

Planning Scheme Policy 16 – Safer by Design

16.1 Purpose

The purpose of this policy is to:

- (1) Support statements from Redland Shire Council's Corporate Plan 2006-2010 and the Redlands Planning Scheme
- (2) Create safe and secure urban environments by incorporating Crime Prevention Through Environmental Design (CPTED) principles into planning, design, construction, management and maintenance of the urban environment
- (3) Promote and integrate safety and security measures in the planning, design and construction of development applications under the Redlands Planning Scheme, Council capital works programs and the management of the public realm
- (4) Raise awareness of CPTED/Safe Design principles and applications
- (5) Reduce opportunities for crime, fear of crime and promote social well-being
- (6) Optimise the community's use of public space

16.2 Context

The intent of this policy is to maintain Redland Shire's status as a safe place to live, work and visit by enhancing perceptions of safety and improving quality of life. Under the Corporate Plan and Redlands Planning Scheme, Redland Shire Council aims to enhance safety and security in a range of public, semi-public and private spaces. This policy assists developers, designers, planners and property owners to understand and implement the principles of safe design.

16.3 Policy and Standards Compliance

- (1) All approved works undertaken for a range of uses are to adhere to the principles of the Safer by Design Policy as well as, but not limited to –
 - (a) relevant Redland Shire Council Policy Procedures;
 - (b) relevant Redland Shire Council Guidelines;
 - (c) relevant Redland Shire Local Laws and Subordinate Local Laws;
 - (d) relevant Australian Standards;
 - (e) the Building Code of Australia;
 - (f) other relevant design and construction standards

16.4 “Safer by Design” Principles

Safe design or CPTED is the “...application of a range of design initiatives and principles to a...location...to minimise the potential for that site to facilitate and support criminal behaviour. CPTED is based on the premise that proper design and effective use of the physical environment can produce behavioural effects that will reduce the incidence and fear of crime thereby improving quality of life” (Crowe, 1991). There are four fundamental principles of CPTED which apply to various land use types:

1. Surveillance
2. Access Control
3. Territorial Reinforcement
4. Management and Maintenance



1. Surveillance

The monitoring of activities aids in the detection of illegitimate users. Surveillance can be natural (e.g. observers), organised (e.g. security patrols) or mechanical (e.g. security cameras). High levels of surveillance (particularly natural surveillance) decrease the anonymity of illegitimate users and maximise feelings of safety for legitimate users.

1.1 Concealment reduction and clear sight lines

When legitimate users can see what is around them and illegitimate users have no opportunities for concealment, natural surveillance is optimal. Surveillance is applicable to all spaces, but some principles to consider are:

- Alleyways and predictable routes are designed and constructed with clear sightlines and traverse short distances so that there is no entrapment zone for users
- Corner mirrors can increase lines of sight on blind corners
- Building entrances and windows should be oriented toward the street to enhance opportunities for natural surveillance

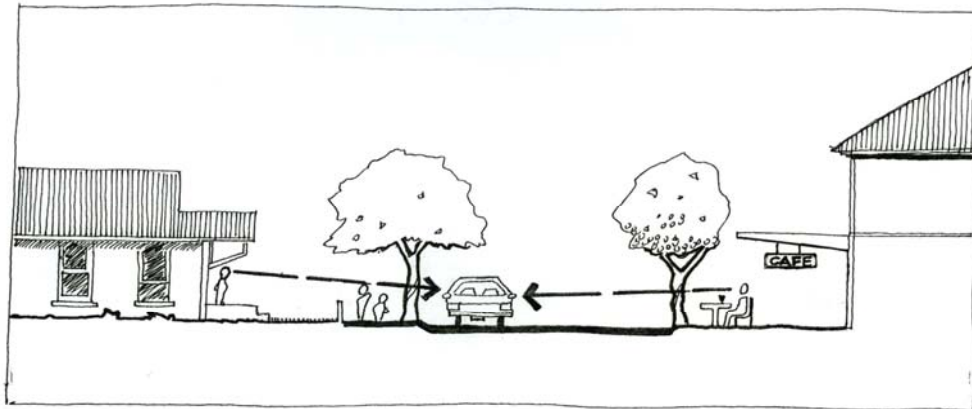


Figure 1. A number of observers have clear sight lines to the streetscape allowing for natural surveillance



1.2 Lighting

Lighting can improve real and perceived levels of safety. Appropriate lighting makes legitimate users aware of their surroundings while minimising opportunities for concealment. Considerations for effective lighting include:

- Lighting should comply with Australian Standard 1158 Public Lighting Code
- Lighting design and placement is to illuminate potential areas of concealment and is to project illumination so that a human face is easily discernible from a suggested distance of 15 metres
- Lighting is to render people, colours, vegetation and objects correctly. i.e. ‘white’ light. Particular attention should be given to pathways, driveways and common external spaces
- Placement of lighting and plants should not conflict with the provision of a safe pedestrian environment
- Building/pathway entrances and exits should be well lit
- Lighting should be provided only where the need or high public use is evident
- The type and structure of the lighting should be dependent on need, location and other environmental factors
- Natural surveillance in car parks can be enhanced with lighting but relevant Australian Standards for high use car parks, disability access and larger car parks must be considered where relevant

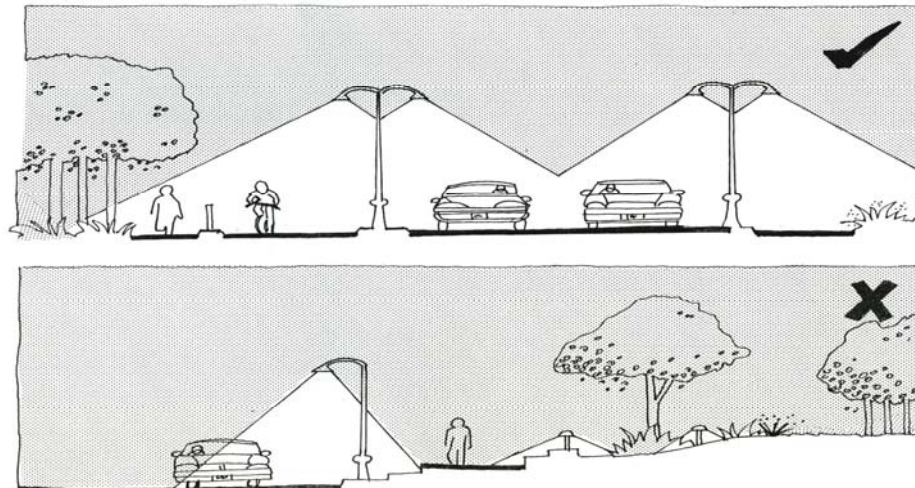


Figure 2. Lighting design is to provide safe levels of visibility

1.3 Vegetation

Vegetation enhances the amenity of public places but inappropriate location of plant material can potentially jeopardise real and perceived levels of safety. For vegetation to contribute to natural surveillance the following should be taken into account:

- Trees located near pathways, car parks, driveways, street corners and at the entry to buildings are to be maintained with a clear trunk to a suggested height of 1 metre. Understorey planting is to be groundcovers to a suggested height of 500mm
- Planting along pedestrian paths is to be restricted to groundcovers and shrubs at a suggested height of 500mm and within a suggested 2 metres on either side of the path
- A regular maintenance regime must be undertaken so that vegetation is not overgrown, rubbish is removed and the area looks cared for and respected

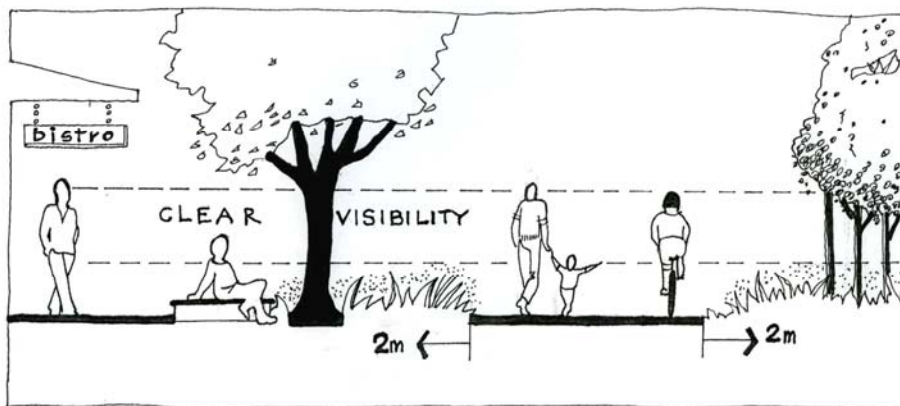


Figure 3. Vegetation should not obscure sight lines and movement



2. Access Control

Access control is achieved with design features that guide legitimate users through a space, highlight entrances/exits and deny offenders access to targets.

Access control can also incorporate “target hardening” or the physical securing of buildings and places to deter offenders. Amenity must be balanced with target hardening measures because excessive target hardening, such as excessive use of bars or gates, can create a fear of crime and impact upon community well-being.

