processes to integrate CPTED responses into private and public developments and planning frameworks to create safer places and spaces. They encourage early implementation of CPTED into planning proposals based on location specific crime risk influences. The Guidelines also consider how good urban design can support safer environments for various types of crime - from graffiti and incidences of anti-social behaviour, through to violent extremism and terrorism.

1.2 Purpose

The Guidelines provide support for decision-making authorities, local government, proponents and designers to implement SPP 7.0 *Design of the Built Environment.* Specifically they assist in:

1. implementing the SPP 7.0 Design Principle of 'safety'; and
2. enabling CPTED principles to be integrated into design and assessment processes to manage crime risk.

Safer Places by Design aims to provide a practical resource to assist designers, planners, developers, decision-makers, landowners and community in the application of CPTED principles to the design and development of places in the built environment, within the context of the Western Australian (WA) planning system. The Guidelines aim to:

1. promote the value of good design in delivering vibrant, attractive and safe public and private environments
2. encourage integration of CPTED thinking into the design, functional brief, implementation and evaluation of development projects of varying scales and complexity
3. promote incorporation of CPTED considerations into the preparation of planning documents, such as schemes, structure plans (standard and precinct), planning policies and design guidelines
4. inform design review and assessment of development applications and other planning proposals
5. raise stakeholder awareness of crime prevention and safety as it relates to the built environment.

1.3 Application

The Guidelines apply to the planning, assessment and delivery of all development in WA, from planning new communities and redevelopment within existing communities, through to infrastructure projects and individual building design. The Guidelines can also be used to include CPTED considerations in relevant planning documents, including planning strategies, schemes, structure plans and policies. Local governments are encouraged to align any new or updated CPTED guidance with the Guidelines.

The Guidelines are designed to be used to achieve CPTED responses that are tailored to each site and context, rather than applied as generic rules to every situation.

The Guidelines deal primarily with the physical aspects of CPTED in the built environment. While the importance of management practices, such as security staffing and surveillance systems, as well as the role of social and cultural influences, such as police and community partnerships, are recognised, these considerations are beyond the scope of the Guidelines. Further investigation into social strategies such as 2nd generation CPTED may be considered on a case by case basis, but are not covered in the Guidelines.

CPTED continues to evolve in response to new challenges and changing public expectations, including those concerning the safety of women and vulnerable people; sustainability, new technologies and the rising threats of terrorism and cyber-crime.

These Guidelines aim to incorporate the latest thinking and evolution in CPTED, however, as CPTED is a dynamic field, the most up-to-date research and advice should always be sought. More information is included in Appendix A1: Useful contacts.

1.4 Who should use the Guidelines

Safer Places by Design provides a resource for the following key user groups:

Decision-makers/Approval authorities

These Guidelines can assist planners, designers, elected members and others operating in local and State government decision-making agencies in both the formulation of planning documents/framework, and assessment of planning and development proposals.

Formulation of Planning Documents:

The Guidelines and/or related CPTED considerations should be considered and incorporated as appropriate when preparing planning documents, including local planning strategies, schemes, policies, structure plans and local development plans.

Assessment of Planning and Development Proposals:

State and local government decision-making agencies should refer to the Guidelines to assist with the assessment of a range of development proposals and planning documents. Design review panels should apply the Guidelines to improve a project's safety outcomes.

Benefits include:

- Integration of CPTED considerations early in decision-making processes
- Better development outcomes, including reductions in crime levels, improved perceptions of safety and use of public areas

Local Government

Local government has a critical role in crime prevention and community safety through efficient policy implementation as well as delivery and maintenance of important community infrastructure. In addition, the Guidelines can assist officers in formulating and implementing community safety strategies.

Formulation of Planning Documents:

The Guidelines and/or related CPTED considerations should be considered and incorporated as appropriate when preparing or updating planning documents, including local planning strategies, schemes, policies, structure plans and local development plans.

Delivery and maintenance of projects

In delivering projects, local government should refer to the Guidelines as relevant to assist with improving the safety of areas under their care with specific consideration of the needs of their community.

Benefits include:

- Better understanding of and responsiveness to local crime risk and changing demographics
- Closer relationship between design, planning and community
- Better development outcomes through early engagement and informed design decisions

Developers, designers and related professionals

Public and private developers (and project teams) are encouraged to use the Guidelines to integrate CPTED early into the design of all project types, including infrastructure works, landscaping, subdivision, and public and private buildings. These Guidelines can also be used by Government delivery teams to integrate CPTED principles in project briefs.

Achieving good outcomes may require expertise from a range of design-related professionals, including architects, landscape architects, planners, urban designers, lighting engineers, structural engineers, mechanical engineers, building surveyors and specialist CPTED assessors.

Benefits include:

- Better understanding of and responsiveness to local crime risk and changing demographics
- Implementation of a holistic approach to the design of safer places and spaces
- Better development outcomes through early engagement and informed design decisions

Development owners and operators

Owners and operators of developments have a duty of care to protect the people accessing and using their spaces from danger and potential threats. Owners and operators are encouraged to be familiar with CPTED approaches outlined in the Guidelines, including counter-terrorism (CT) strategies where relevant.

Owners and operators are encouraged to apply CPTED thinking from the outset of a project - at tender and project brief stages, where the largest benefits to a project can be achieved. It is also the responsibility of owners and operators to implement and review CPTED strategies for effectiveness.

Benefits include:

- Safer and better designed places for customers and employees
- Integration of CPTED considerations early in decision-making processes reduces the risk of costly add-ons at a later stage

Community organisations

A range of community stakeholders, including residents and community groups, can have an interest in and support the implementation of effective CPTED strategies. Forming strategic, ongoing partnerships with local organisations, such as property owners, WA police and community groups, can support a consistent and coordinated approach to help understand risk and formulate responses that enhance safety.

These Guidelines can be used to inform communities about the principles and processes of CPTED and to encourage community participation in the creation and maintenance of safe environments.

Benefits include:

- Opportunities to contribute to design processes for safer places and spaces
- Improved perceptions of safety and connection to neighbourhood
- Fewer incidences of crime
- Stronger neighbourhood relationships and sense of belonging

WA Police Force and security personnel

The Guidelines provide a reference for police and others involved in crime prevention to promote practical, effective and holistic CPTED approaches for the design and management of safer places.

Benefits include:

- Opportunity to contribute to meaningful crime prevention strategies
- Closer relationship between design/ planning and law enforcement agencies

1.5 Related State Planning Policies

The WAPC's SPP 7.0 provides a framework to promote quality design across WA. The policy identifies Ten Design Principles that are applied to create a consistent framework for informing and assessing development design quality across WA. CPTED relates to all ten principles, but particularly the principle of 'safety':

Safety*: Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.* (WAPC, 2019)

The Guidelines are to be considered in conjunction with SPP 7.0 to enable CPTED principles to be integrated into design and assessment processes to manage crime risk.

The Guidelines should also be read in conjunction with other relevant WAPC policies. This may entail WAPC policies making direct reference to *Safer Places by Design*, or WAPC policies incorporating relevant CPTED considerations and requirements, having regard to the objectives and principles of these Guidelines. Key policies that should be considered in conjunction with *Safer Places by Design* include, but are not confined to:

Liveable Neighbourhoods Operational Policy

SPP 3.2: *Aboriginal Settlements*

SPP 4.2: *Activity Centres*

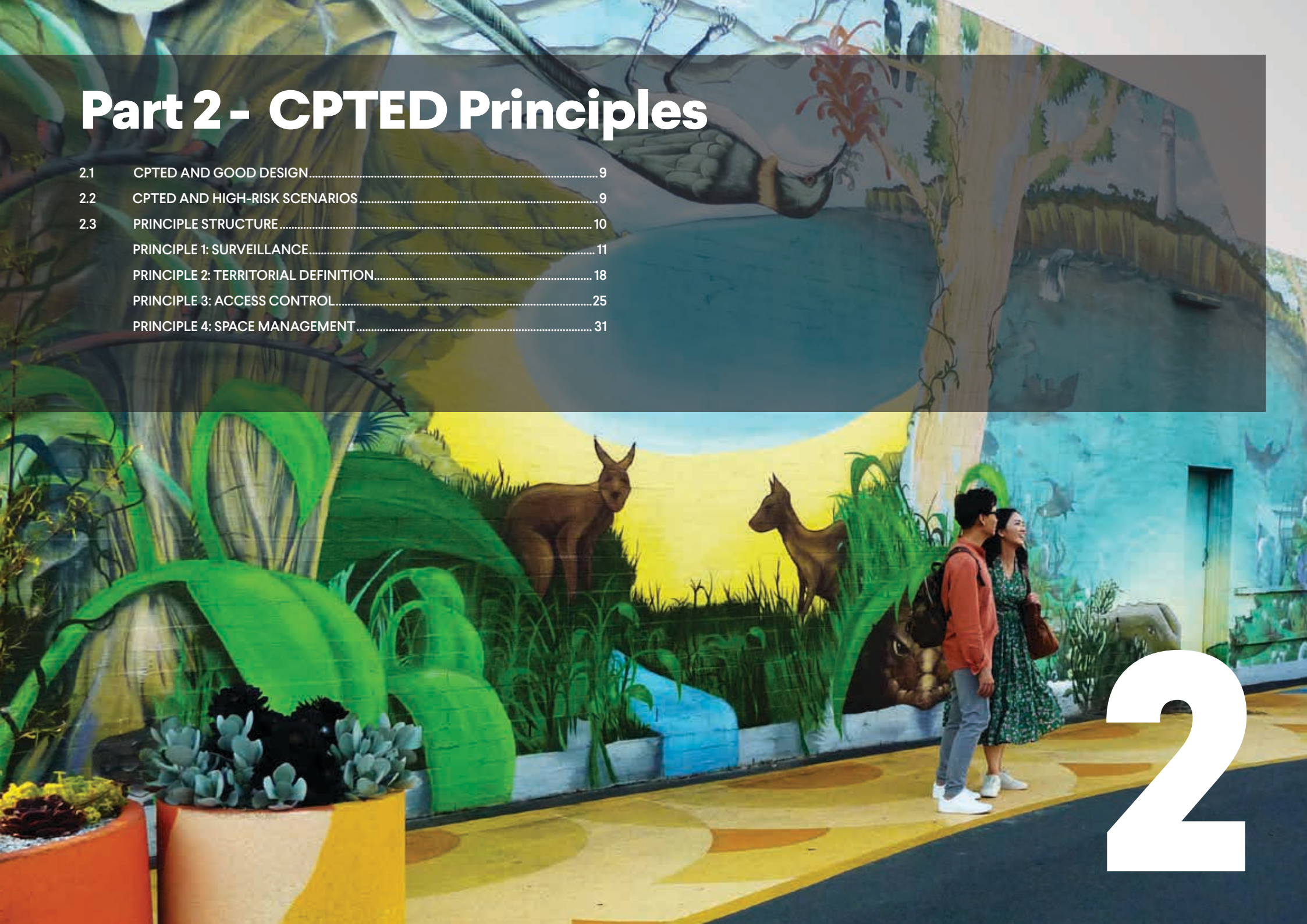
SPP 7.2: *Precinct Design Guidelines*

SPP 7.3: *Residential Design Codes: Volumes 1 and 2*

Related legislation and standards

Safer Places by Design should be read in conjunction with relevant legislation including the *National Construction Code* (NCC), the *Disability Discrimination Act* 1992, and other relevant Australian Standards. Further information can be found in Appendix A1: Useful contacts.

Part 2 - CPTED Principles



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CPTED Principles

2.1 CPTED and good design

When places are well designed, they perform better and create positive experiences for users. Great places are spaces that people want to spend time in. They are inclusive and accessible to all. When a mix of people have access to spaces, both activation and perception of safety increases. For example, places that cater for both the elderly and younger people will bring people together, supporting passive surveillance and a stronger sense of inclusion, connection and belonging.

Incorporating CPTED approaches at the outset of the design process is the best way to support the creation of great spaces. The design of a development project can create inviting spaces that people want to spend time in and that positively influence behaviour. This supports safer outcomes and reduces the need for costly modifications at later stages.

2.2 CPTED and high-risk scenarios

The CPTED principles include key considerations for those areas or projects that are deemed to be at 'high risk' to threats from terrorism and violent extremism, with the aim of assisting in reducing the opportunity for these hostile acts.

High risk scenarios include places that are more vulnerable to severe threats including terrorism and violent extremism. This may be due to the scale or type of development project or land use, a target location, or where a terrorist or crime threat has been identified. Locations such as critical infrastructure and crowded places (see Definitions) can be high-risk targets.

Even though the probability of a hostile or terrorist incident is low compared to other crimes; the impact can be devastating. Terrorists are prone to seek targets where they are least expected and where defences are ill-prepared. While intelligence gathering, surveillance and police presence are key tools, the last line of defence is often barriers and security checks. These responses can impact amenity, be inconvenient and increase perceptions of crime. Responses to a terrorist threat should aim to be sympathetic to the local environment, and not contribute to heightened perceptions of threats.

To maximise effectiveness, responses to high-risk scenarios should be considered early in the design process to support integrated design solutions and be holistic and appropriate to the level of threat. It is important that designs consider the needs of normal users so that spaces can perform well and be pleasant to be in, while also responding to identified risks.

Responses to high-risk scenarios should factor in other relevant considerations, such as current and future security measures, along with organisational processes, including understanding how internal teams and support agencies (e.g. police) will respond to incidents. Some responses may be temporary, for example measures introduced for large events, while others may be permanent. Given that threats can change very quickly, designs often need to be adaptable and scalable.

A suitably qualified professional may be required to assist with appropriate CPTED responses and/or CPTED assessment during planning assessment. This may involve design expertise, including architects, landscape architects, urban designers and engineers. However, in some situations it may be necessary to engage specialist CPTED expertise and risk advisors, as well as consult with the WA Police Force Protective Security Unit.

Reference should be made to the WA Police Force Counter Terrorism (WAPFCT) Unit and Australian National Security for advice on current terrorism threat and national advice. These can be found at *https://www.police.wa.gov.au/Your-Safety/Counter-terrorism* and *https://www.nationalsecurity.gov.au/Media-and-publications/Publications/Pages/default.aspx*. Further information is available in A1: Useful contacts.

2.3 Principle structure

For the purpose of the Guidelines, CPTED is organised into four principles that support well-designed, safer places.

Each Principle is accompanied by the following supporting information:

- **Intent** - explains the intended outcome of the principle and why it is important
- **Objectives** - states the objectives to achieve the desired outcome of that principle
- **Considerations** - identifies how the principle objectives may be achieved through appropriate design responses (including for new development, retrofitting existing development and additional considerations for high-risk scenarios – see below)
- **Avoid** - outlines design responses to be avoided

Part 3: CPTED Process, explains how these principles, objectives and considerations can be applied to a six-step process that begins with context understanding and concludes with project delivery and evaluation.

The expectation is for the **Objectives** accompanying each **Principle** to be addressed through tailored application of the **Considerations**, having regard to the nature and scale of the proposal at hand, its site context, and the local crime risk profile.

This is conducive to a site-specific and performance-based approach that allows for common sense solutions, whereby practitioners can apply the **Objectives** and **Considerations** as applicable to their respective proposals.

Reference can also be made to Part 4: Safer Place Scenarios, which illustrate how these principles, objectives and considerations can be applied in specific situations.

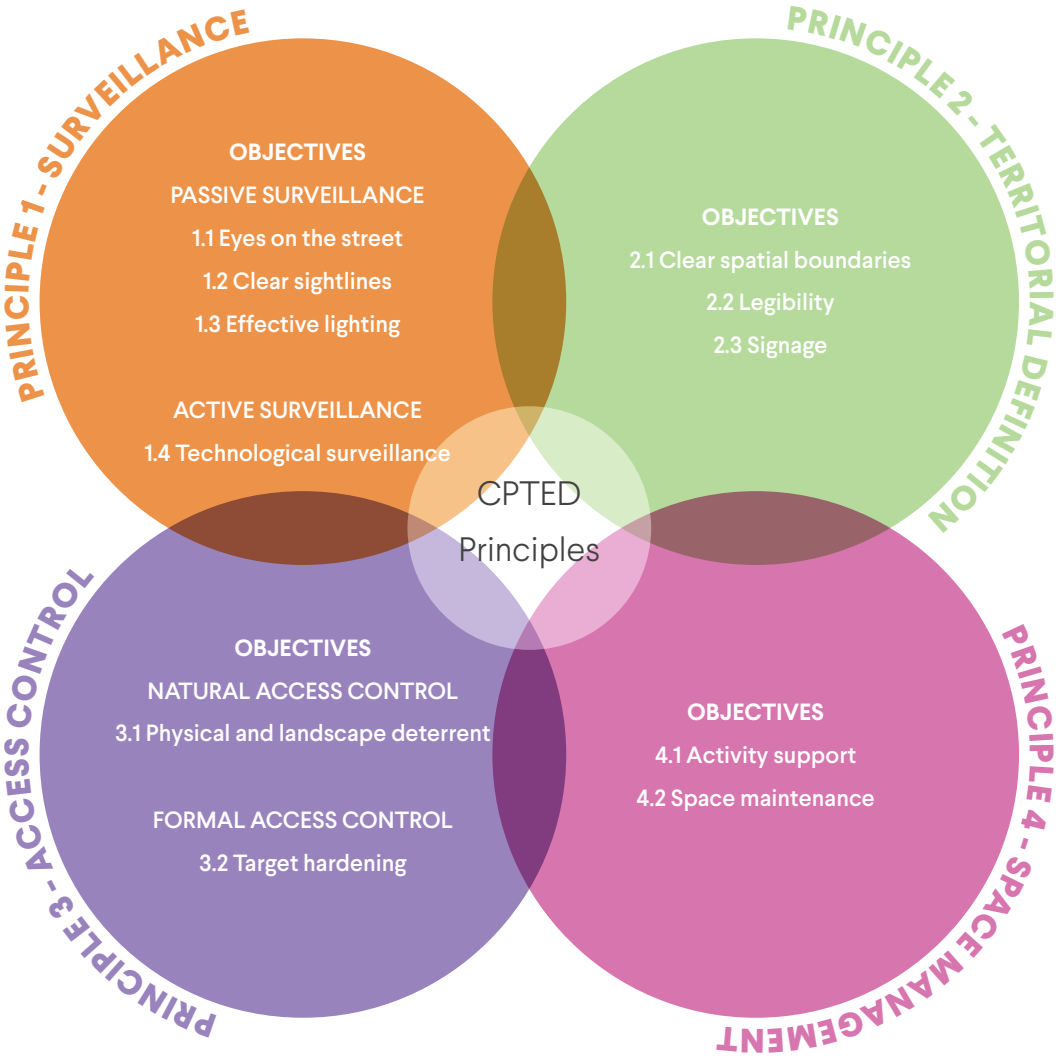


Figure 2.1 CPTED Principles

OBJECTIVES

PASSIVE SURVEILLANCE

1.1 Eyes on the Street

1.2 Clear Sightlines

1.3 Effective Lighting

ACTIVE SURVEILLANCE

1.4 Technological Surveillance

Principle 1: Surveillance

Intent

'To see and be seen'. The design of an environment should maximise the number of people using a space to encourage good passive surveillance. Effective surveillance can make crime targets less attractive.

Why?

Criminals do not want to be observed. An environment that feels overlooked, with physical features, activities and good passive surveillance, discourages crime and anti-social behaviour. Perceptions of safety and security for users also increases.

Design focus

The built environment design should maximise opportunities for appropriate passive surveillance, with active surveillance measures (such as CCTV and security patrols) employed only where passive surveillance is not achievable or sufficient to prevent anti-social or criminal activity.

Active surveillance:

Where passive surveillance alone is deemed insufficient to deter anti-social or criminal activity, surveillance can be supplemented by the installation of active, technological systems, like CCTV and electronic monitoring. Technological advancements such as georeferencing and movement detection offer sophisticated systems that can be integrated into the design of higher-risk environments.

Public spaces and transitional spaces between public and private development may become a target for crime and may benefit from the installation of technological surveillance. This may include areas concealed from view, and/or which experience regular periods of isolation or inactivity, such as car parks, playgrounds, public spaces in commercial areas that are accessible after business hours, elevators and narrow accessways.

In addition to the above measures, a CPTED surveillance response can be supplemented by an organisational security response. This includes consideration to the ongoing management of places with visible security presence, regular patrols and clear communication lines between security personnel.

Passive Surveillance

OBJECTIVE 1.1 Eyes on the street

The design of publicly accessible spaces provides opportunities for passive surveillance

CONSIDERATIONS

C1.1.1 Facilitate passive surveillance from adjacent land uses by orienting buildings and openings (windows, terraces, balconies) to appropriately overlook streets and public places (consider secondary street frontages/laneways as well)

C1.1.2 Encourage a mix of complementary land uses to extend the hours of surveillance

C1.1.3 Encourage temporary uses such as pop up businesses or food trucks to increase activation of a space

C1.1.4 Encourage activity generators (e.g. shop fronts, promotions, events) at ground level to increase the passive surveillance by users of the public spaces. This may be beneficial when retrofitting an existing development

C1.1.5 Balance passive surveillance with privacy and noise considerations through appropriate fencing selections between private outdoor spaces and public spaces.

C1.1.6 Intensify movement activity by co-locating pedestrian paths and transport routes

C1.1.7 Locate major uses, for example commercial or civic land uses, to support safe pedestrian routes between locations

High risk scenarios

For high risk scenarios, passive surveillance can be used as a key strategy to assist detecting potential danger.

C1.1.8 Maximise passive surveillance opportunities in high risk locations wherever possible – consider clear sightlines and vantage points for observation of unusual or suspicious activity

C1.1.9 Increase public attention to potential threats by communication design techniques (e.g. use of signage with catchy reminders such as "If you see something, say something")

AVOID

- Blank walls to streets and public open space
- Footpaths and accessways with no overlooking
- Public access to the sides of a building
- Underused and segregated streets and footpaths
- Roll down shutters, tall fencing and landscaping that prevents surveillance
- Concave building footprints for public spaces that may create concealed areas away from public view

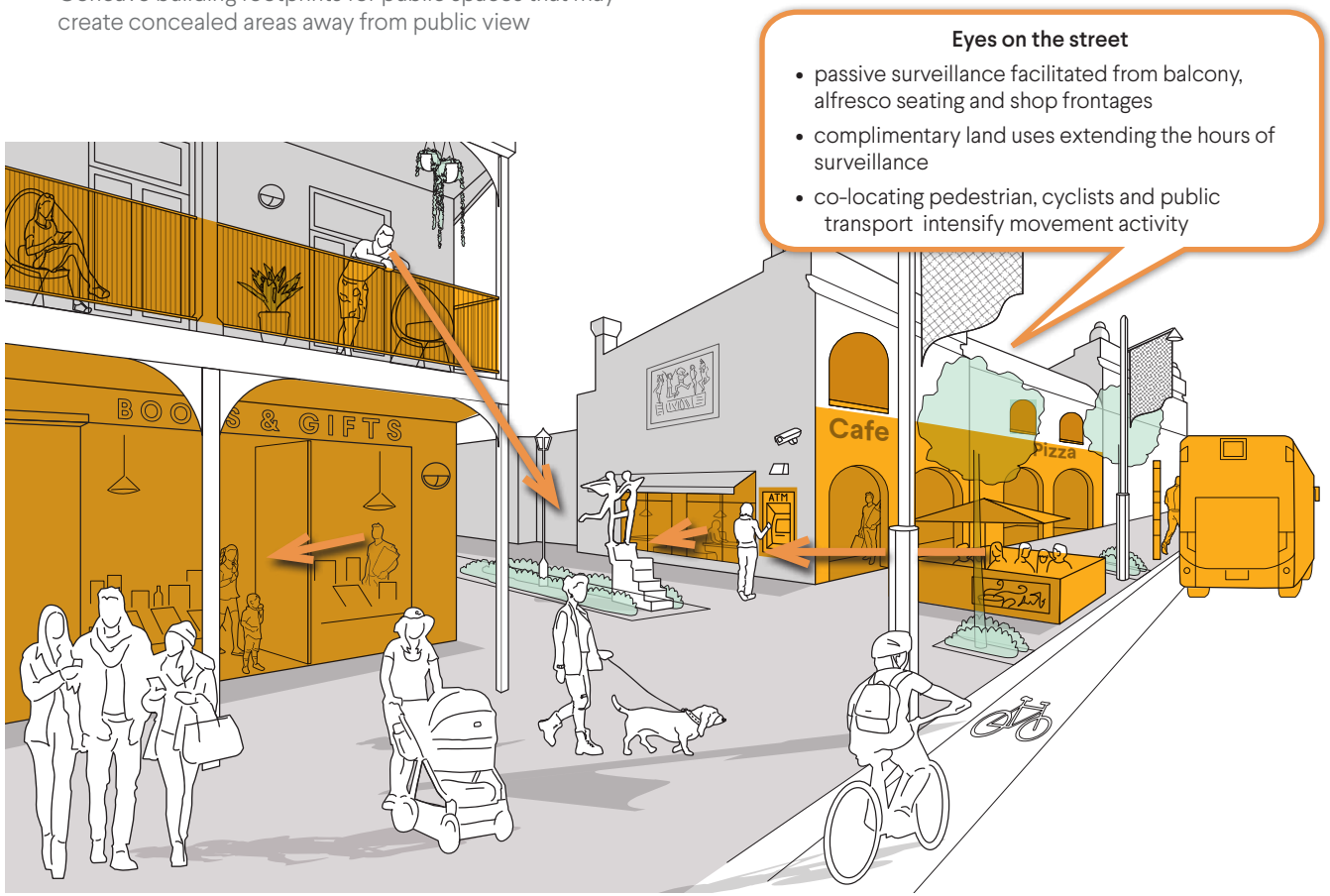


Figure 2.2 Eyes on the street

OBJECTIVE 1.2 Clear sightlines

The design of the environment provides opportunities for passive surveillance through unimpeded sightlines to, and within publicly accessible areas

CONSIDERATIONS

C1.2.1 Locate design and landscaping features to maintain sightlines from surrounding buildings to public areas, particularly to walkways, seating and play areas

C1.2.2 Use mirrors/reflective surfaces and clear glazing to assist people to see around corners, or to improve visibility where pedestrian routes are not straight

C1.2.3 Support surveillance and sightlines with visually permeable fences and barriers, with landscape features such as well-maintained, low level planting and cleared understorey to trees as appropriate

C1.2.4 Maintain unimpeded sightlines along footpaths and accessways to building entrances and exits, and to potential crime target areas such as ATMs and public toilets; avoiding areas of concealment

C1.2.5 Locate footpaths and cycleways in view of adjacent active land uses and active frontages

C1.2.6 Design laneways to enable clear sightlines from one end to the other

C1.2.7 Ensure design features do not conceal unlawful access and activity

High risk scenarios

Clear sightlines limit the ability to hide or conceal suspicious activity.

C1.2.8 Ensure clear sightlines to areas that may be used for concealment, such as bins

AVOID

- Blind spots caused by changes in direction, gradient or level which may impede sightlines, especially on pathways, stairs or enclosed spaces
- Landscape materials or planting that can act as a visual barrier
- Compromising privacy
- Level changes that obscure public areas
- Dense shrubs and trees that block sightlines and create hidden areas
- Screening of windows to main-street retail environments with painted advertising, opaque glazing, window treatments and the like
- Routes that could create entrapment spots

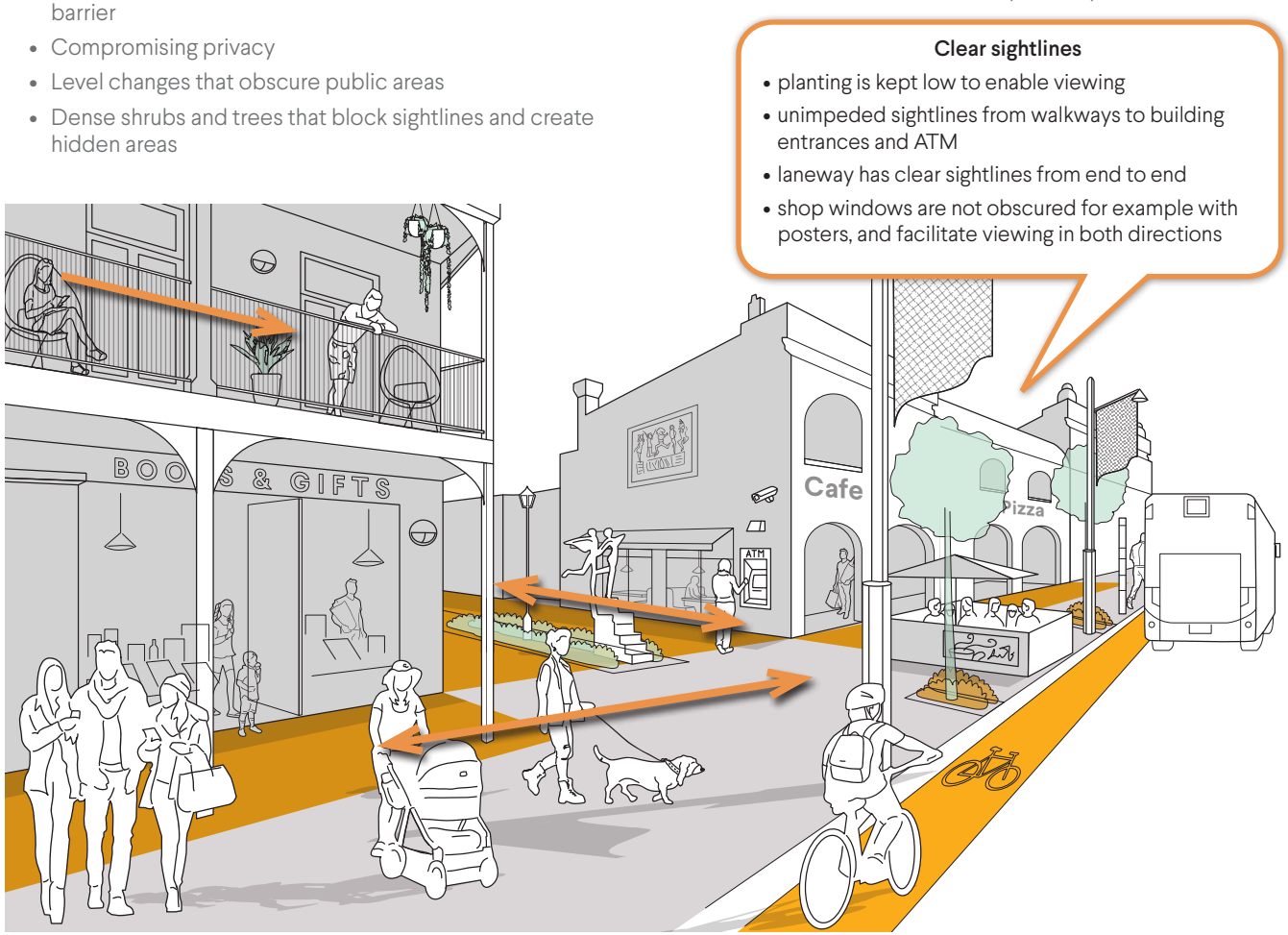


Figure 2.3 Clear sightlines

Passive Surveillance

OBJECTIVE 1.3 Effective lighting

Lighting design supports good surveillance, raises perceptions of safety and deters offending

CONSIDERATIONS

C1.3.1 Maximise opportunities for natural light penetration into public areas and for even well-lit spaces through careful building orientation and design

C1.3.2 Provide effective lighting for CPTED measures while preventing/negating light spill. Consider AS/NZ 1158.3.1

C1.3.3 Create a lighting strategy that supports passive surveillance of public areas. This may include the following considerations:

- Light pedestrian routes and spaces
- Use lighting to enhance visibility at both ends and along the length of pedestrian routes
- Focus lighting on areas that are intended for night-time uses
- Ensure alcoves, recessed areas and entrances/exits are well lit
- Use lighting to facilitate good interior to exterior surveillance
- Reduce contrast and shadow to avoid hiding places, consider appropriate levels of illumination
- Allow for eyes to gradually adjust to changing light levels
- Prove effective lighting to signage and pathways
- Consider the appeal of fixtures to vandals and theft
- Combine footpath and entrance lighting wherever possible

C1.3.4 Provide lighting at a range of heights for a range of surveillance points, avoiding glare from up-lights where possible

C1.3.5 Consider using movement-sensored lighting where appropriate

C1.3.6 Ensure sufficient light coverage if one fixture fails

C1.3.7 Ensure the light fixtures are capable of being maintained and promptly fixed if broken

AVOID

- Dark spots
- Alcoves or recessed doorways
- Light pollution
- Excess lighting of areas not intended for use after dark
- Unshielded lighting at eye level
- Locating lighting in areas shielded by vegetation, awnings or other barriers
- Placement of lighting fixtures that support climbing
- Over-lit areas that impact visual amenity from surrounding areas and cause feelings of over exposure

Effective lighting

- road, footpaths and laneway are well-lit
- recessed area in laneway (potential entrapment space) is sufficiently lit
- lighting provided along footpaths and building entries

Figure 2.4 Effective lighting

OBJECTIVE 1.4 Technological surveillance

Surveillance of higher-risk or vulnerable areas is increased through technological measures

CONSIDERATIONS

C1.4.1 Consider the most effective locations for positioning CCTV cameras in relation to lighting, obstructions and sightlines to maximise observations within the field of vision.

Effective CCTV depends on:

- Complete visual coverage of the area (saturation cover)
- Clear sightlines from the cameras (no blind spots)
- 24/7 monitoring
- Fast guardianship response

C1.4.2 Promote the presence of CCTV with clearly visible signage and consideration to legal obligations

C1.4.3 Consider using temporary/mobile CCTV to respond to emerging situations or crime hot spots

C1.4.4 The use of CCTV may be appropriate for pedestrian access ways close to commercial areas

High risk scenarios

In high risk scenarios, more visible patrols and use of sophisticated technological surveillance devices may be necessary. This may include, for example, CCTV, automatic number plate readers (ANPR), facial recognition devices, robotic security guards and security drones.

C1.4.5 Provide technological surveillance devices to increase surveillance to prevent or deter offending

C1.4.6 Be aware that targets under camera surveillance may sometimes become more attractive to terrorists if they seek to gain media attention

AVOID

- Compromising privacy
- Overuse of technological surveillance as a substitute for good environmental design and passive surveillance
- Sightlines of CCTV being blocked by overgrown trees or other obstacles

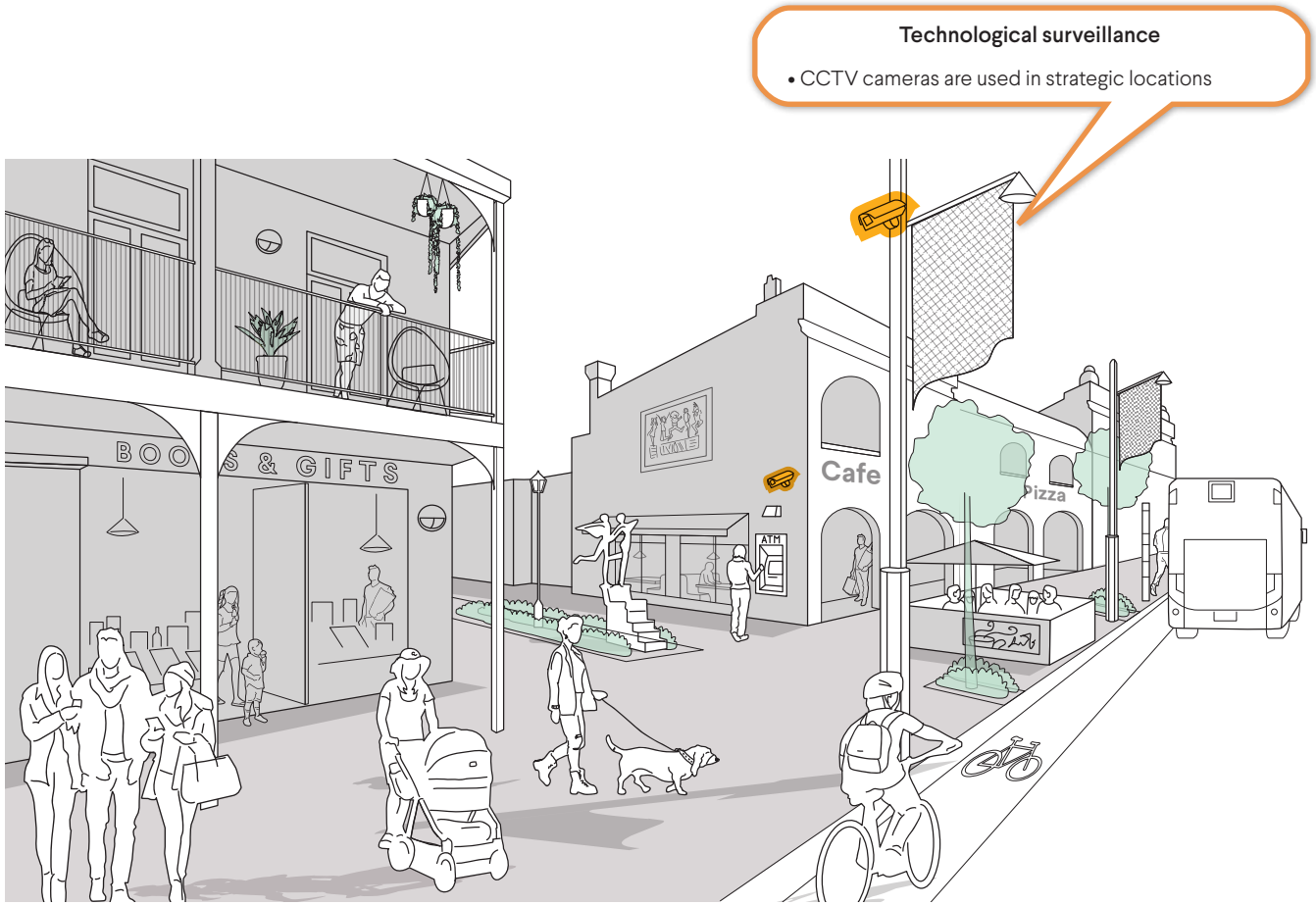


Figure 2.5 Technological surveillance

Surveillance examples

Photo 2.1 Safety at this public toilet is enhanced with low planting, sufficient lighting, and CCTV monitoring.

Photo 2.2 Well maintained low hedging without areas of concealment.

Photo 2.3 Major openings to dwellings provide passive surveillance to the public realm.

Photo 2.4 A bend at the end of this PAW affects the ability to see through to the other side. This impacts visibility and wayfinding.

Photo 2.5 Dwellings with narrow lot frontages are dominated by garage doors. The lack of windows reduces opportunity for passive surveillance.

Photo 2.6 Excessive posters on the shop windows limits natural surveillance opportunities to both the exterior and interior spaces.

Surveillance examples

Photo 2.7 CCTV cameras and lighting improve safety for laneways that have both day and nighttime uses.

Photo 2.8 Lighting extends the safe useable hours for active and passive recreation for local residents. This supports after-hours activity as a focal point for the community.

Photo 2.9 Good passive surveillance to the street is provided by active frontages and first floor windows.

Photo 2.10 Mixed use buildings sited close to playground provide passive surveillance.

Photo 2.11 Windows above garages facilitate good surveillance to this laneway, even located just on one side.

Photo 2.12 In isolated or rural settings, bus stop surrounds should be cleared of overgrown vegetation and sufficiently lit

OBJECTIVES

2.1 Clear spatial boundaries

2.2 Legibility

2.3 Signage

Principle 2: Territorial Definition

Intent

To provide clear demarcation between public and private space and encourage community ownership of public space.

Why?

People are inclined to protect their own space, be it as individuals or a community, and have a certain respect for the space of others. When people feel ownership over regularly used routes and public areas, they are more likely to recognise and challenge inappropriate behaviour. Visual cues as to the boundaries of and intended use of public space assist by making clear what activity does and does not belong.

Design focus

Approaches to territorial definition should be sensitively integrated to avoid creating spaces that are hostile, excluding or unwelcoming. Visual cues, like changes in level, vegetation, paving materials and low fences can assist by indicating a space's intended use while still being welcoming.

Territorial definition

OBJECTIVE 2.1 Clear spatial boundaries

Clearly define the ownership of a space (public and private spaces, as well as transitional spaces in between)

CONSIDERATIONS

C2.1.1 Create a clear distinction between public and private space, as well as transitional spaces between public and private through physical and symbolic boundary markers and clear layering of spaces

- Clearly define and design for the appropriate use of a space and apply landscape treatments to design out undesired uses. Visual cues of spatial control like walkways, changes in surface treatments, bollards, fencing, soft and hard landscaping can assist in this regard, which can be augmented with signage where needed
- Provide enough separation between the private and public realm so that occupants do not feel overexposed, resulting in excessive screening

C2.1.2 Create a sense of safety, security and pride in a place:

- Identify potential users of the space and involve them in the design and decision-making process where possible to engender a sense of ownership e.g. in public parks and civic buildings
- Plan and design communities with supporting facilities and land uses
- Use quality materials and finishes, thoughtful design and public art elements to strengthen sense of ownership.

C2.1.3 Use co-design processes to develop space specific solutions to community concerns, where appropriate

C2.1.4 Design clearly legible building entrances. For example, shared residential entries for apartments should be welcoming places and easy to locate

C2.1.5 Integrate public buildings into the wider public realm

C2.1.6 In mixed use developments, separate the public, commercial and semi-public spaces from private residential areas, using:

- Separate entries and levels
- Changes in landscape and building response, e.g. colour, floor treatment, materials, design features
- Signage

C2.1.7 Where private spaces e.g. courtyards are adjacent to footpaths, consider raising the private space or using vegetation to create a physical gap

C2.1.8 Introduce changes in surface treatments and new landscaping to provide clear cues for spatial boundaries and transitions

High risk scenarios

For high risk scenarios, additional measures may be required with territory defined through 'perimeter defence' and 'stand-off distances' (see Definitions). It is more effective and less expensive to consider these measures at the design stage than retrofitting.

For high risk scenarios consider the following elevated responses:

C2.1.9 Use of perimeter defence to limit or block unauthorised access into a protected site, using the three 'Ds' approach where appropriate:

- **Deter**: use a mix of physical deterrents or barriers, integrated into the overall design where possible (e.g. fences, lighting, bollards, warning signs)
- **Detect**: maximise passive surveillance opportunities and install appropriate surveillance measures such as surveillance camera technology
- **Delay**: use physical barriers to slow down the intrusion such as gates and interior locking doors

C2.1.10 Provide an enforceable 'stand-off distance' (see Definitions) to address potential security threats (such as improvised explosive devices (see Definitions) at the perimeter of a site or development:

- Reducing potential damage through calculating blast effects and distances
- Consider 'stand-off' as a key component of a tiered response which includes security surveillance (staff and CCTV), traffic management, and communication

Territorial definition

AVOID

- The creation of small, unusable areas of land and open space that are difficult to maintain and susceptible to neglect
- The use of excessive physical barriers, that are not integrated into design elements
- Surface treatments that hinder people with mobility impairements
- Creating boundaries between public and private areas that will result in excessive screening

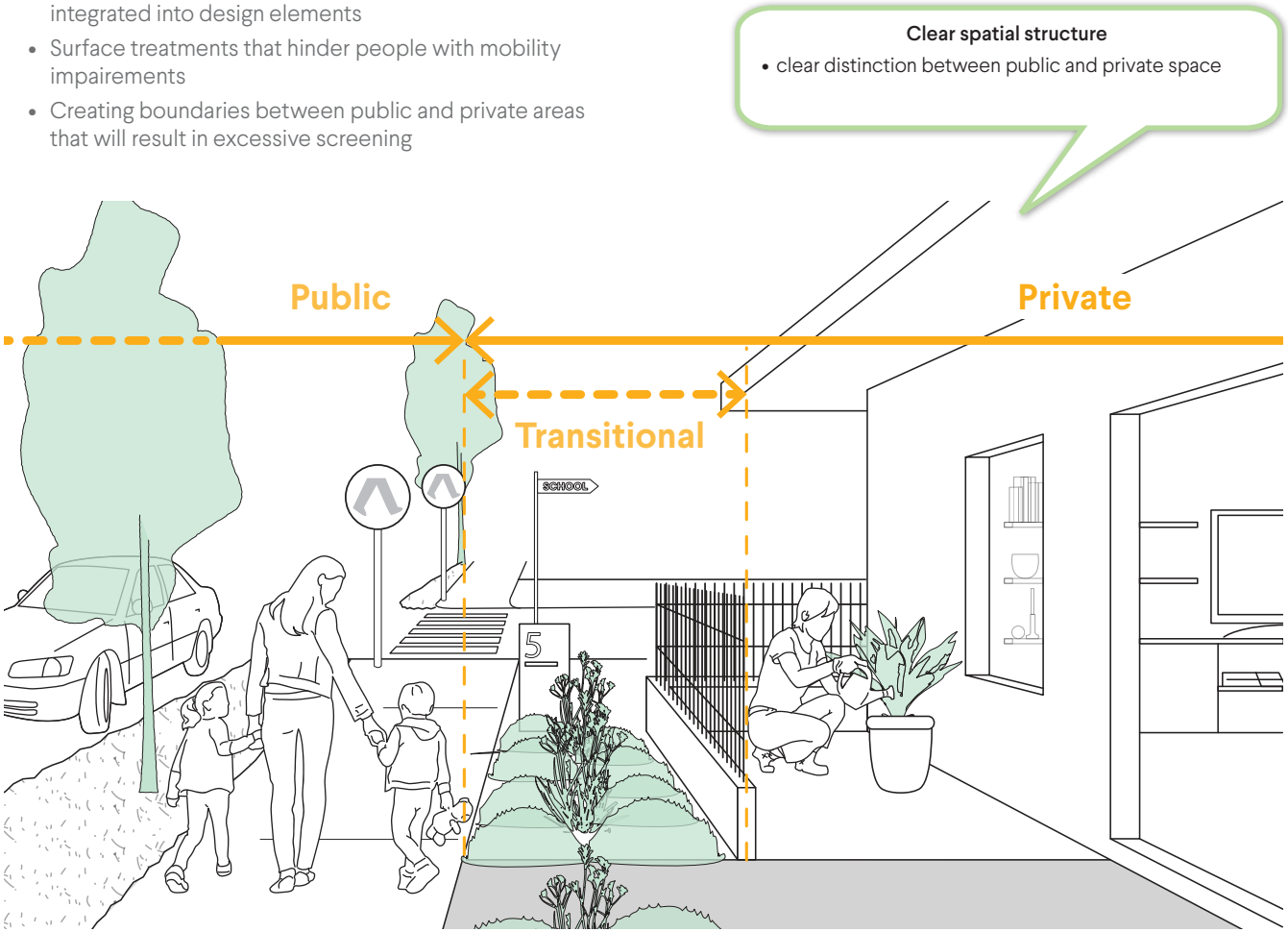


Figure 2.6 Clear spatial structure

Photo 2.13 Changes in level define the transitional area from public to private.

OBJECTIVE 2.2 Legibility

A legible land use spatial structure is provided that assists wayfinding, orientation and connection to support safe opportunities for social interaction and recreation.

CONSIDERATIONS

C2.2.1 Ensure land use spatial structure and movement network is responsive to topography, local context and land uses and is designed to achieve good connectivity

C2.2.2 Design a legible street network – a grid or modified grid pattern layout that provides route choice is usually preferred compared to a curvilinear arrangement

C2.2.3 Avoid creating new pedestrian accessways, however where proposed ensure they are purposefully designed with the cul-de-sac network

C2.2.4 Link public open spaces with residential areas to encourage pedestrian movement and active transport

C2.2.5 Ensure pedestrian and cyclist routes support easy wayfinding. This can be assisted by using different paving materials or patterns

C2.2.6 Locate bus stops, taxi stands and other services in areas that are highly visible and safe

C2.2.7 Create landmarks and focal points, such as public art or sculptures, or use unique local elements or colours to aid wayfinding

C2.2.8 Ensure entrances and exits to a place or building are clearly presented to users

C2.2.9 Locate movement networks on primary routes and shared spaces

C2.2.10 Ensure public open space is well defined and purposeful

AVOID

- Isolated corners, entrapment spaces and culs-de-sac with poorly designed public access ways (PAWs)
- Isolated pockets of small, unusable land and open space as they are difficult to maintain and do not facilitate recreation
- Underpasses with poor levels of passive surveillance

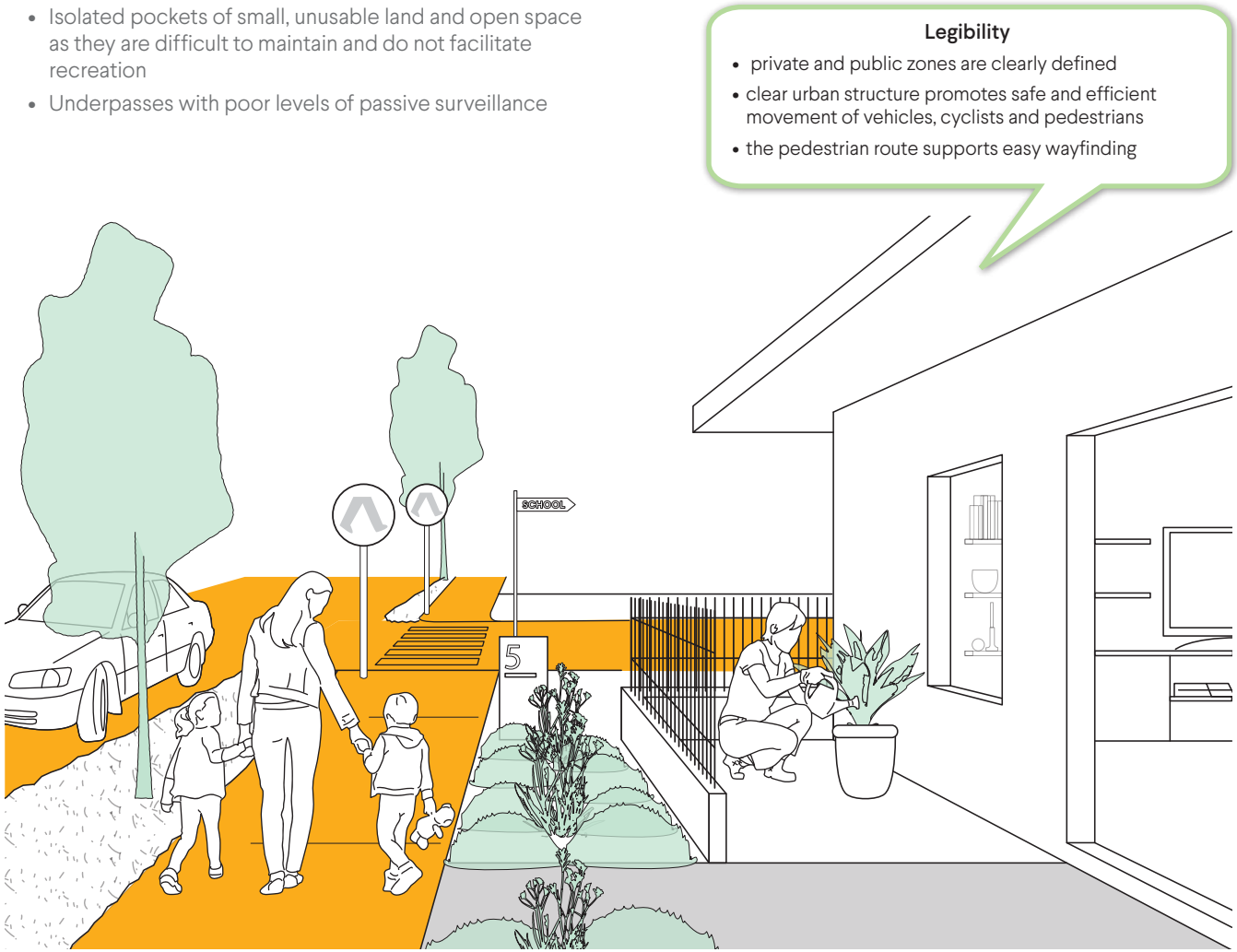


Figure 2.7 Legibility

OBJECTIVE 2.3 Signage

Signage supports legibility and wayfinding while communicating the intended use of space

CONSIDERATIONS

C2.3.1 Use signage to:

- Communicate ownership of the space and desired behaviours
- Display assistance (including after-hours information) and how to report crime
- Support wayfinding, with directional maps and signposts to communicate the location of safe places and routes

C2.3.2 Placement and design of signage should consider the following:

- Clarity of information - consider scale, language, symbols, concise messaging
- Provide QR code on signage for easier and instant access to more detailed information
- Be legible, well-lit and appropriately positioned to benefit all users: children, the elderly, people with disability
- Regular and strategic positioning (e.g. at crossing points and entrances) so that the message is not missed
- Enough lighting to see and be seen at night
- Ease of maintenance and prompt repair if damaged

C2.3.3 Ensure signage is strategically located to compliment legibility

C2.3.4 Ensure signage is inclusive and responsive to the cultural context of the place

C2.3.5 Update signage when changes are made to the design or function of a space

AVOID

- Conflicts with planting, landscape or building features that may obscure the signage
- Proliferation of signage that may create a confusing or unattractive environment
- Signage that is of poor quality, susceptible to vandalism, or unable to be adequately maintained
- Poorly located signage that may impact on visual sightlines
- Placing signage or other objects in the line of vision from installed or planned CCTV
- Avoid hostile language on signage between public and private property

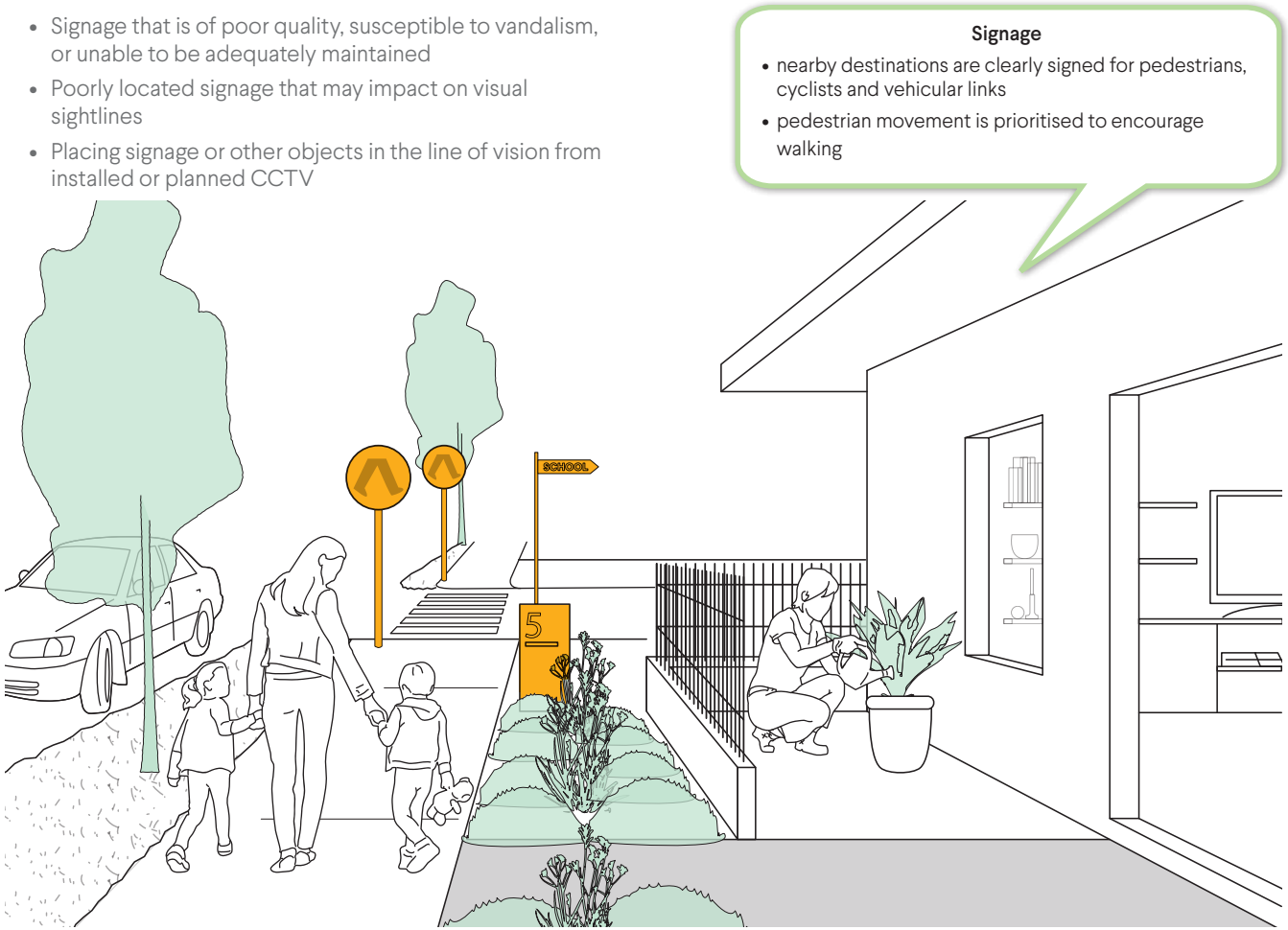


Figure 2.8 Signage

Territorial definition examples

Photo 2.14 Transitional areas occur between private and public zones. 'Target hardening' (see objective 3.2) is also in place with the provision of security gate.

Photo 2.15 A purposefully designed and well defined public open space is a favourite place for both the young and the old.

Photo 2.16 Well-designed signage assists wayfinding, provides information and enhances legibility and amenity of the urban environment.

Photo 2.17 Signage may combine directions, maps, information and artwork and make a pleasant entry statement to a public space.

Territorial definition examples

Photo 2.18 Paving pattern helps to distinguish public footpath from transition space next to the dwellings.

Photo 2.19 Clear demarcation of pedestrian and cyclist movement supports shared use. The different paving and colour enhance legibility.

Photo 2.20 Clear delineation between private (left) and public (right) entries.

Photo 2.21 Fence design with sparse landscape and lowered courtyard may lead to a feeling of exposure for occupants.

Photo 2.22 While visually appealing, this pathway may create spaces for concealment.

Photo 2.23 Access control and spatial definition is not well integrated into the design of the building, resulting in a visually dominant fence.

OBJECTIVES

NATURAL ACCESS CONTROL

3.1 Physical and landscape deterrent

FORMAL ACCESS CONTROL

3.2 Target hardening

Principle 3: Access control

Intent

Design for access control should attract people and vehicles to some places and restrict them from others. Access control should limit instances of trespassing and opportunities for high risk scenarios such as hostile vehicles.

Why?

Access control reduces the opportunity for crime, increases the effort needed to commit crime, and makes inappropriate access obvious to surrounding 'eyes on the street'.

Design focus

The built environment should maximise opportunity for natural access control, with formal access control measures employed where natural control is unachievable or insufficient to prevent anti-social or criminal activity. Entrances, landscaping, lighting and fences can guide appropriate access along designated paths while deterring access to potential crime targets (such as doors and windows).

Natural and formal access control

Natural access control uses physical or symbolic barriers in the environment to facilitate normal and appropriate access, or to channel or restrict the movement of people. Formal access control uses organised, electronic and mechanical measures to further control access to potential targets or restricted areas.

The design of the environment should maximise opportunities for natural access control, with formal access control measures employed where natural control is unachievable or insufficient to prevent anti-social or criminal activity.

Natural access control

OBJECTIVE 3.1 Physical and landscape deterrent

The design of the physical environment directs pedestrian movement through the public realm away from potential targets or risk and into areas with good surveillance

CONSIDERATIONS

C3.1.1 Consider opportunities to integrate urban design elements to support visual continuity and enhance the environment, while improving security. Features may include:

- Reinforced planters and street furniture
- Reinforced sculptures
- Water features

C3.1.2 Landforms, trees and hedges incorporate landscape features such as changes in surfaces and vegetation to guide movement in the public realm, such as:

- 'Defensive' planting, e.g. spiky or barrier planting, to restrict access to vulnerable areas, like ground floor windows
- Lighting, pavement surfaces, pavement markings and vegetation to provide visual cues of approved routes or transition in ownership from public to private realm
- Ramps, steps and changes in ground level to control access

C3.1.3 Ensure landscaping responses used to define boundaries allow good surveillance (e.g. low walls, low vegetation, visually permeable fencing)

C3.1.4 For staged developments, ensure that an appropriate level of access is given for each stage

C3.1.5 Incorporate physical features into the urban design, such as designed bollards, to deter vehicle access to restricted, vulnerable or high-risk areas

C3.1.6 Minimise the number of public entrances and exits within high risk locations

AVOID

- Conflicts with other design objectives, such as universal access and fire access
- Obscuring sightlines and natural surveillance
- Creating a fortified environment that evokes a sense of fear, such as unsightly concrete structures
- Blocking natural surveillance with boundary walls and fences
- Creating conflicts between hostile vehicle mitigation and safe pedestrian access and egress when providing temporary protection (such as during an event)
- Fences that are easily scalable

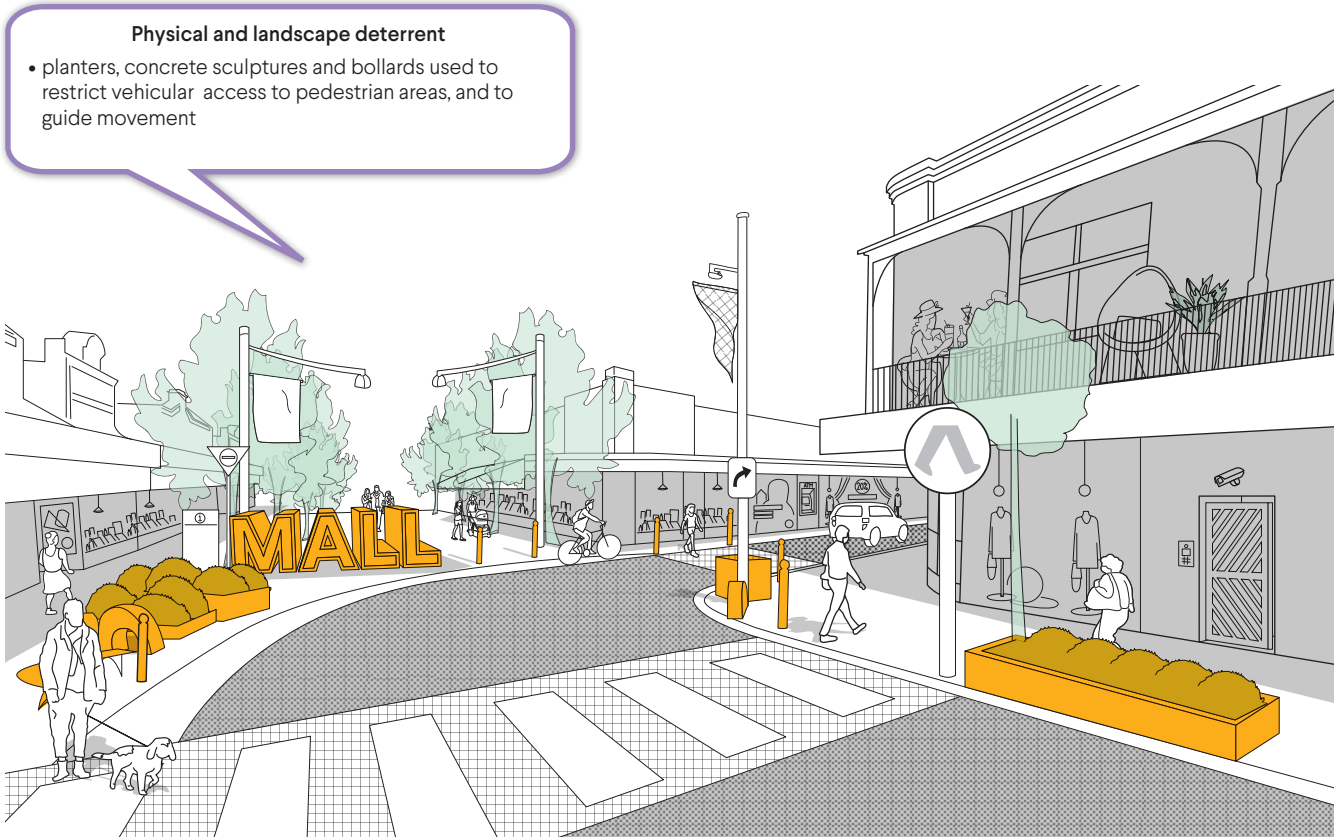


Figure 2.9 Physical and landscape deterrent

OBJECTIVE 3.2 Target hardening

For higher risk targets, incorporate 'obvious and visual' deterrent measures into the design; limit access with gates, locks and security doors

Formal access control

CONSIDERATIONS

C3.2.1 Provide layered security measures through multiple design responses

C3.2.2 Allow for the required level of organised control (e.g. security personnel) at entrances or highly visible locations to deter criminal and anti-social behaviour

C3.2.3 Integrate into the design electronic (computer) systems to control access such as number plate and face recognition

C3.2.4 Select the appropriate vehicle security barriers

C3.2.5 For pedestrian routes consider climbing plants on walls to hinder attempts to access adjacent property

C3.2.6 Where appropriate, use mechanical access control (such as security bars, deadlocks, security shutters, turnstiles and access gates) to inhibit access to probable crime targets

High risk scenarios

In high risk situations, including potential terrorist targets (e.g. critical infrastructure, crowded places), more specific target hardening and formal access control measures may be required.

Consideration should be given to the possible methods of attack, which can include hostile vehicles and improvised explosive devices i.e.:

- Driving into an unprotected crowd at speed
- Parking a vehicle with an explosive device
- Entering an area via a controlled access point via deception or by ramming a barrier

For situations like these, the following elevated responses may be appropriate:

C3.2.7 Mitigate hostile vehicles and improvised explosive devices using stand-off, access and approach controls (See Definitions), and use of barriers

Stand-off (See Definitions)

C3.2.8 Prevent vehicular access by locating parking outside the stand-off perimeter, noting that an exception may be required for emergency vehicles

C3.2.9 When retrofitting existing sites, use site features (such as reinforced planter-boxes or seats) to create stand-off distances

Access and Approach Control (See Definitions)

C3.2.10 Consider changes in traffic management and road design to reduce vehicle speeds and minimise the risk of a vehicle borne attack:

- Vehicle exclusion areas
- Design access roads for reduce speeds e.g. right-angle approaches, inclines
- Use traffic calming devices such as speed humps, bends and chicanes

C3.2.11 Design separate service access roads, loading bays and entrances from main entrance to minimise potential risk

C3.2.12 Consider access for authorised vehicles only, or time-based separation between vehicles and pedestrians

C3.2.13 Deploy detection technology to alert security when restricted areas are breached

Formal access control

Barrier control (See Definitions)

C3.2.14 Use bollards in various designs appropriate to the situation. In an emergency, when introducing temporary physical barriers between pedestrians and vehicles (including hostile vehicles), target hardening may be applied, for example use of jersey barriers as a short-term solution

C3.2.15 Consider using natural passive barriers (e.g. raised levels, land form manipulation and other landscaping techniques) in appropriate places, before resorting to the installation of bollards

C.3.1.16 Consider designing bollards to be multi-functional, e.g. as public art or incorporated seating

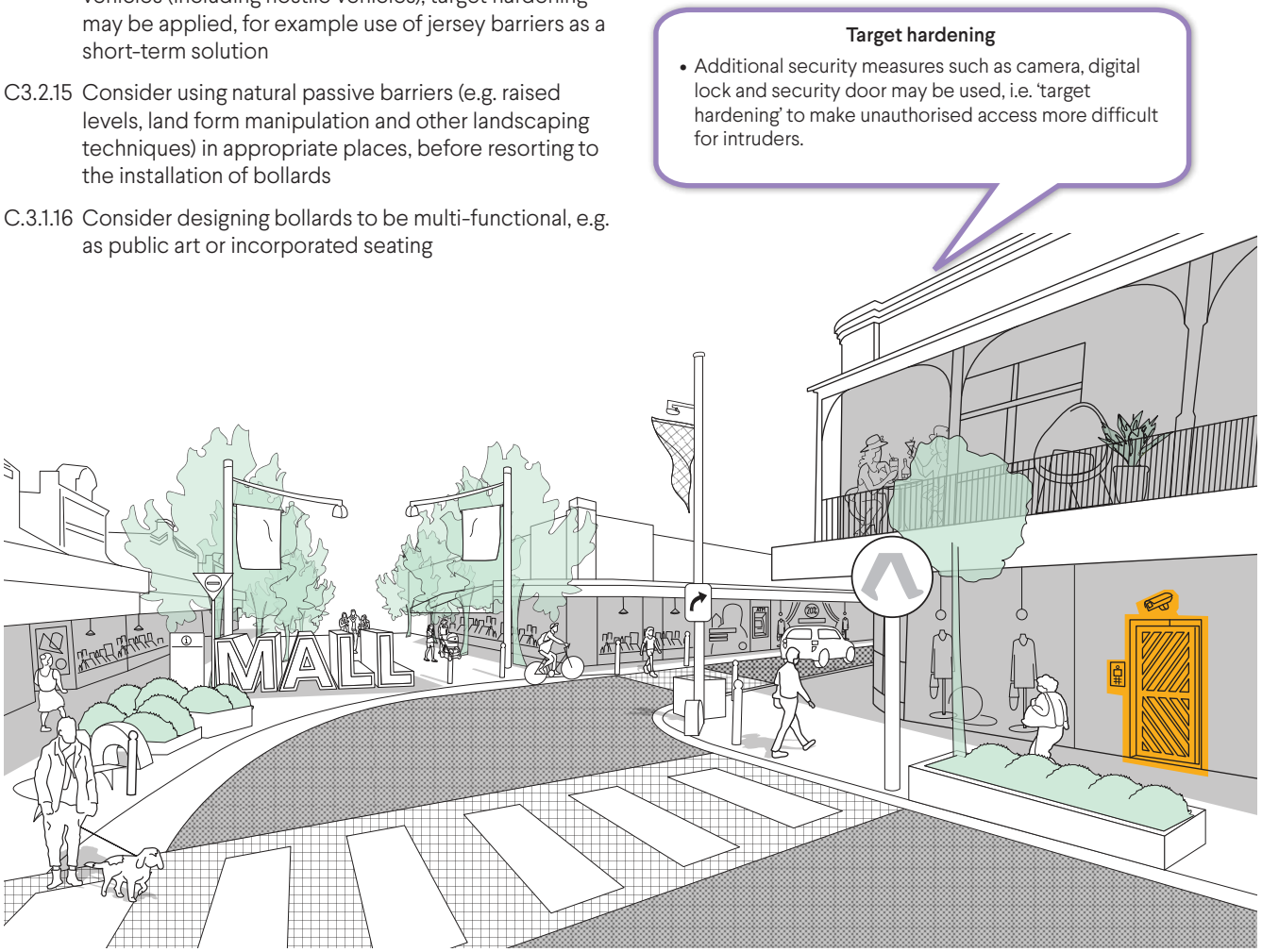


Figure 2.10 Target hardening

AVOID

- Creating unintended consequences from formal access control measures. For example, placing barriers in awkward locations that may limit people's safe egress from a site
- Proliferation of bollards or other physical barriers that conflict with the intended use of a space

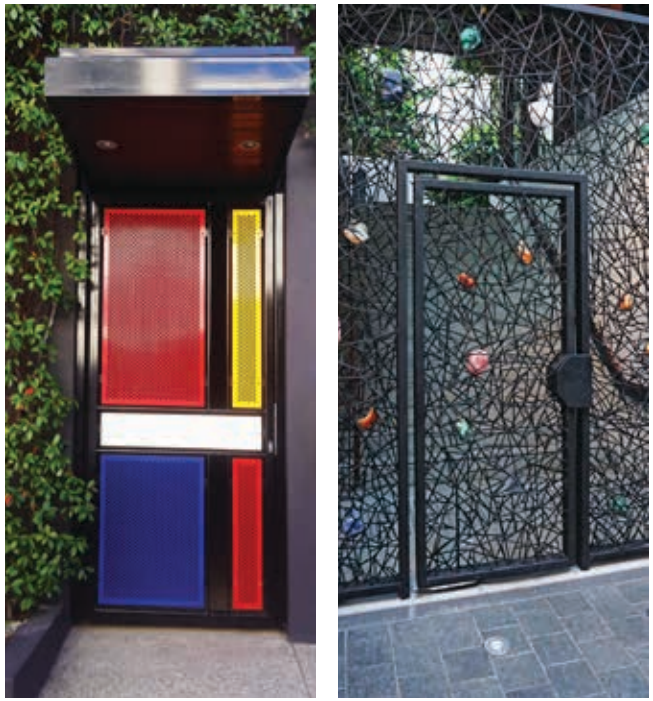


Photo 2.24 Security gates when integrated into the design can contribute positively to a sense of place.

Access control examples

Photo 2.25 and 2.26 A combination of steps, rocks, concrete benches and retractable bollards form a protective border of this public open space. The telephone kiosk is well sited in an open area subject to good passive surveillance.

Photo 2.27 The side entrance of the Perth RAC Arena incorporates vehicle mitigation measures in the design, using large planters as bollards to provide barrier and protect the crowd when there is a performance.

Photo 2.28 Water feature (moat like) and landscaping as part of the security defence system in the new US Embassy, London. (PC)

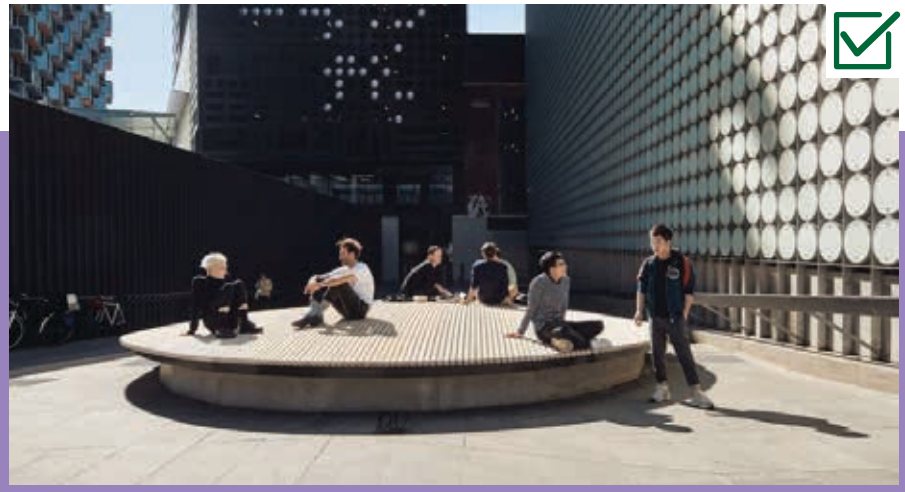


Photo 2.29 Sculptural street furniture: 'Accoya Bollard' at RMIT by Openwork. (PC)

Access control examples

Photo 2.30 Specially designed bollards compliment the religious architecture and protect the entrance area from hostile vehicles.

Photo 2.31 Sculptural bollards. (PC)

Photo 2.32 Low bollards and semi-structural bollards are used to protect the entrance of the RAC Arena.

Photo 2.33 A combination of bollards, planters, seats, signage and sculptural stones enhance the safety of this space.

Photo 2.34 Gabion baskets with timber benches provide a decorative and functional barrier in front of commercial premises.

Photo 2.35 Placement of bins near gate and horizontal downpipe may provide easy access to vandals.

OBJECTIVES

4.1 Activity support

4.2 Space maintenance

Principle 4: Space management

Intent

Public places should appear owned and well-cared for. Effective management and regular maintenance are necessary to ensure the continued use of spaces for their intended purpose. The presence of people improves surveillance and perceptions of safety.

Why?

Well-maintained public spaces improve our perception of safety and supports our desire to spend time in these places, sustaining appropriate activity. People often feel comfortable in and more likely to visit, places which feel owned and cared for.

Design focus

A built environment response should include robust materials and finishes to minimise servicing and maintenance.

OBJECTIVE 4.1 Activity support

The design of the physical environment increases levels of activity, supporting appropriate uses and passive surveillance

CONSIDERATIONS

C4.1.1 The design of a place should reinforce the intended use and deter anti-social and criminal activities

C4.1.2 Encourage ground level activity generators (See Definitions) that support the intended use, increase casual surveillance and reduce opportunity for criminal activity – e.g. cafes, public seating areas and community facilities

C4.1.3 Encourage movement generators that support the intended use and provide surveillance without creating barriers

C4.1.4 Locate uses such as children's playgrounds, ATMs, and bus stops, close to locations where other users are likely to congregate (e.g. cafe, shopping areas), to increase passive surveillance

C4.1.5 Locate pedestrian routes adjacent to active uses such as playgrounds and public open space. Activity generators close to pedestrian access ways can act as a source of surveillance and guardianship, or as a source of potential crime and anti-social behaviour. This depends on users, purpose, time of day and the location.

C4.1.6 Encourage and locate after-hour activity-generating businesses (e.g. fast-food stalls, food trucks, wine bars) in vulnerable but not high-risk areas for activation

C4.1.7 Provide appropriate support for activity such as a sufficient number of bins and restrooms

C4.1.8 Consider activities that appeal to a range of demographics, and are sensitive to a variety of needs

AVOID

- Encouraging negative interactions through conflicting uses or activities. For example, a liquor store adjacent to a playground

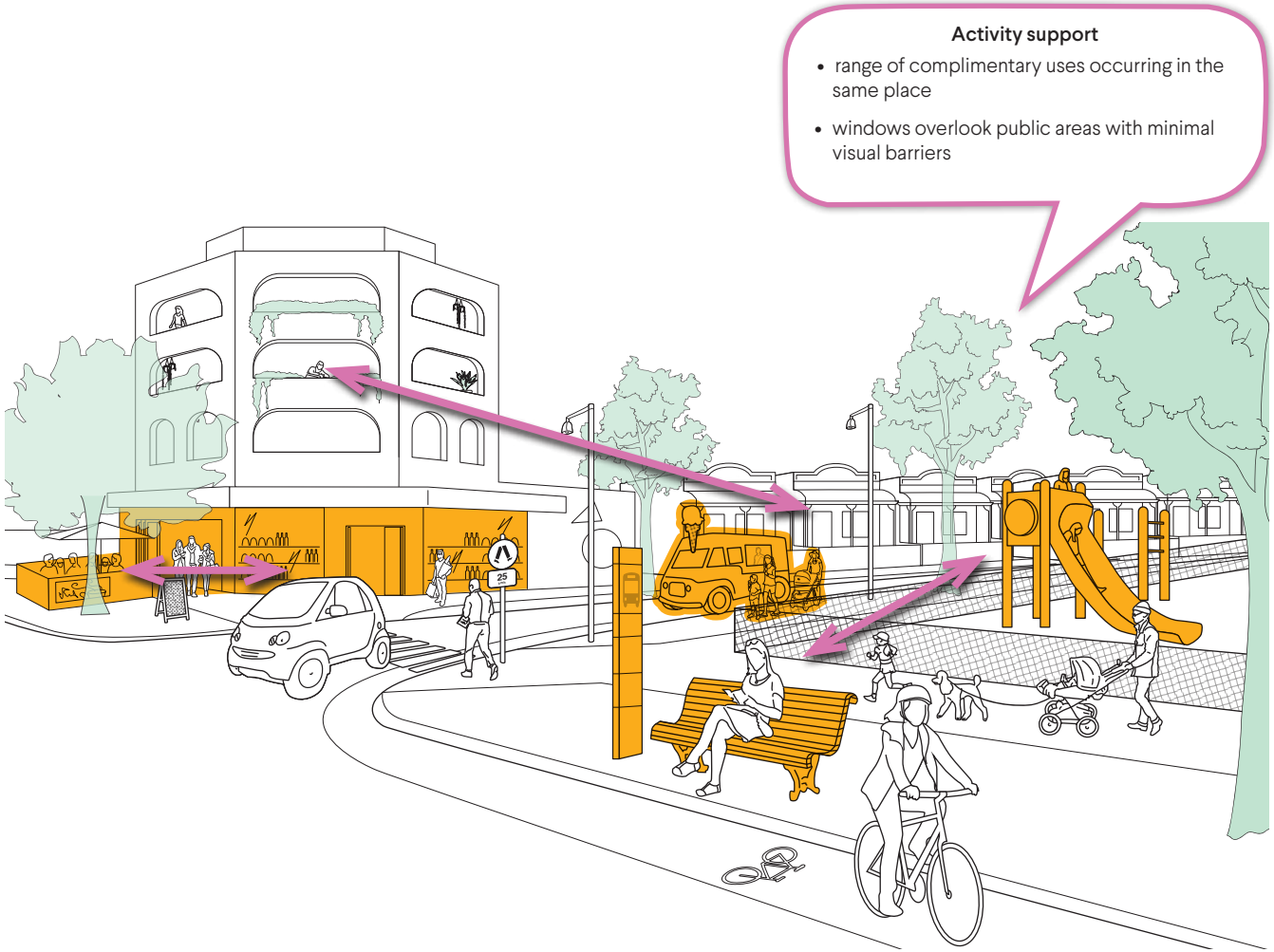


Figure 2.11 Activity support

OBJECTIVE 4.2 Space maintenance

A well-maintained physical environment appears to be owned and cared for. This discourages vandalism and anti-social behaviour

CONSIDERATIONS

C4.2.1 Consider the life-cycle and whole-of-life cost of the development to ensure ongoing maintenance requirements can be met including:

- Cleaning and promptly maintaining vandalised equipment or damaged infrastructure, such as lighting
- A regular maintenance program for public spaces

C4.2.2 Reduce opportunities for graffiti and vandalism e.g. use robust and resistant materials and anti-graffiti coating

C4.2.3 Designs should ensure robust materials and finishes minimise maintenance

C4.2.4 Ensure walking surfaces are even and well-maintained to signal that pedestrian access is managed as a priority

C4.2.5 Ensure areas requiring servicing and maintenance have appropriate access

C4.2.6 Create opportunities for informal and formal surveillance to support the reporting of damage

C4.2.7 Consider opportunities for public art that will encourage community care of spaces as well as discourage graffiti and vandalism

AVOID

- Ambiguity of ownership and responsibility
- Spaces that are difficult to maintain, such as fragmented spaces and areas with low quality finishes
- Blank walls that may attract graffitti

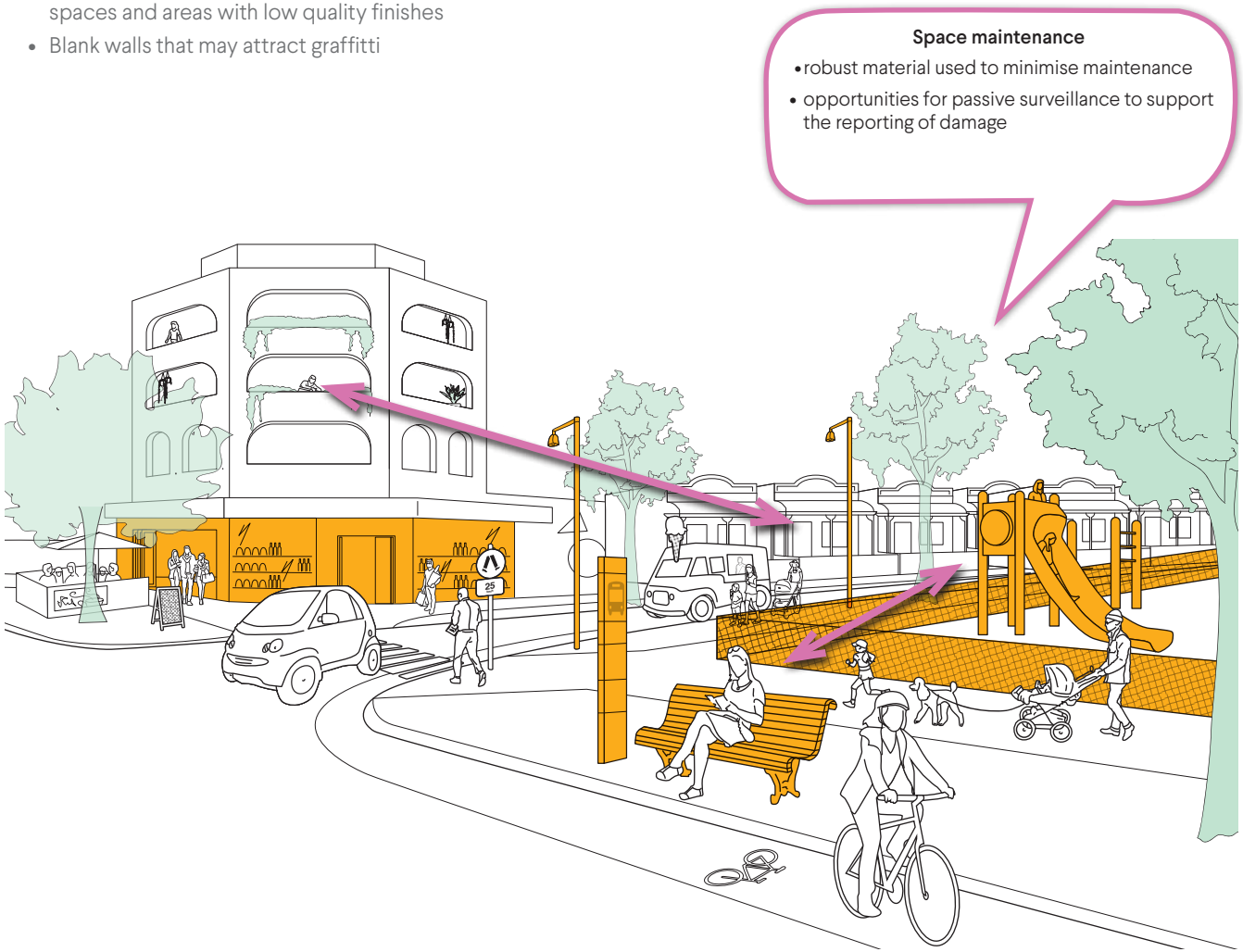


Figure 2.12 Space maintenance

Space management examples

Photo 2.36 High quality, well maintained and active space in a residential area. The public open space has very good surveillance from surrounding areas.

Photo 2.37 Murals and artworks help to minimise graffiti. Building on the right attracts graffiti while other buildings with murals in this laneway are left untouched.

Photo 2.38 WaterCorp's initiative "Splash of Colour" brightens up pump stations and wastewater assets all over WA with artworks by local artists working with community groups. This instills a sense of community ownership, minimises vandalism and shows a well-maintained public asset.

Photo 2.39 Artworks on the footpath, planter and wall brighten up this stretch of road, and discourages graffiti.

Space management examples

Photo 2.40 A pleasant walking environment increases levels of activity, supporting passive surveillance.

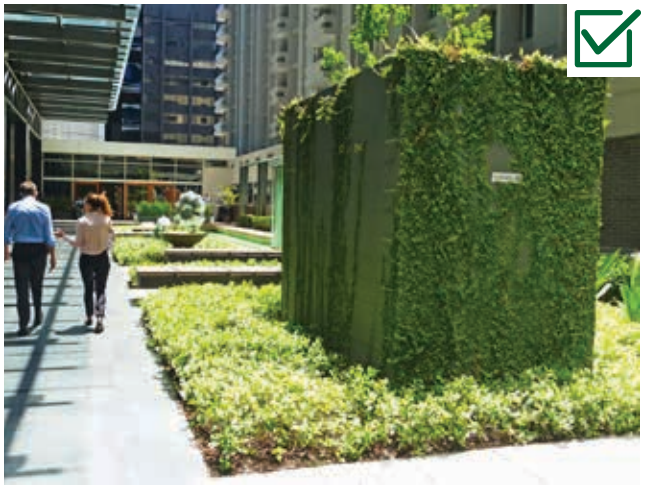


Photo 2.41 A well maintained landscaped area discourages vandalism. Creepers on structure minimises the visual impact of services and prevent graffiti.

Photo 2.42 Inclusion of ground level retails increases levels of activity, supporting appropriate uses and passive surveillance.

Photo 2.43 Mural and bench on a blank wall facing a laneway in Mandurah deter graffiti and adds interest to this cafe. Signage helps to provide direction to local eateries.

Photo 2.44 Public transport and footpath adjacent to a public open space activates the area and provides surveillance without creating barrier.

Photo 2.45 Disused building tends attract unwanted attention. Regular upkeep or introducing temporary use would minimise vandalism.

Part 3 - CPTED Process

3

CPTED Process

3.1 CPTED process

The CPTED process can be readily integrated into a typical design, assessment and decision-making process for development proposals. The process is not intended to produce a 'tick-box' response for proposals but address CPTED principles in a well-considered way having regard to project type and local environment.

The process is deliberately flexible so that it can be applied to all projects irrespective of size and complexity. The process applies to planning proposals, including private/public developments, subdivisions, structure plans and local development plans.

This section outlines a recommended six-step process for integrating CPTED into project design, assessment and delivery. The steps allow CPTED to be considered holistically as a risk-based approach, whereby the design responds to site specific considerations, including local crime risk, intended function and use, and design objectives. The process encourages CPTED to be addressed early at project briefing stage. Consideration of CPTED throughout the planning, design and construction phases supports a cost-effective approach, which can address (sometimes competing) design objectives to facilitate integrated design outcomes. Additionally, this approach allows justification of responses during reporting and assessment.

Involving community and other relevant stakeholders in the CPTED process can help improve safety outcomes. When preparing the project brief, consultation helps clarify crime risks and perceptions of crime; during design development it informs project responses; and during implementation it may help to garner community involvement and partnerships to support safer spaces. Further information on engagement strategies for community consultation can be found in the *Guide to Best Practice Planning Engagement for Western Australia* (WAPC, 2022).

Photo 3.1 Activation of space is an important method to ensure safety through 'eyes on the street'.

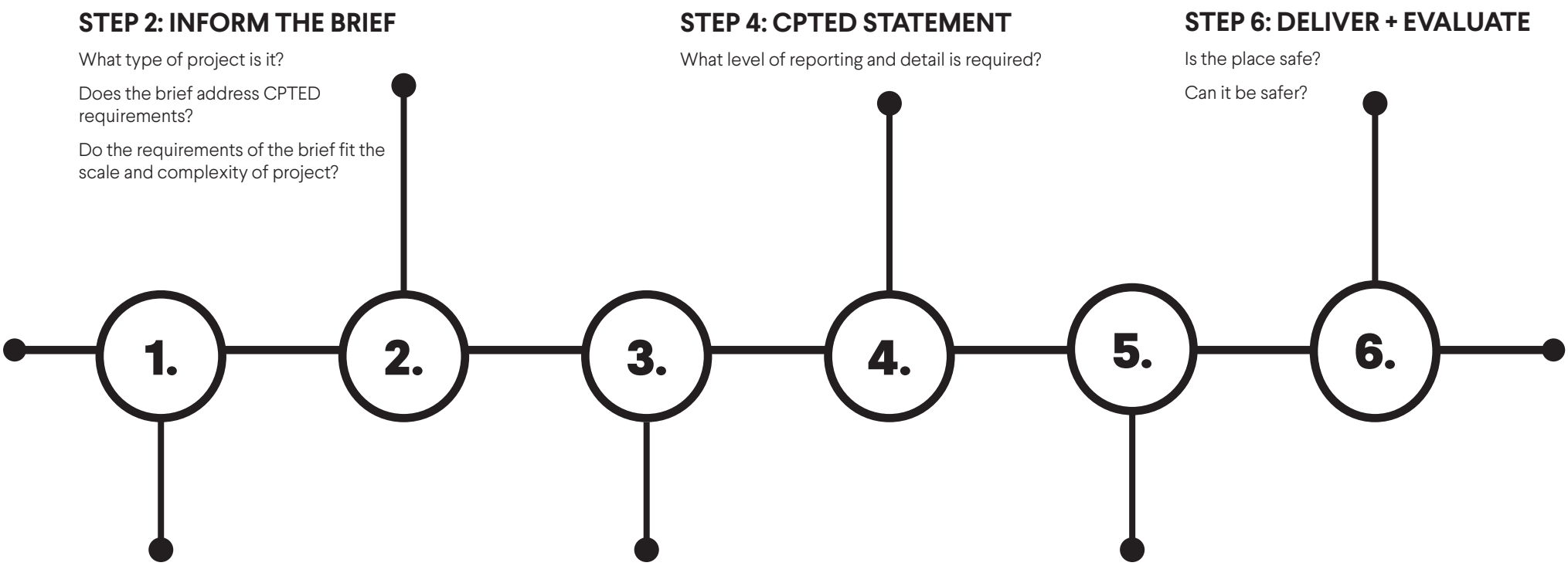


Figure 3.1 The 6-Step CPTED Process

3.2 CPTED process summary

1. IDENTIFY THE RISK

Action: Consider the Crime risk influences

Completed by: Proponent and project team. Government led project delivery teams (when preparing briefs)

Consult with: Relevant stakeholders to ensure understanding and agreement on the risk level

Complete: Checklist A: Crime Risk Level

Outcome: Project is identified as either High or Low Risk

2. INFORM THE BRIEF

Action: Identify the scale and complexity of the project as well as the desired safety outcomes. Use these and the identified project risk to inform the brief

Completed by: Proponent and project team. Government led project delivery teams (when preparing briefs)

Consult with: Relevant stakeholders to ensure understanding and agreement on the complexity of the proposal

Complete: Checklist B: Type of Proposal

Outcome: Project is identified as either Simple or Complex

3. DESIGN DEVELOPMENT

Action: Select and define specific CPTED responses appropriate to the type of proposal and identified crime risk level. Resolve competing objectives where these may occur

Completed by: Proponent and project team, including a CPTED specialist when appropriate

Consult with: Relevant stakeholders to ensure understanding and agreement on the CPTED design response proposed

4. CPTED STATEMENT

Action: Determine the required level of CPTED statement

Completed by: Proponent and project team, including a CPTED specialist when appropriate

Consult with: Relevant stakeholders to ensure understanding and agreement on the level of CPTED statement

Complete: Checklist C: CPTED Statement Requirements and Checklist D: Chosen CPTED Measures

Outcome: A Low Level or High Level CPTED statement is prepared, depending on the crime risk level and the type of proposal. Input from a CPTED specialist is recommended for a High level CPTED Statement

5. CPTED ASSESSMENT

Action: A tailored review of the proposal is undertaken to determine whether safety and security requirements have been satisfactorily addressed

Completed by: Decision makers, including local government or State Government, and advisory bodies, such as design review panels

Consult with: Community, stakeholders and proponent

6. DELIVER + EVALUATE

Action: Ongoing evaluation of the success of the approved and implemented CPTED approaches

Completed by: Local government, WA Police, business owners and community

Outcome: Review and maintain the implemented CPTED approach

3.3 CPTED statement checklists

Table 3.1 CPTED statement checklist overview

Checklist	Name	Description	Step
Checklist A	Crime Risk Level	To determine whether the level of crime risk is high or low. See Crime Risk Influences	1: Identify the Risk
Checklist B	Type of Proposal	To determine if the proposal is 'simple' or 'complex'	2: Inform the brief
Checklist C	CPTED Statement Requirements	A checklist outlining the requirements for a 'low level' and 'high level' CPTED statement	4: CPTED Statement
Checklist D	Chosen CPTED Measures	A checklist to identify how the project responds to the CPTED principles and objectives. Use to demonstrate to the decision-makers how a proposal addresses the CPTED principles in response to identified risk factors	4: CPTED Statement

1. Identify risk

What is the local crime risk of the project?
What type of CPTED response may be needed?

What it is

The project team should identify, analyse and evaluate the crime risk of a development project. Findings from investigations into the site and its surrounds can inform design decisions and the scale of CPTED response.

Who is involved

Proponent (and project team). This should be undertaken at the early stages of a project to support the formation of the brief.

Communication and consultation

During this step it is recommended relevant stakeholders be consulted. This may include local and State Government, community and law enforcement agencies. Understanding activities, crime patterns and any safety issues relating to the location allows design responses to be site-specific.

Where appropriate undertake case study analysis considering the successes and shortfalls of similar projects and incorporate finsings into the project proposal.

Guidance

Each project has its own unique physical and social context. The project team should identify local crime risk and design responses to site-specific issues, avoiding a generic application of CPTED principles.

Consideration can be given to the following six crime risk influences (see Table 3.2 below).

For more information on how to go about understanding the local crime risk, see Crime Risk Influences. A checklist is also provided: Checklist A: Crime Risk Level to assist proponents to determine if the identified crime risk presents a high or low risk.

Where a proposal may constitute a high crime risk or high-risk scenario, consultation with a decision-maker/approval authority is advised. Where a discrepancy may arise, the decision-maker/approval authority should use discretion to determine the level of risk.

Table 3.2 Crime risk influences

Crime risk influence	Description
1. Crime statistics	What level of crime is occurring in the area and how is the threat of crime perceived?
2. Local community profile	What are the characteristics of the local community, including demographics and access to opportunities, and how could this affect crime levels?
3. Local geographical context	What land uses, activities and forms of development are located nearby and how may this affect crime levels?
4. Site observations	What do observations of the site and its surrounds tell about existing and the potential for crime?
5. Influence of the new development	What impact could new development or a change of land use have on crime or anti-social behaviour in the location?
6. High risk targets	Could the proposal become a high-risk target for terrorism or violent extremism?

Crime risk influences

The below table provides a guide to site and context analysis when establishing level of crime risk for a development project. A simple development project may need less analysis to inform level of crime risk than a complex project.

1. Crime statistics: actual and perceived

Aim: *to understand the actual and perceived risk of crime in the local area.*

Crime data provides insights into the location, frequency and type of crimes occurring in a given area. Perceptions of crime risk should also be considered, as perceptions may not always align with crime data. Below are sources that can be accessed to establish actual and perceived crime levels.

Sources of crime statistics

Crime statistics by suburb are available on the Western Australian Police Force website: www.police.wa.gov.au/Crime/CrimeStatistics#/

Local police stations may be able to provide location specific information on crime trends, crime generators and anti-social activity in the area.

Data may be sourced from local government Community Safety Crime Prevention Plans (where available) and from local government personnel, including security, rangers and community development officers.

For locations with a very high crime rates, crime hotspot mapping may indicate definitive locations of risk.

Perceived crime risks

A safety audit (See Definitions*)* of the site and its immediate surrounds will help understand perceptions of crime and safety by providing an opportunity:

- for neighbouring residents, local community, businesses, and visitors, to record their sense of safety and identify factors that influence perceptions
- to observe the surroundings for evidence of anti-social behaviour and target hardening that may indicate crime risk

Take note of the type of threats, as different forms of crime may require a different CPTED response. e.g. stealing from cars and pedestrians - focus on surveillance, street lighting, sightlines.

2. Community profile

Aim: *to understand the implications of local community profile on crime risk and anti-social behaviour.*

There are broad causal factors for crime in a locality such as high unemployment levels, family breakdown, poverty, lack of community facilities and programs, and displacement factors. In addition, research has consistently indicated crime is more prevalent in societies where there is greater disparity in the quality of life of its citizens (Kawachi, Levine, Miller, Lasch, & Amick, 1994).

Australian Bureau of Statistics data

Australian Bureau of Statistics (ABS) Census data provides demographic indicators for profiling local communities. Particular attention should be given to the safety needs of vulnerable groups like women, children, elderly, physically impaired. www.abs.gov.au/census

SEIFA, developed by the ABS, ranks areas in Australia according to relative socio-economic advantage and disadvantage. www.abs.gov.au/websitedbs/censushome.nsf/home/seifa

Social capital

Understand how community groups and activities contribute to community connectedness, local sense of place and well cared for spaces. The social capital of a community can assist in promoting community respect for and protection of the local neighbourhood and the people within it.

Crime risk influences (cont.)

3. Local geographical context

Aim: *to identify the potential sources of criminal and anti-social activity nearby, both in terms of potential crime generators and attractors.*

This will be influenced by the siting of land uses, activities, and routes to, through and around the site. (Cozens, Love, & Davern, 2019)

Nearby land uses and activities

Identify land uses and activities around the site that have potential to attract crime. For example, liquor stores can be associated with higher levels of assault and robbery. (Brantingham & Brantingham, 1998) Studies have also highlighted higher rates of crime and anti-social behaviours associated with transit routes and stations.

Displacement

Displacement occurs when criminal activity moves in as a result of redevelopment or revitalisation. Identifying or predicting displacement can allow it to be managed as part of the design process.

Contextual design elements

Identify any issues with existing or nearby buildings such as blank walls and entrapment spots. Also consider unsafe routes where there are no alternatives, like walled or fenced pedestrian accessways or where the potential for crime or the perceived risk is high.

4. Observations

Aim: *to observe how the existing site and its immediate surrounds influences the potential for crime and anti-social behaviour.*

Site safety audit

Carry out site observational or a safety audit of the site, ideally at different times of the day and night. Consider:

- Surveillance opportunities
- Sightlines
- Lighting levels and placement
- Territorial reinforcement
- Access controls including security personnel
- Technological surveillance
- Routine activities in and around the site and established behavioural patterns
- Management and maintenance

In conducting these observations, be aware of the influence that existing land uses and building configurations may have on local crime, and the potential for existing CPTED measures to lower crime risk.

Crime risk influences (cont.)

5. Influence of the proposal

Aim: *to understand the potential impact of new development and land use change on criminal and anti-social activity in and around the development site.*

The crime context assessment should consider the impact of the development on the local incidence of and perceptions of crime. The form of development, type of land use, and user groups attracted to the site, will influence local crime risk. This assessment should consider the influence of the development both during construction and on completion.

Potential of project to generate crime

To establish the crime generation potential of the proposal, the following considerations may be relevant:

- What is the anticipated demographic of the new community?
- What are the expected tenancies of the building(s)?
- Will the development change the way the local community uses the existing public spaces, such as alteration to established pedestrian routes?
- Will the development bring more people to the area?
- Consider also the implications of project staging on crime risk.

Potential of project to reduce crime

Consideration should be given to ways in which the proposal could improve the safety of the local neighbourhood and support activity in public areas.

- Can the development improve surveillance of public spaces and areas of transition between public and private spaces?
- Can the development contribute to better definition of private and public space?

6. High risk targets

Aim: *to understand the level of terrorism threat associated with the project.*

Terrorism presents a risk to public access buildings, public open spaces and high-risk targets.

Terrorist targets

Crowded places and locations that are accessed by large numbers of people on a predictable basis are potential targets for a terrorist attack and include:

- Places of mass gathering
- Transport hubs
- Sport stadiums
- Open spaces in cities

Other areas considered high risk:

- Prominent structures, such as places of national heritage value
- Buildings with a political or religious significance
- Places likely to attract tourists, or theatre or club goers
- Strategic and regional infrastructure.
- Buildings of cultural significance or symbolic value

Reference should be made to the WA Police Force Counter Terrorism (WAPFCT) Unit and Australian National Security for advice on current terrorism threat and national advice.

Checklist A: Crime risk level

When to use: Based on information gathered in Part 3: Step 1 Identify Risk use the below checklist to determine whether each of the crime risk influences presents a high or low level of risk.

Where the risk of a terrorist incident is thought to be 'high' (i.e. in the case of a target location such as a crowded place or critical infrastructure), engagement with the decision-maker/approval authority is recommended.

Used by: Proponent and project team. Engage with relevant stakeholders to inform level of crime risk.

Crime risk influence	Level of risk (low/high)	Comments/Justification
Crime statistics		
Local community profile		
Local geographical context		
Site observations		
Influence of the new development		
High risk targets		

2. Inform the brief

What type of project is it?
Does the brief address CPTED requirements?
Do the requirements of the brief fit the scale and complexity of project?

What it is

The desired safety outcomes for the type of development project and its identified crime risk will inform the project brief and scope. Ideally consider CPTED from the project outset - making good design decisions early in the process can save costs and time later.

Identifying development project scale and complexity assists in determining if a low level or high level CPTED statement and assessment is required.

Who is involved

Proponent (and project team).
Government led delivery teams when preparing briefs.

Communication and consultation

Consult relevant stakeholders. These may include local and State Government, community and law enforcement agencies. Activities, crime patterns and any safety issues relating to the location should inform the brief.

Guidance

At the early design stages it is useful to consider how the objectives and considerations of the CPTED principles outlined in Part 2 can be applied to inform the brief so that it is tailored to the requirements of the project. Including CPTED considerations in the project brief and scope sets the priorities of CPTED strategies to inform the development of the design. The brief should articulate that CPTED responses should be integrated and complement the project design and not compromise good outcomes. Responses should be proportional to the identified level of risk and project type.

For more information on how to define project type, scale and complexity refer to Checklist B: Type of proposal. This checklist defines simple and complex development projects with some example projects. Defining the project type establishes the level of CPTED statement and planning assessment required.

Table 3.3 Example CPTED brief considerations

Crime type/ threat[1]	CPTED principle	CPTED objective	Considerations for design brief and design development
e.g. Risk of burglary (high, secure fences to neighbouring houses)	Principle 1: Surveillance Principle 2: Territorial Definition	**Objective 1.2 Clear sightlines** The design of the environment provides opportunities for passive surveillance through unimpeded sightlines to, and within publicly accessible areas **Objective 2.1: Clear Spatial Boundaries** Clearly define the ownership of a space (public and private spaces, as well as transitional spaces in between)	• Maintain clear sightlines to points of ingress/egress, and from within the project area looking out, with well-considered door and window placement • Plant/tree selection to support passive surveillance and maintain sightlines • Define the development site using landscape, street furniture, changes in paving and surface treatments
e.g. Risk of hostile vehicle attack for a crowded place	Principle 2: Territorial Definition Principle 3: Access Control	**Objective 2.1: Clear Spatial Boundaries** Clearly define the ownership of a space (public and private spaces, as well as transitional spaces in between) **Objective 3.1: Physical and landscape deterrent** The design of the physical environment directs pedestrian movement through the public realm away from potential targets or risk and into areas with good surveillance **Objective 3.2: Target Hardening** For higher risk targets, incorporate 'obvious and visual' deterrent measures into the design; limit access with gates, locks and security doors	• Clearly define the perimeter of the site. Use urban design elements such as natural landforms, artwork instead of fences/ walling • Is a security checkpoint required? If so, where? • What is the required stand-off? Consider natural landforms and public art as a physical deterrent and barrier for hostile vehicles • Consider access paths for potential hostile vehicles –consider bends, chicanes or inclines to deter and delay • Provide choice of egress points and consider how people will move comfortably through the space – particularly when at capacity • Avoid areas that may cause bottle-necks and dead-ends • Consider a tiered response that includes security surveillance

Table 3.3 provides an example approach to applying CPTED considerations.

[1] *Crime types as identified through identify risk (Step 1)*

Checklist B: Type of proposal

Identifying development project scale and complexity assists in determining if a low level or high level CPTED statement and assessment is required.

When to use: Apply criteria and refer to example projects to establish if project is simple or complex.

Combining the risk level with the type of proposal will assist in determing the level of CPTED statement and assessment required.

Used by: Proponent and project team. Engagement with relevant stakeholders to ensure agreement on the proposal type.

Simple development projects	Example projects
Where the following apply: • Minor development or change of use is proposed • Simple arrangement of buildings and spaces • Non-contentious building uses are proposed • Development delivery is uncomplicated, requiring straightforward CPTED strategies	Small scale residential development Small scale car parking areas Small shops and businesses Parks Bus stops

Complex development projects	Example projects
Where the following apply: • Significant development or change of use is proposed • There is a complex arrangement of buildings, access routes and spaces • Complex building uses are proposed • Development will be staged and require different CPTED strategies	Airport and associated services Bulky goods showrooms Entertainment districts Hospitals Hotels Liquor stores Mixed use developments Nightclubs Retail Centres and Malls Supermarkets Small bars Taverns Transport hubs Crowded places Critical infrastructure Complex public open spaces Structure plans (precinct or standard)

3. Design development

How do we incorporate CPTED into the design?
What is the designated purpose of the space?
How is the space defined and intended to be used?
How well does the design support its intended function?

What it is

The project team can select and define specific CPTED responses for the implementation of CPTED into the project design. This should meet the requirements of the brief, including if relevant addressing required High Risk strategies. As the design progresses, responses should be proportionate to the identified risk and project type and navigate competing design imperatives. Applying CPTED responses to the design should be an iterative process, drawing on specialist advice as needed.

Who is involved

Proponent (and project team). Input from a CPTED specialist may be required for complex projects identified as having a high crime risk or for high risk scenarios.

Communication and consultation

It may be beneficial to engage with relevant stakeholders such as community, property managers and law enforcement agencies at this stage to resolve design issues and inform design decisions. Early engagement with decision-makers can also help identify issues upfront, reducing assessment and decision-making timeframes later. It can also clarify the level of CPTED reporting required with the application.

Guidance

Design Development

Applying the three 'Ds', Designation, Definition, and Design (Crowe, 2000) can help designers in applying the CPTED principles to ensure development serves its intended purpose and is conducive to acceptable behaviours and safety.

Designate: Designate the purpose of the space: its function and degree of public or private access

Is there a clearly designated purpose(s) for the space?
Is there any potential use/user conflicts?

Define: Define the spatial, social, cultural and legal boundaries for behaviour within the space

Is the space clearly defined?
Does the space clearly belong to someone/some group?
Is there any conflict or confusion between purpose and definition?

Design: Design to support and control the desired behaviour and discourage unwanted behaviours

Does the design support the intended use of the space?
Does the design encourage people to use the site? Does it facilitate access control and promote surveillance?

Conflict Resolution in Design Development:

Given the interrelated nature of the CPTED principle objectives, addressing one objective may in some instances compromise another. For example, addressing an objective for safe lighting (O1.3) may result in excessive glare and contrast that compromises passive surveillance (O1.1). A successful CPTED response will find solutions to manage or resolve these conflicts to benefit the project and its users.

Furthermore, while CPTED principles aim to create safer environments, they should not compromise the ability of a development to satisfy other planning and design requirements. Where conflicts occur, a common-sense approach should prevail to decide the priority design outcomes, while addressing CPTED objectives as far as is possible. Areas where conflict can arise may relate to considerations such as universal access; road noise abatement; bushfire risk management; and objectives to achieve walkability, liveability, passive surveillance, and sustainability goals.

Avoid creating negative CPTED outcomes such as excessive target hardening that can lead to hostile environments, or exclusionary design that unintendedly restricts access for some members of the community.

4. CPTED statement

What is the designated purpose of the space?
What level of reporting and detail is required?

What it is

After identifying the development type and the risk level, the required CPTED statement can be determined. This should be undertaken through collaboration with local or State Government and/or relevant decision maker to ensure the statement level is appropriate to the level of assessment required.

Documenting the CPTED process and response will take the form of either a low level or high level CPTED statement. Documenting the process allows the project team to identify outstanding issues and allows decision-makers/approval authorities to determine whether the proposal meets safety and security requirements. Responses should have regard to the objectives and considerations of the CPTED principles, providing a rationale and justification for design responses.

Who is involved

Proponent (and project team). Input from a CPTED specialist may be required for complex projects identified as having a high crime risk or for high risk scenarios.

Communication and consultation

Early engagement with decision-makers can help clarify the level of CPTED reporting required with the application.

Guidance

Table 3.4 below should be used to determine the level of reporting required. A low level CPTED statement may be as short as a simple paragraph outlining crime risk and chosen CPTED measures, while a high level CPTED statement includes more detailed analysis of crime risk, response, conflicts and detailed drawings and supporting material. For more information refer to Checklist C: CPTED Statement requirements.

Table 3.4 CPTED Statement identification

	High Risk	Low Risk
Simple Development Project	High level CPTED Statement	Low level CPTED Statement
Complex Development Project	High level CPTED Statement	Low level CPTED Statement or High level CPTED Statement*

**In some instances a low level CPTED statement may be applicable for low risk complex developments depending on the context of the project. The appropriate CPTED statement should be determined after consultation with relevant stakeholders.*

Step 4. CPTED Statement

Checklist C: CPTED statement requirements

When to use: Use checklist to confirm the requirements of either the low level or high level CPTED statement as applicable to your project.

The level of detail required for the CPTED statement depends on the risk factors identified and the project type. The higher the risk factor the more comprehensive the reporting required.

Who to use: Proponent and project team.

Statement type	Proponent requirements	
Low level CPTED statement	☐ **Identified Crime Risks**.	This may be a basic review of primary crime risks from crime statistics, observations, and local geographical context. (see Crime Risk Influences)
	☐ **Chosen CPTED measures**	To address the primary risk, noting why, where and how they will be integrated in the design. (see Checklist D)
High level CPTED statement (includes more detailed CPTED analysis)	A statement which draws on a wide-range of data and information to generate a detailed understanding of:	
	☐ **Identified Crime Risks.**	This may include a detailed analysis of site and context depending on type of project and level of risk. (see Crime Risk Influences)
	☐ **Chosen CPTED measures**	To address identified risks, noting why, where and how they will be integrated in the design. (see Checklist D)
	☐ **Identified design conflicts and resolutions**.	
	☐ **Marked up drawings and support material**	To describe the design features of the site and local environment that contribute to making a safer place. Ensure to describe intended specifications of variable elements, e.g. tree species and size, lighting lux/spill, CCTV type, materials and reinforcement and maintenance standards
	☐ **ANZCTC Crowded Places Self-Assessment**	Where relevant

The statement may also address ongoing operational requirements including security staffing levels, CCTV management and monitoring, maintenance scheduled and lighting controls.

Post-occupancy monitoring is strongly encouraged.

Step 4. CPTED Statement

Checklist D: Chosen CPTED measures

When to use: For low level and high level CPTED statements to identify how the proposal responds to CPTED principles and considerations. CPTED responses should consider the project location, crime risks, purpose, function, use and any competing design objectives. This checklist is intended to guide consideration of the CPTED measures and not as a tick-box outcome.

Who to use: Proponent and project team.

Principle	Objective	CPTED measures used (and competing design resolution if applicable)
Principle 1: Surveillance	☐ Eyes on the street	
	☐ Clear sightlines	
	☐ Effective lighting	
	☐ Technological surveillance	
Principle 2: Territorial Definition	☐ Clear spatial structure	
	☐ Signage	
	☐ Legibility	
Principle 3: Access Control	☐ Physical and landscape deterrents	
	☐ Target hardening	
Principle 4: Space Management	☐ Activity support	
	☐ Space maintenance	

5. CPTED assessment

How do we assess the proposal?
Will the proposal create safer places?

What it is

An assessment of the proposed development to determine whether safety and security requirements have been satisfactorily addressed.

Who is involved

Decision-makers, including local government or State Government and design review panels.

Communication and consultation

Project teams should discuss with decision-makers the level of information they will require for the assessment prior to lodging an application.

Upon receipt of the application and prior to a decision being made, a decision-maker may need to consult with the community and other stakeholders, as well as hold further discussions with the proponent.

Guidance

A CPTED assessment will fall into two types. Where the type of proposal has been identified as low risk then a low level review would appropriate. Where a project has been identified as having complex risk factors, then a high- level review is required.

The decision-maker would need to be satisfied that the proposal demonstrates an adequate response to support safer design outcomes for the identified level of crime risk and type of proposal. There is no 'tick-box' solution to assessment - each assessment should deliver a tailored review that has regard to the following:

- whether the level of CPTED reporting provided with the application is adequate
- whether the responses to CPTED principles and objectives are sufficient
- whether any unintended consequences could arise from CPTED approaches
- whether there are any design conflicts or non-conformance with other planning requirements that need to be resolved.

In some cases, the CPTED statement may include complex information or responses to risk, whereby it may be appropriate for the decision-maker to seek CPTED expertise to assist with their assessment.

Photo 3.2 Sculpture/public art adds interest and indicates a well-cared space, which will discourage vandalism.

6. Deliver and evaluate

Is the place safe?
Can it be safer?

What it is

The CPTED approaches outlined in the approved CPTED statement should be implemented. However, it is only through completed and occupied projects that success can be evaluated. The creation of safer places is not static. For example, changes to patterns of use, functions, and perceptions of a place may affect how well it performs. Evaluation is necessary to ensure places continue to be safe over time.

Who is involved

The proponent and project teams can implement CPTED during design and construction. However, it is usually local governments, WA Police, business owners and community who play a role in monitoring and evaluating CPTED outcomes.

Guidance

Implementing CPTED successfully relies on delivering the design responses as approved by the decision-maker. For some development projects, creating a maintenance or management plan can help to prevent crime and perceived crime as the development ages.

Evaluation timeframes should be realistic and responses persistent, noting that positive outcomes may take some time to deliver. Indicators of success should be simple and capable of being satisfied. As part of the evaluation process, regular site checks may be undertaken to consider things like whether management and maintenance plans have been implemented, and whether technological responses, such as CCTV surveillance, are operating effectively.

Photo 3.3 Well maintained landscaping creates an attractive outlook and contributes to better safety.

Part 4 - Safer Place Scenarios

This section provides CPTED guidance for specific land use and development scenarios.

Each Safer Place Scenario is accompanied by an annotated illustration, demonstrating key considerations which address CPTED principles for the situation/scenario.

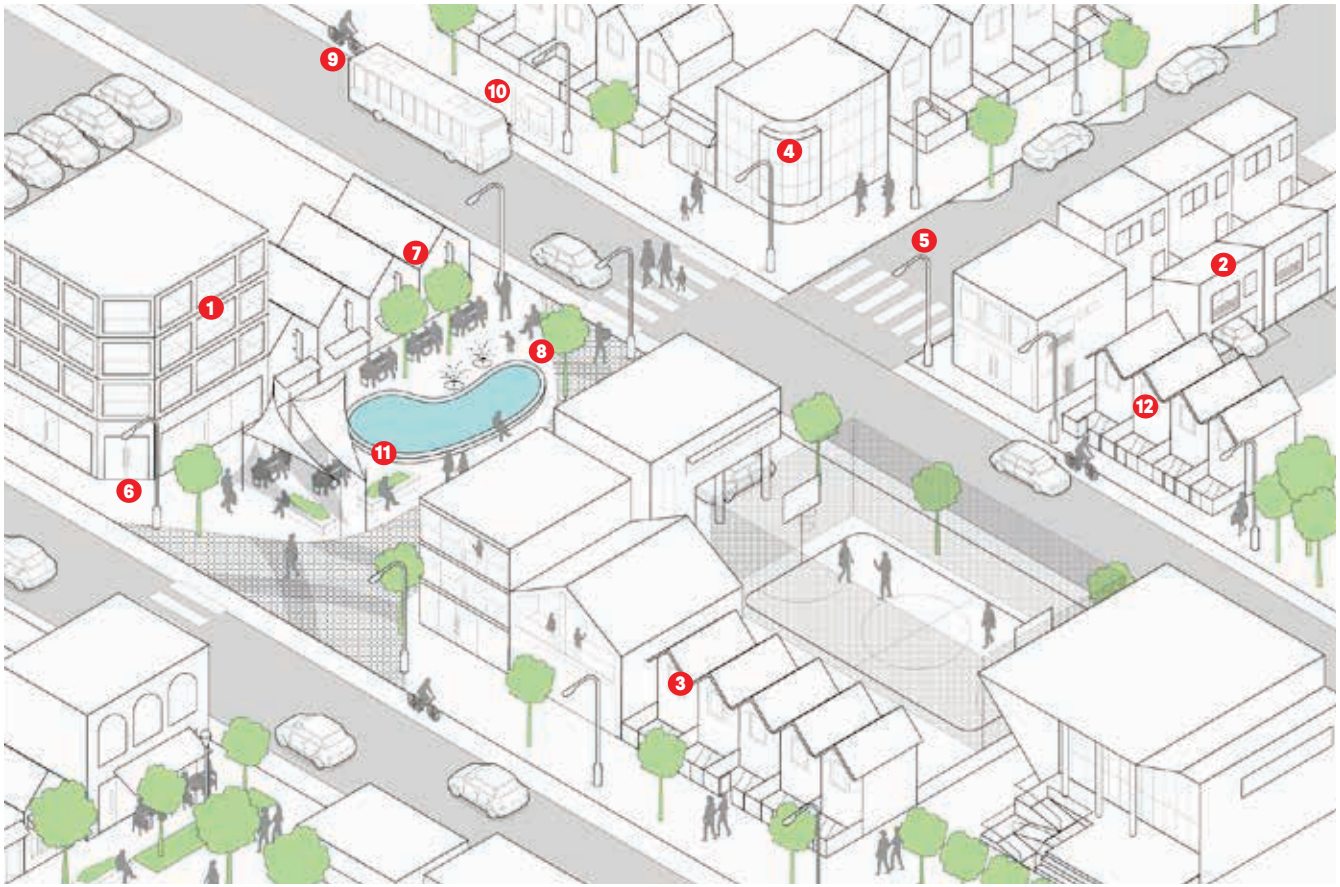
The responses demonstrated are not all-encompassing nor intended to provide final solutions, as each place and project will warrant a specific response tailored to its location and context.

4

4.1 Neighbourhoods and precincts

Safe design of neighbourhoods and precincts includes all greenfield and urban infill (brownfield) development for residential and mixed use land uses.

Commercial development and development around activity centres is addressed separately in 'Safer design of activity centres'.



Principle 1: Surveillance

1. Buildings overlook public streets, pedestrian paths and parks
2. Ancillary dwellings over garages (Fonzie flats) overlook laneways
3. Windows, verandahs, porches and balconies to street fronts
4. Houses on corner sites address both street frontages
5. Adequate street lighting supports day-time and night-time use

Principle 2: Territorial definition

6. Movement network is legible and easy to navigate, with good sightlines, vistas and visual cues
7. Local and neighbourhood centres integrate housing, shopping and civic spaces, avoiding separation of land uses
8. Park edges are defined by public streets, avoiding where possible direct frontage to residential lots

Principle 3: Access control

9. Movement network offers good connectivity for pedestrians, cyclists and vehicles both within the neighbourhood and with adjoining areas
10. Public transport services are supported by residential densities and land-uses. Routes and stops are legible and attractive for users

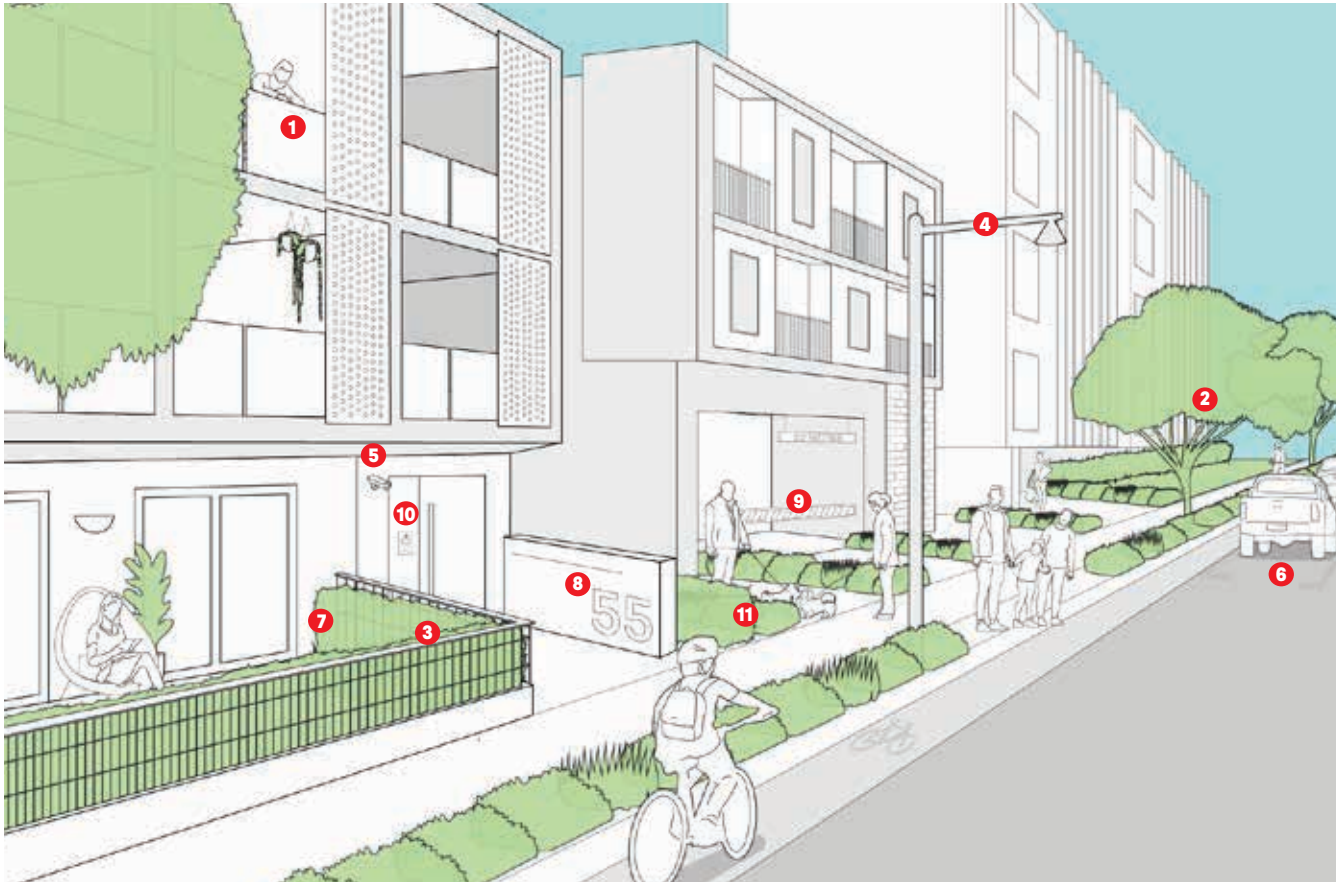
Principle 4: Space management

11. High quality public spaces provide interest, including landscaping, canopy structures, shaded and seating areas along pedestrian routes
12. A range of housing types provide for a diverse community

4.2 Residential and mixed use streets

Safer design of residential and mixed use streets considers the interface between private development and public spaces. The careful design of the transition between public and private space assists in defining ownership.

Passive surveillance from residences to public spaces are key to ensuring these spaces are well used and feel safe.



Principle 1: Surveillance

1. Balconies facing street maximise passive surveillance opportunities from upper and lower level residences
2. Low shrubs and high canopy trees support clear sightlines and passive surveillance from many viewpoints in the public realm
3. Visually permeable fencing and low planting facilitates passive surveillance from ground floor residences
4. Adequate street lighting– separate from tree canopies
5. CCTV at a secured resident entrance provides additional security
6. Street parking is located close to building entrances to support accessibility

Principle 2: Territorial definition

7. Private gardens are clearly defined by low fencing and landscaping
8. Residential address is clearly displayed and well lit

Principle 3: Access control

9. Secure access to private car parking enhances safety of residents and commercial tenants
10. Residential entries are secure

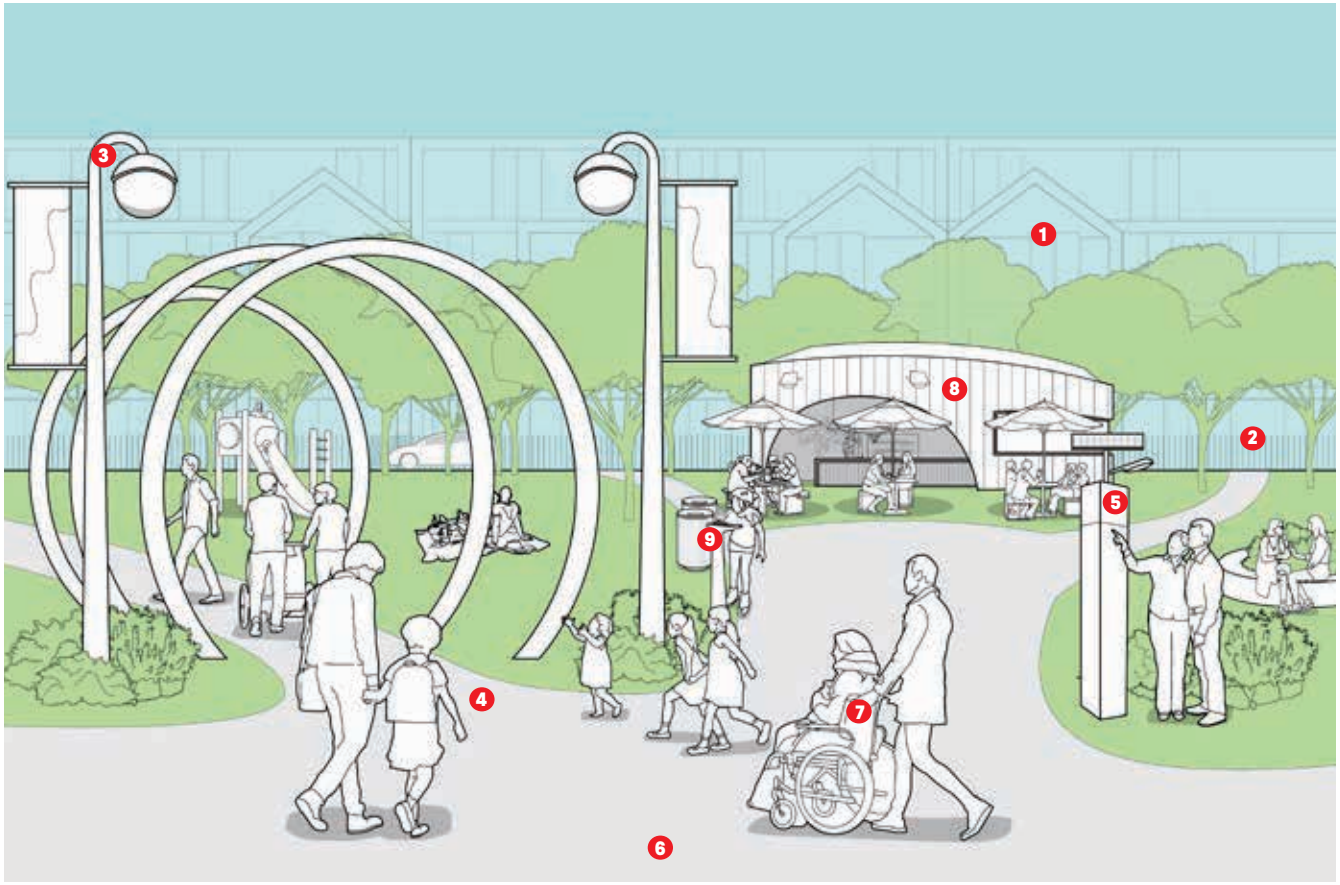
Principle 4: Space management

11. Well maintained landscaping demonstrates a sense of ownership and defines transitional areas between public and private zones

4.3 Public spaces

Safe design of the public realm includes streets, plazas, parks, community spaces, sports grounds, civic spaces and other community spaces. It also encompasses the facilities within these spaces including public toilets, playgrounds and community facilities.

The safety of public spaces is related to the design of the spaces and the ability to provide surveillance, sightlines, legibility and protection from entrapment. Design also plays a key role in encouraging people to use a place and deter offending.



Principle 1: Surveillance

1. Passive surveillance provided by adjacent land uses
2. Clear sightlines provided through landscaping
3. Provision of street, walkway and park lighting encourages day and night-time use
4. Footpaths are legible, have good surveillance and are free from entrapments

Principle 2: Territorial definition

5. Clear signage and wayfinding

Principle 3: Access control

6. Multiple exit and entry points are easy to navigate
7. Designed for diversity

Principle 4: Space management

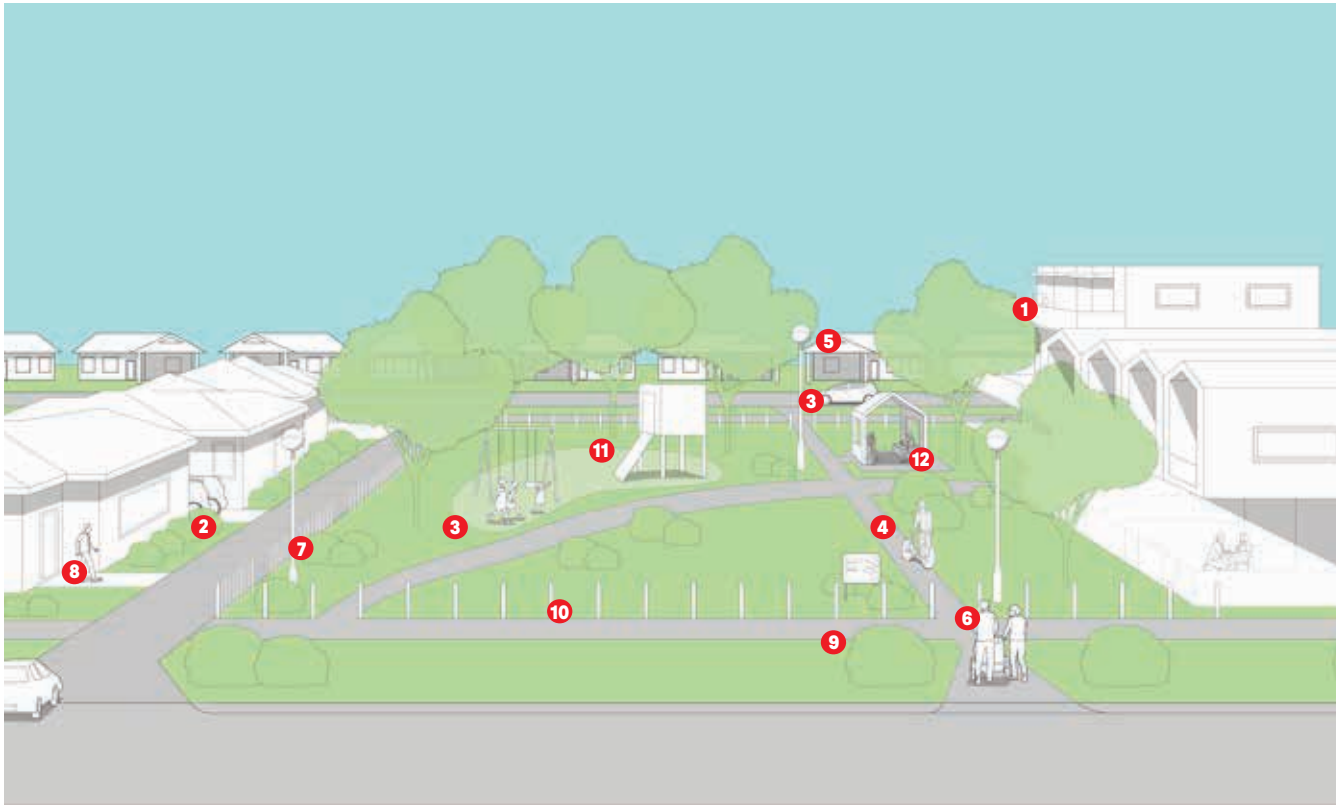
8. Adjacent active uses such as a café provide additional activity and surveillance
9. Facilities and landscaping is of a high quality and well maintained

4.4 Neighbourhood parks

The design of a park can have a direct influence on people's perceptions of safety and willingness to use it.

Designing parks and pedestrian access routes adjacent to residential development requires careful consideration of often conflicting design outcomes.

The need for resident privacy should be balanced with the need for active edges to the park to support passive surveillance.



Principle 1: Surveillance

1. Passive surveillance provided by adjacent residential development through ground level and upper level windows
2. Active frontages to residential development with blank walls avoided
3. Clear sightlines maintained across the park
4. Footpaths are legible, have good surveillance and are free from entrapments
5. Lighting provided along pedestrian footpaths
6. Park entrances are highly visible and promote casual use

Principle 2: Territorial definition

7. Clear transition between public and private spaces through changes in surface treatment and soft and hard landscaping,
8. Residential entrances are visible
9. Pathways and connection to adjacent street networks to encourage active use

Principle 3: Access control

10. Bollards restrict vehicle access to the space

Principle 4: Space management

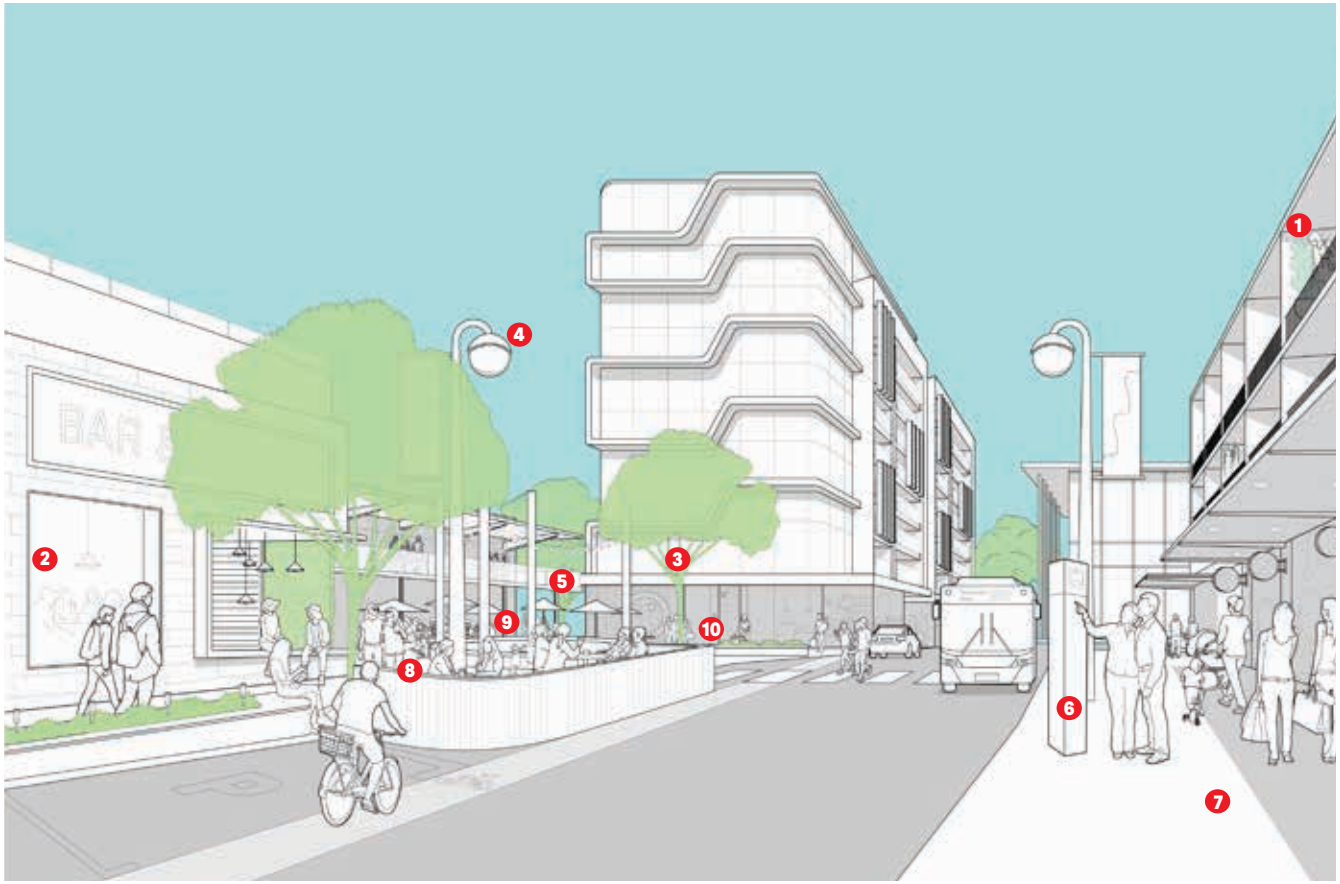
11. Inclusion of well maintained play equipment and seating provides a diverse range of uses
12. Facilities and landscaping are durable and easy to maintain

4.5 Activity centres

The design and mix of uses in activity centres contribute to vitality and appropriate use.

Centres can have two lives - a day life and a night life. Land uses which bring people into these areas in the evening and weekends can increase safety and perception of safety.

Activity centres in this context include commercial, retail and mixed use areas and can range in scale from local centres through to major city centres.



Principle 1: Surveillance

1. Balconies and windows overlooking the street support passive surveillance
2. Shop fronts with transparent glass windows create good sightlines to and from the shops
3. Tree canopy and shrubs are kept low/high and do not to block sightlines
4. Streets and active areas are well-lit to support night-time activity

Principle 2: Territorial definition

5. Consistent building setbacks avoid areas of concealment
6. Clear and easy access to public transport and parking facilities
7. Well-connected, legible and safe pedestrian walkway system

Principle 3: Access control

8. Seating and planter boxes provide a physical deterrent for vehicular access to footpaths

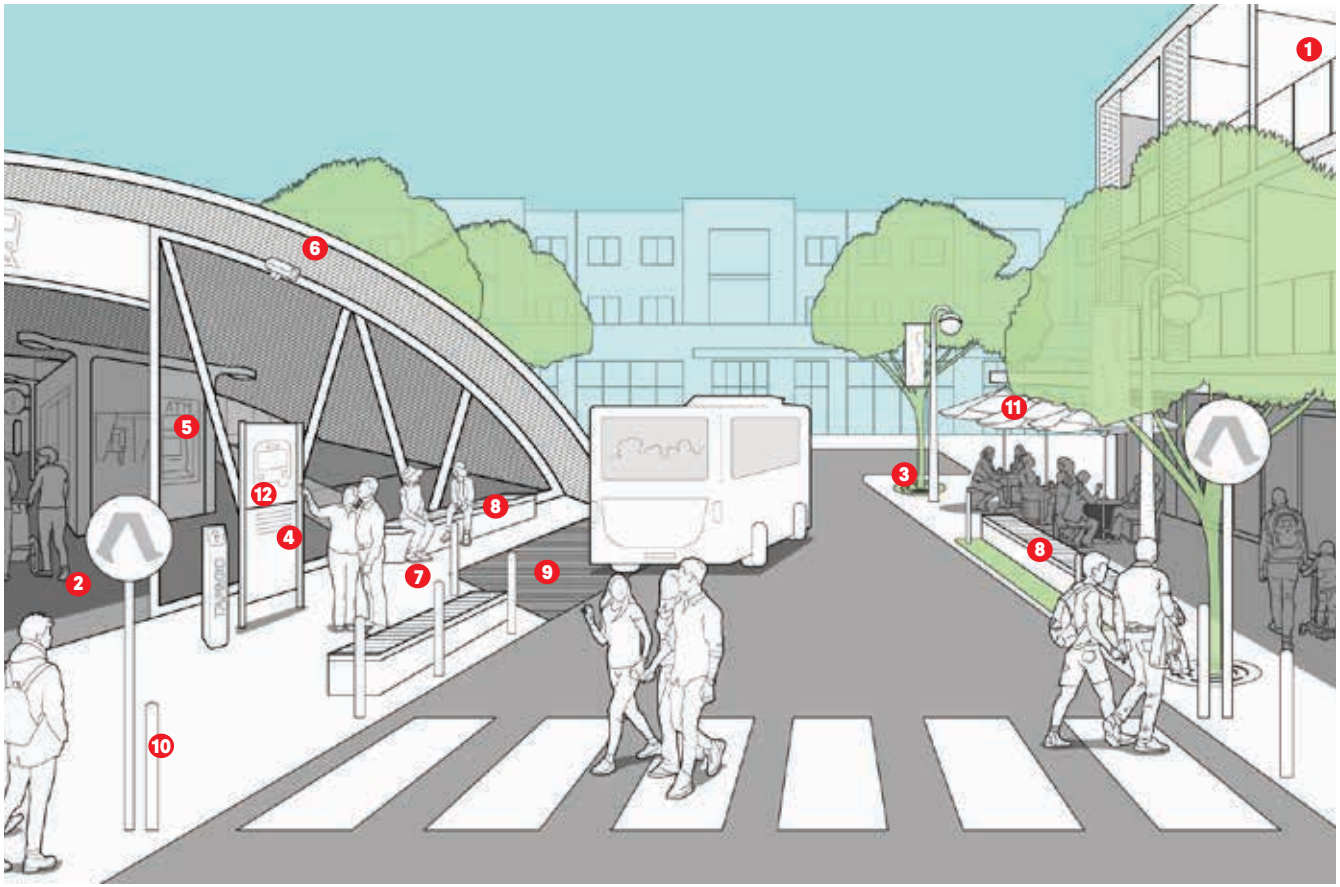
Principle 4: Space management

9. Varied activities, including residential and a mix of retail and entertainment uses ensure the centre is activated at different times of the day and night
10. High quality public realm designed to be of appropriate human scale

4.6 Public transport hubs

Safety at public transport hubs is essential to assure users, support patronage, and minimise crime and fear of crime.

Designing for safer public transport hubs minimises anti-social behaviour, improves passenger security and perceptions of public transport generally.



Principle 1: Surveillance

1. Neighbouring residences provide passive surveillance to bus stop and station
2. Good sightlines through the station and bus interchange
3. Low shrubs and high canopy trees provide clear sightlines
4. Signage assists wayfinding
5. Telephones, ATMs are located adjacent to active frontages
6. CCTV provided to bus interchange – area at higher risk during night-time use

Principle 2: Territorial definition

7. Adjacent bus and train access provides convenience and reduced walking distances
8. Urban furniture creates stand-off distances between the public realm and the road.

Principle 3: Access control

9. Change in paving colour provides visual cues between pedestrian and vehicular realm
10. Bollards prevent vehicular access to station ticketing and pedestrian entries

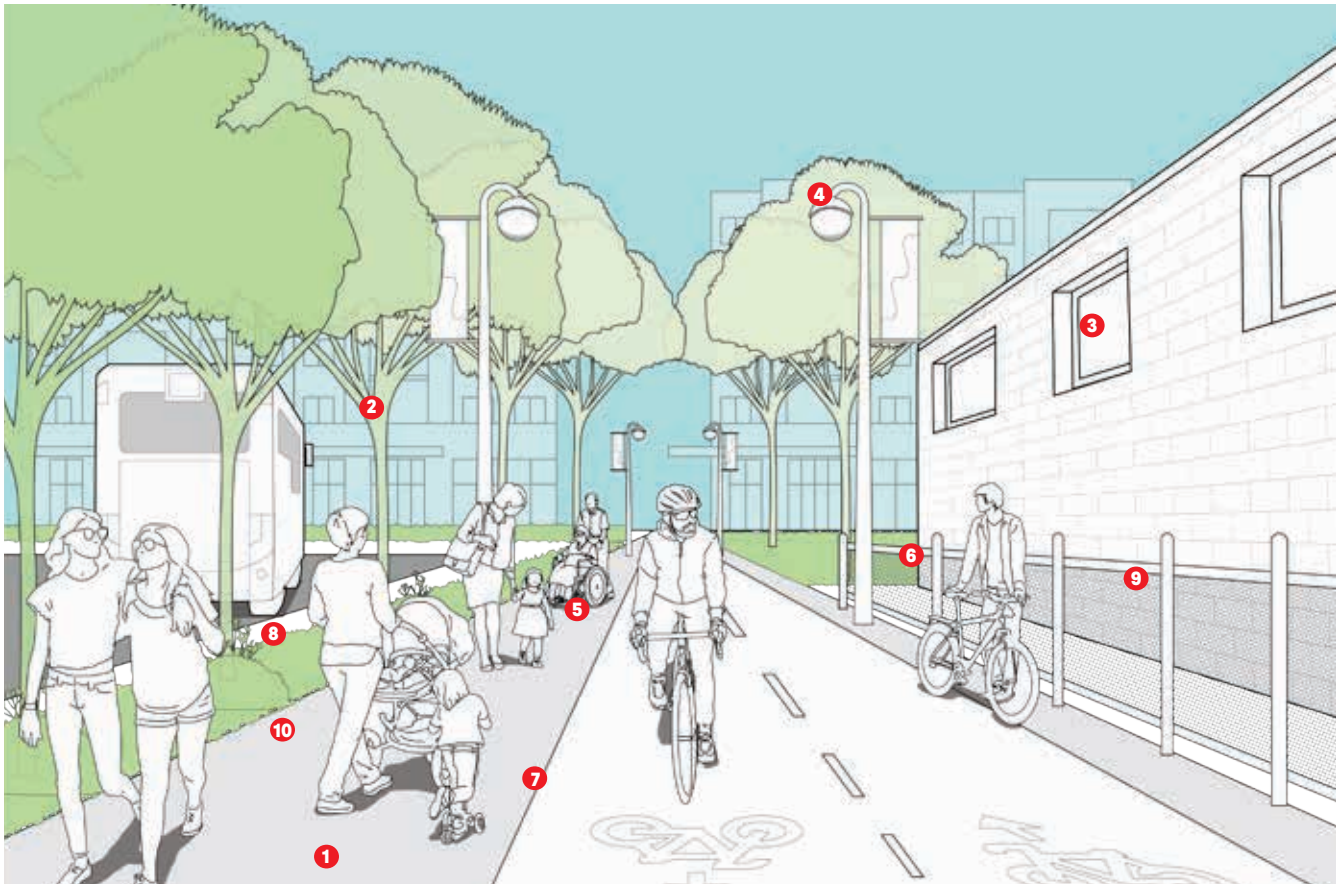
Principle 4: Space management

11. Station is located adjacent to areas of activity such as cafes and shops
12. Signage is high quality and vandal-proof

4.7 Pedestrian and cycling networks

The design of spaces can influence our perceptions of an area and user preferences. For example, a pedestrian and cycling route that is perceived to be safe will often be regularly used, whereas routes and paths perceived as unsafe will deter public use.

Pedestrian paths include footpaths, roadside walkways, underpasses, overpasses, stairs, steps and pedestrian access ways (PAWs). For further information for PAWs see Scenario 4.8 Pedestrian Access Ways .



Principle 1: Surveillance

1. Footpaths, cycle paths and vehicle routes are close to each other to maximise activity and passive surveillance
2. Low shrubs and high canopy trees provide clear sightlines
3. Passive surveillance provided by adjacent buildings
4. Adequate lighting supports safe night-time use

Principle 2: Territorial definition

5. The pedestrian and cycling route is wide enough to allow pedestrians/cyclists to pass each other easily
6. The boundaries between the public space and private space are clearly defined and robustly fenced

Principle 3: Access control

7. Different paving materials, patterns and colours provides clear demarcation of use
8. Low landscaping demarcates vehicular routes from pedestrian routes
9. High, visually permeable fencing to private space restricts access while providing surveillance

Principle 4: Space management

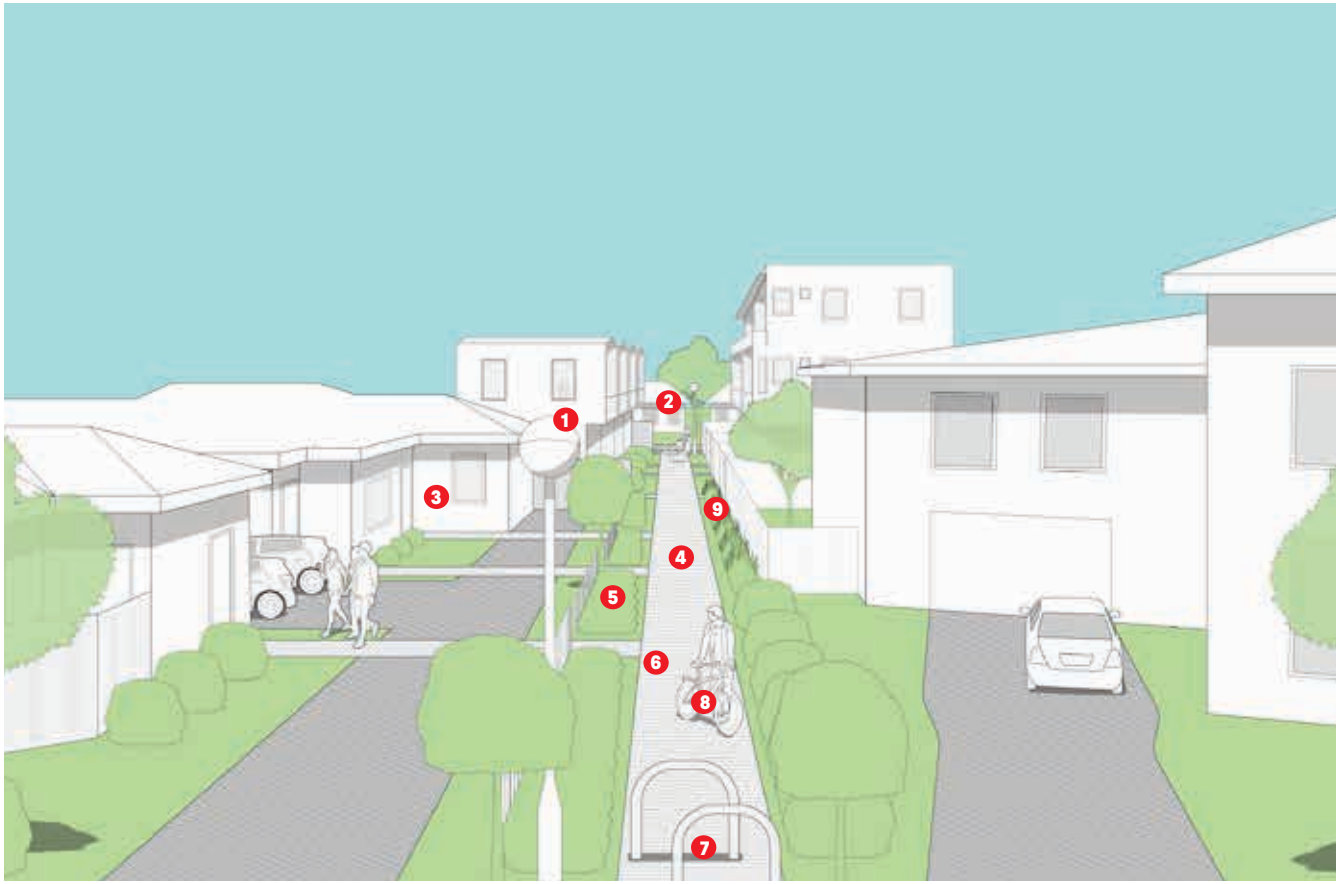
10. Paving is level and trip-free to support pedestrian movement

4.8 Pedestrian access ways

Pedestrian access ways (PAWs) are an effective way to improve connectivity through a neighbourhood. However, contemporary planning often discourages the creation of new PAWs as they can be identified as targets for crime and anti-social behaviour.

Where PAWs are being planned for they should be designed to integrate into the public realm network to support better surveillance to reduce crime and perception of crime. Where existing PAWs are being retrofitted they should first be assessed to determine appropriate responses.

For more information on CPTED in pedestrian access ways and for the procedure for their closure refer – *Reducing Crime and Anti-Social Behaviour in Pedestrian Access Ways Planning Guidelines* (WAPC, 2009) and *Procedure for the Closure of Pedestrian Access Ways Planning Guidelines* (WAPC, 2009).



Principle 1: Surveillance

1. Adequate lighting is used to enhance safe night-time movement
2. The access way is overlooked and has clear sightlines at its ingress/egress point and along its route
3. The access way is located adjacent to residential frontages for passive surveillance
4. There are no entrapment points along the length of the access way

Principle 2: Territorial definition

5. The boundaries between the public space and private space are clearly defined by low level landscaping and low fences

Principle 3: Access control

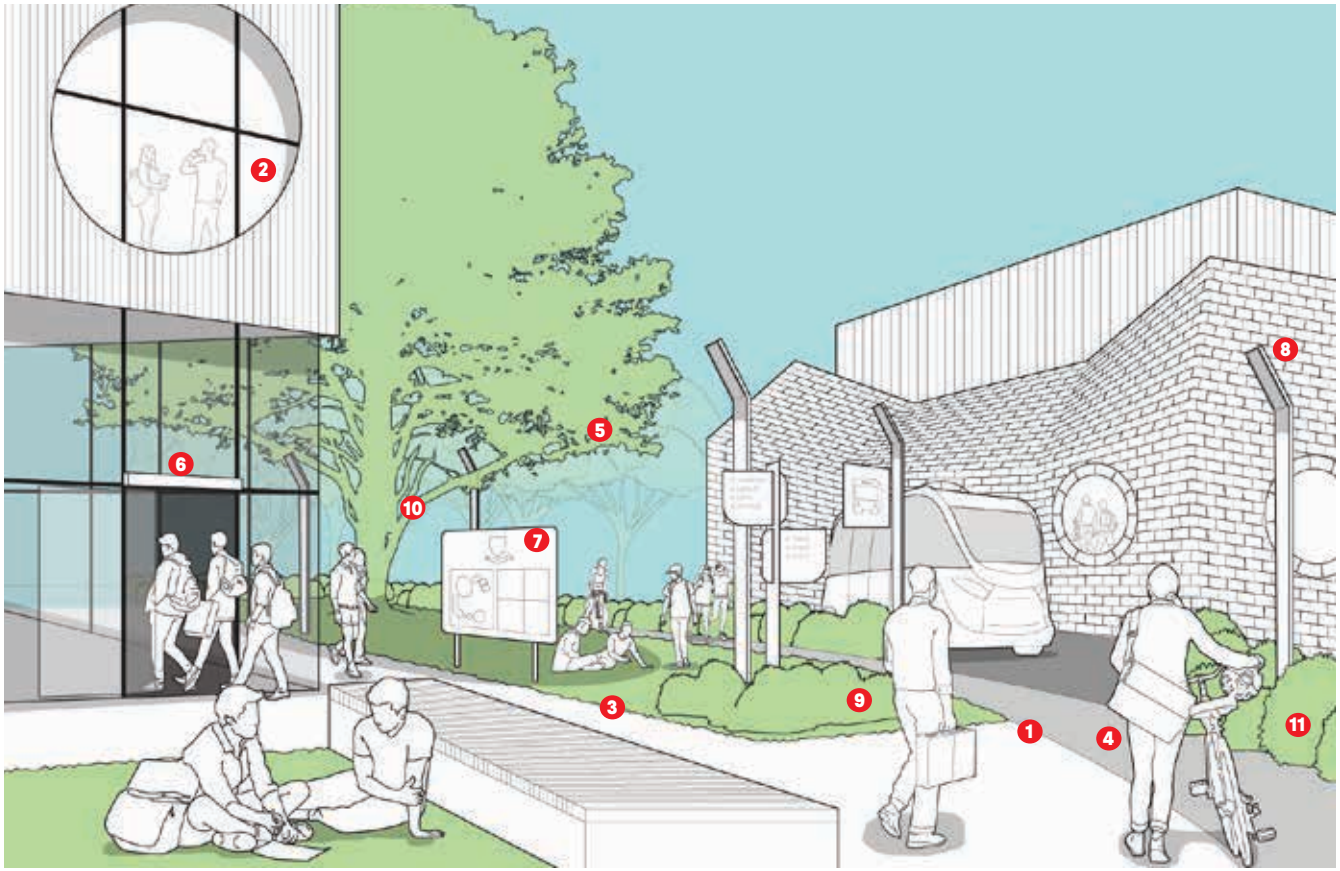
6. The access way is wide enough to allow pedestrians to pass each other easily
7. Bollards discourage motor vehicle entry
8. The access way is designed for universal access and to be a part of the cycling network

Principle 4: Space management

9. The access way is appropriately maintained

4.9 Community infrastructure

Many larger institutions have their own campuses or precincts, and CPTED design responses need to cover both the internal layout and the interface with the exterior. Most of the time these campuses are used as a quasi-public space and designs should take this into consideration.



Principle 1: Surveillance

1. Footpaths and cycle routes are located adjacent to uses that provide surveillance such as entries, cafes/libraries
2. Upper and lower level passive surveillance
3. Pedestrian routes are well-lit and have good sightlines from building entrances
4. Pedestrian routes and cycle paths are co-located
5. Low planting and high canopy trees provide good sightlines and amenity

Principle 2: Territorial definition

6. Building entries are clearly legible
7. Adequate signage assists wayfinding
8. Feature lighting supports legibility and wayfinding

Principle 3: Access control

9. Landscaping provides natural access control for pedestrian and vehicles

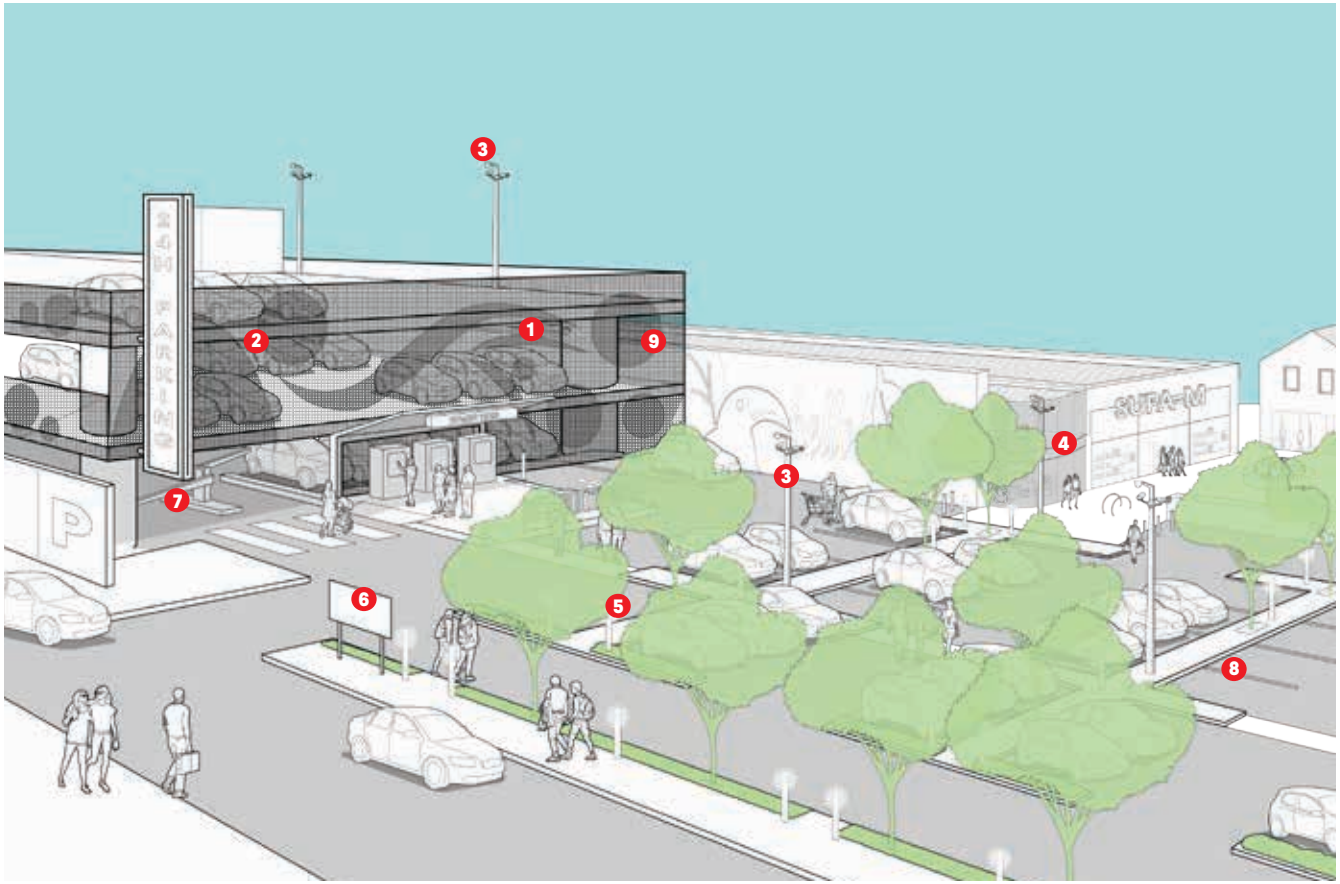
Principle 4: Space management

10. Landscaping is well maintained

4.10 Car parking

Improving the general amenity of an existing car park can enhance feelings of safety. For example, introducing features which attract people to the area, and enabling good passive surveillance through the location of pathways and entries can make it more attractive and increase pedestrian movement through the space.

CPTED responses for car parks can be most effective when aligned with other interventions, such as active surveillance and management strategies. Landscaping, lighting and any CCTV should be considered in an integrated manner to reduce conflicts.



Principle 1: Surveillance

1. Car parking can be seen from the public realm
2. Lighting of multi-storey car parks is adequate and uniformly distributed to avoid deep shadows
3. CCTV and other means of additional security measures enhance safety. Ensure integration with planting and lighting
4. Car parking is located adjacent to active land uses

Principle 2: Territorial definition

5. Pedestrian routes in car park are legible, well lit and support safe movement
6. Signage is located at strategic locations to assist orientation and wayfinding

Principle 3: Access control

7. Entry is gated and draws awareness to non-permissible use

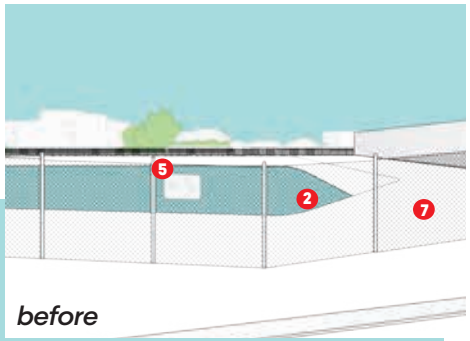
Principle 4: Space management

8. Car parking is well maintained, clean and free of rubbish
9. Integrated public art on car park screening minimises instances of graffiti

4.11 Nature spaces

Reinvigorating existing pieces of underused land such as stormwater basins into accessible green spaces can reduce instances of anti-social behaviour and vandalism.

Introducing features which attract people to the area such as attractive landscaping and shaded areas for seating, as well as providing legible pathways and entries can increase the movement of people to and through the space.



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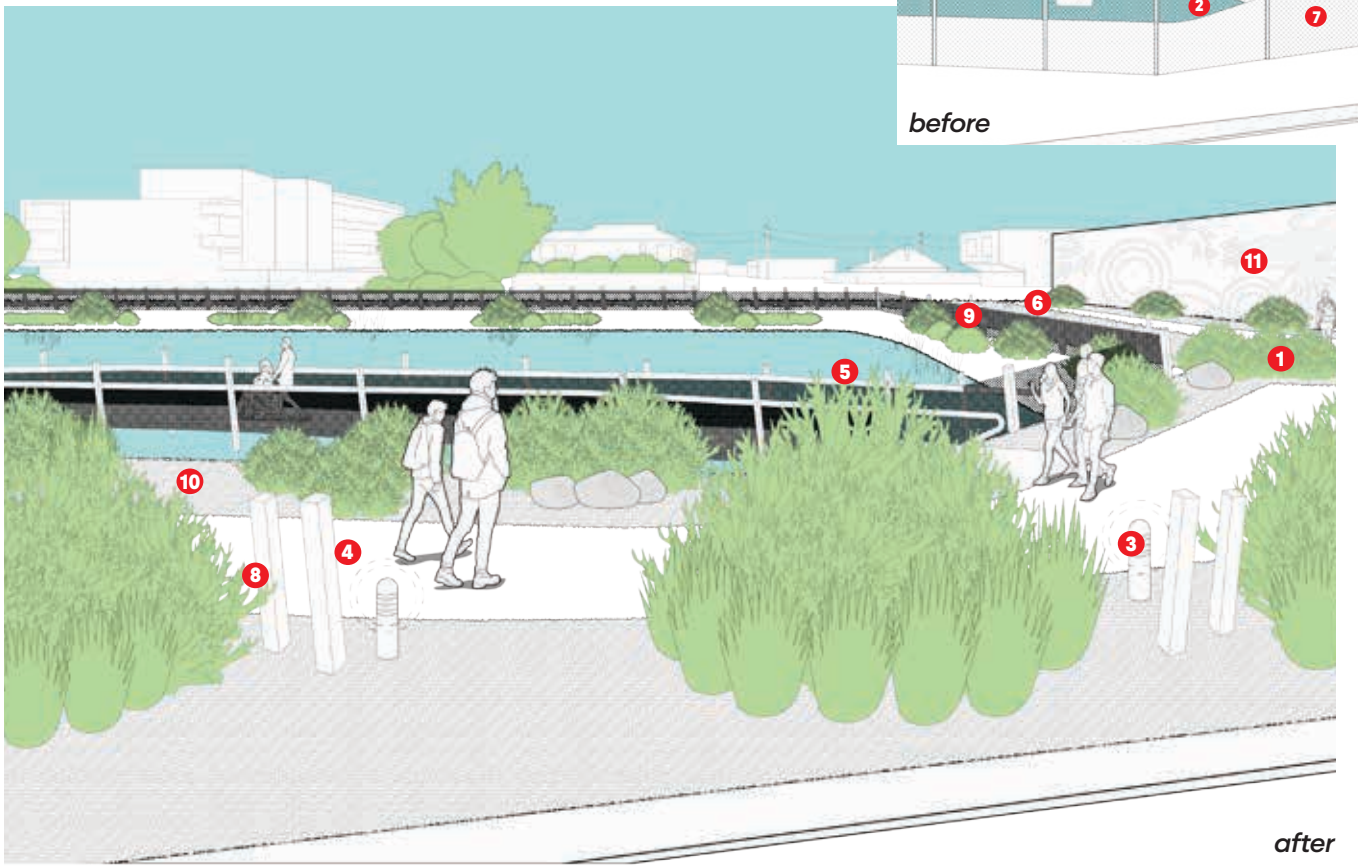


after

Principle 1: Surveillance

1. The introduction of low level planting provides clear sightlines across the space
2. Removal of the fence enhances visibility across the park
3. Introduction of low bollard lighting ensures footpaths are well lit

Principle 2: Territorial definition

4. Pedestrian routes are legible, well lit and support safe movement
5. The park is now inviting, without hostile signage
6. Connecting the footpaths within the park to the greater pedestrian network increases the use of the space

Principle 3: Access Control

7. Removal of the fence encourages incidental movement across the park
8. Discrete use of bollards and landscaping prevents vehicle access
9. Fencing around the water limits access to stormwater

Principle 4: Space management

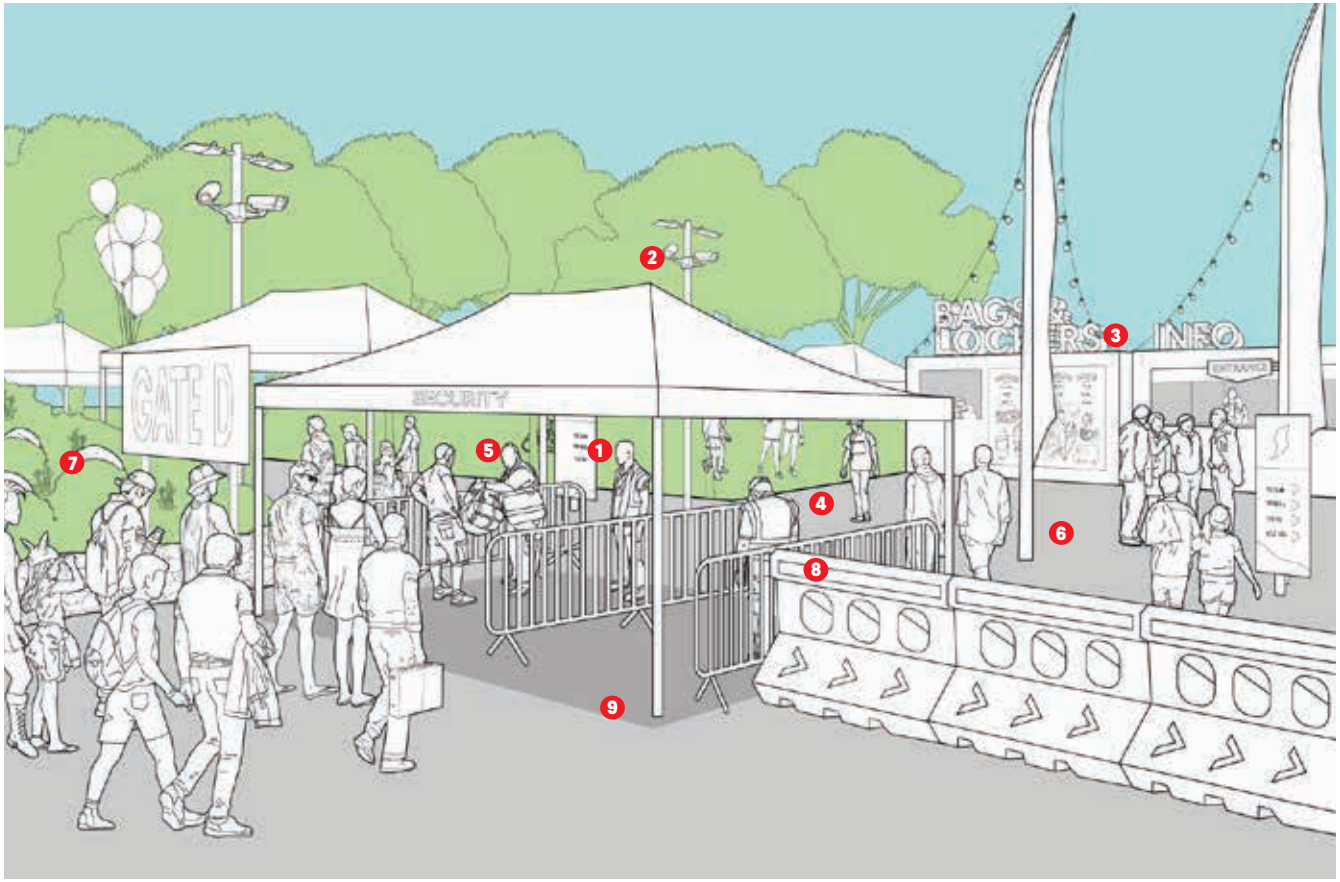
10. The Park is well maintained, clean and free of rubbish
11. The introduction of Integrated public art on the adjacent building minimises instances of graffiti

4.12 Crowded places

High risk

Crowded places can include places that draw large volumes of people on a regular basis, such as a town square and malls, or places that are designed to hold events such as fairgrounds, sporting arenas and concert venues.

Crowded places are considered high risk target locations and attractive to would be attackers. Careful planning is of prime importance to ensure responses are calibrated to the risk level. Bespoke solutions and a combination of approaches tailored to context and place may be required to actively attract people to a space that is safe and secure.



Principle 1: Surveillance

1. Clear sightlines between entry and gated areas
2. Lighting and CCTV designed to be located at (temporary) security checkpoint

Principle 2: Territorial definition

3. Strategically placed signage aids wayfinding, legibility and assists to prevent overcrowding
4. Clearly defined ingress/egress point and internal access ways

Principle 3: Access control

5. Security checkpoint at entry prevent illegitimate use
6. Stand-off distance between checkpoint and main entry
7. Natural land form (landscaped hill) used as a barrier

Principle 4: Space management

8. Fencing is stable and robust
9. Area is kept clean and free of rubbish

Appendices

A

A1 Useful contacts

Australian Bureau of Statistics

Australia's national statistical agency and an official source of independent, reliable information. We tell the real story of Australia, its economy and its people by bringing life and meaning to numbers

https://www.abs.gov.au/

Australian Institute for Disaster Resilience

The National Institute for disaster risk reduction and resilience. We collaborate across sectors to strengthen the resilience of Australian communities to disasters

https://www.aidr.org.au/

Australian National Security

Resource to Australian national security measures for terrorist attack, including publications and other resources

Publications by the Australia-New Zealand Counter-Terrorism Committee (ANZCTC): https://www.nationalsecurity.gov.au/Media-and-publications

Department of Home Affairs – national security

Responsible for national security and law enforcement policy, emergency management, counter terrorism policy and coordination, critical infrastructure protection and countering violent extremism programs along with other initiatives

https://www.homeaffairs.gov.au/about-us/our-portfolios/national-security

International CPTED Association (ICA) (Canada)

The ICA promotes the use of CPTED globally and supports local organizations, practitioners and communities that utilise CPTED principles to create safer communities and environments

https://www.cpted.net/

Secured by Design (UK)

Secured by Design is the official police security initiative in the UK that works to improve the security of buildings and their immediate surroundings to provide safe places to live, work, shop and visit

Design guidance reference

https://www.securedbydesign.com/guidance/design-guides

WA Police Force

The Western Australia Police Force is responsible for policing the world's largest single police jurisdiction, covering Western Australia's 2.5 million square kilometres with over 150 police stations across 8 metropolitan and 7 regional districts

WA Police Force Crime Prevention and Community Liaison Unit

https://www.police.wa.gov.au/Our-Community/Crime-Prevention-and-Community-Liaison

WA Police Force Crime Prevention Publications for Businesses and Homeowners

https://www.police.wa.gov.au/Our-Community/Publications

WA Police Force Crime Statistics

https://www.police.wa.gov.au/Crime/CrimeStatistics#/

WA Police Force Protective Security Unit

https://www.police.wa.gov.au/Your-Safety/Counter-terrorism

A2 Definitions

ACCESS AND APPROACH CONTROL - one of the measures to improve safety of a building or location from hostile acts. Where stand-off distances are unable to be achieved, the impact of a hostile vehicle or improvised explosive device can be mitigated and/or reduced by controlling the vehicle's access and approach. Traffic calming techniques such as bends, chicanes (a serpentine curve), right-angled approaches, inclines or speed bumps may be used to reduce vehicle speeds and subsequent severity of impact.

ACTIVE FRONTAGE - building frontage which contains uses that promote activity on the street.

ACTIVE SURVEILLANCE - surveillance through technology and management, such as CCTV and security patrols.

ACTIVITY GENERATORS - features and land uses that attract people, activity and surveillance opportunities, such as picnic areas, cafes, recreation facilities and public seating areas.

ANZCTC - Australia-New Zealand Counter-terrorism Committee.

BARRIER CONTROL - barrier control is a direct and effective way to reduce the impact of hostile vehicle. This takes the form of bollards in various designs; however, if incorporated poorly these can be unsightly and contribute to the perception of a hostile environment. Other approaches include designing natural barriers (e.g. raised levels, land form manipulation and other landscaping techniques).

BLAST MITIGATION -strategies to reduce the impact of bomb blasts and explosions (improvised explosive devices), collectively known as blast mitigation. Primarily these include providing stand-off distance, the use of blast proof materials, blast-proof building design and installation of blast shields. Blast mitigation works to minimise the risk to people and property.

BLIND SPOTS - areas where vision ahead or around is restricted

CCTV - closed Circuit Television, video systems whose access to viewing is private.

COMMUNITY SAFETY AND CRIME PREVENTION PARTNERSHIP - Community Safety and Crime Prevention Partnership (CSCPP) agreements are one of the main ways the WA Police Force works with local governments. The WA Police Force's Crime Prevention and Community Liaison Unit helps local governments collaborate with community partners, such as schools, housing providers, and youth services, to create a plan that will guide local responses to reduce crime and other anti-social activity

CRITICAL INFRASTRUCTURE - critical infrastructure includes, but is not limited to, essential services such as energy, communications, water, transport (ports, rail etc), health, food supply, banking and finance, information technology infrastructure. It is deemed 'critical' because if destroyed, degraded or rendered unavailable, it would have significant wider social and economic impacts on the community, including disruptions to business and government services, or compromised national defence and security.

CROWDED PLACES - crowded places are locations visited by high volumes of people on a predictable basis, such as for sporting events, major tourist attractions (e.g. historical buildings and theme parks) and festivals. These locations can be at risk of a terrorist incident or violent extremism from a range of modes of attack including hostile vehicles and improvised explosive devices.

DISPLACEMENT - occurs where crime is moved away or drawn into new locations, or displaced in time, or to different crime types or crime targets/victims.

ENTRAPMENT - places where people can hide or where there are no alternative exit/exits if confronted.

HOTSPOTS - locations where there is an existing higher than average crime rate.

HOSTILE VEHICLE - a hostile vehicle is one that is out of control or whose driver intends to access an unauthorised or restricted area to cause damage to buildings or structures, death or injury to people, disruptions to business, or generate publicity for a cause. Damage is caused by driving the vehicle(s) at speed (using the vehicle as a weapon) or the vehicle may be used to carry an explosive device to detonate in a chosen location.

IMPROVISED EXPLOSIVE DEVICE (IED) - an improvised explosive device is a bomb constructed in an improvised manner and deployed in a non-conventional military way. It can be used as a roadside bomb and in heavy terrorist actions. Typically IEDs can be either person-borne or vehicle-borne.

LEGIBILITY - the ability of people who are unfamiliar with an area to find their way.

MITIGATION - measures taken before, during, or after a crime event to decrease or eliminate its impact on people, property or a location.

NATURAL SURVEILLANCE - see passive surveillance.

PASSIVE SURVEILLANCE - also known as "natural/informal surveillance", passive surveillance is the incidental or informal surveillance of a location through overlooking from neighbouring uses ('eyes on the street'). This approach relies on clear sightlines, lighting and considered urban design to avoid the creation of hidden or isolated spaces.

PERIMETER DEFENCE - measures to limit or block the unauthorised access of individuals across the perimeter of a site. Due to the nature of their size, and access and egress points, perimeters can create numerous opportunities for undetected attack.

A2 Definitions (cont.)

PUBLIC REALM - public spaces including streets, public open space and other areas used by and accessible to the community.

PUBLIC SPACES - includes open spaces and the green network, that is: recreation spaces, sport spaces, nature spaces and foreshore reserves, as well as streetscapes, civic squares, piazzas, plazas and paved open pedestrian spaces.

SAFETY AUDIT - knowledge gathering of qualitative perspectives from community participants to identify the perceived safety of an area, to identify community safety issues and possible solutions.

SIGHTLINES - the line of sight between the viewer and viewed.

STAND-OFF - stand-off is used as a counter-terrorism measure to reduce the damage to people and assets caused by a hostile vehicle or blast. Stand-off is the maximum possible distance that can be kept between an asset and a hostile vehicle, or the minimum distance or tolerance between an improvised explosive device (including a vehicle borne explosive device) and its target.

TARGET - targets in a terrorist attack can be categorised as people, physical assets, information and processes

TARGET HARDENING - the use of elevated security measures in higher crime risk areas, or to provide protection for higher value assets. Target hardening aims to delay an offence and allow sufficient time for a protective response to occur. Measures may include the use of resilient materials, structural reinforcement and securing openings.

TERRITORIAL DEFINITION OR TERRITORIAL REINFORCEMENT - making clear the boundaries between public spaces, semi-public spaces, semi-private spaces and private spaces.

TERRORIST ACT - an act or threat committed with the intention of advancing a political, ideological or religious cause, and which is intended to coerce or intimidate an Australian government, a foreign government, or sections of the public. It aims to cause serious physical harm or death to people or serious damage to property, creates a serious risk to the health and safety of the public, or seriously interferes with, disrupts, or destroys, an electronic system.

URBAN DESIGN - a design-based approach to shaping built environments and optimising the performance and efficiency of neighbourhoods, towns and cities, paying attention to the way spatial structures work, the interface between public and private realms and natural environment, cultural values, integrated movement systems and built form.

VULNERABLE GROUPS - individuals, or groups of people who are likely to perceive themselves or be perceived as being unsafe or insecure or at risk of violence in the community, or at risk of committing crimes and being exposed to the criminal justice system.

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