2.1 Movement and access

Safe movement and access promote the use of a space and reduce vulnerability to crime. For example:

- Ensure there are no entrapment zones in the area, allowing users to move freely throughout the space and easily exit if necessary
- Avoid movement predictors such as alleyways
- Public access to the rear of buildings should be restricted. Secluded pathways should not be located at the rear of buildings. If this is not achievable enhanced visibility and lighting should be considered
- All entries and exits should be accessible and visible
- Avoid excessive entry and exit points that provide escape routes for potential offenders
- Avoid natural ladders (such as balconies or structures) that aid access to private spaces
- Multi-level car parks should have direct access to each level of the building
- Multi-level car parks in mixed-use shopping centres should have lift access to each level of the car park independent of the shopping centre to accommodate after hours users of the car park

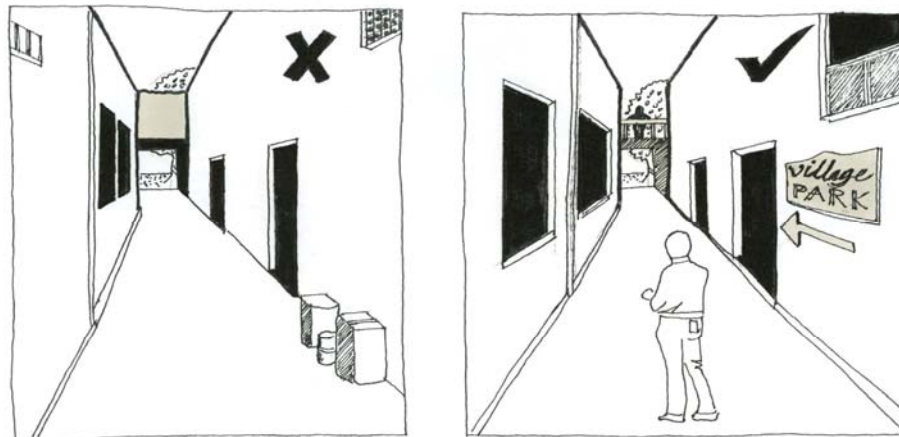


Figure 4. Movement predictors should be avoided but where this is not possible legible connections should be maximised

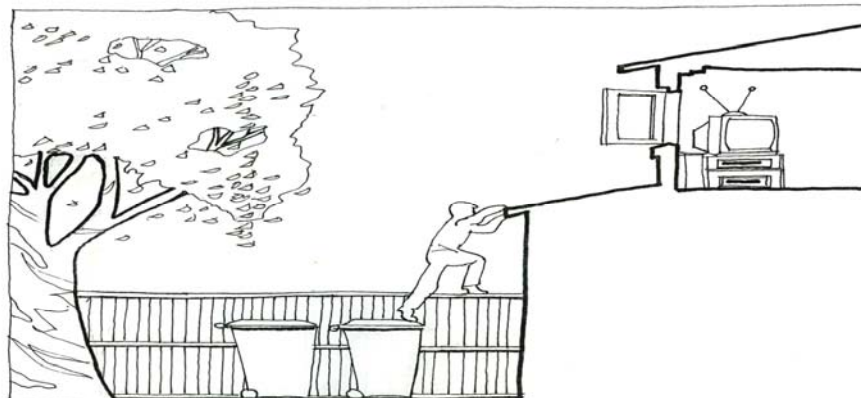


Figure 5. Natural ladders should be avoided

2.2 Way-finding and signage

Symbols, cues and signage assist legitimate users to safely navigate through an area and remove reasons for illegitimate users to be in the designated space.

- Signage should be in accordance with Australian Standard 1428.1 Design for Access and Mobility and in areas such as multi-level public car parks include textures and distinct colours to assist way finding
- Signage should indicate where assistance can be located (e.g. telephones, public transport)
- Signage should be legible from a suggested distance of 10 metres
- Regular signposting along main pedestrian routes is necessary for continuity and reinforcement of way-finding
- Directional and assistance signage and maps should be illuminated if the space is used at night



Figure 6. Clear signage and legible connectivity assists in way-finding



2.3 Fencing and gates

Fencing can effectively control access but if not appropriately designed and constructed can reduce opportunities for natural surveillance. The following should be considered:

- Acoustic barriers that have openings for pedestrian connectivity should have vandal-resistant permeable gates and side barriers so that visibility and safe access for users into the adjoining space is assured
- Play areas in parks should be located so they are visible from adjoining properties. Low permeable fencing can deter illegitimate users from the play area
- Gates should be designed with some permeability to permit surveillance of alleyways

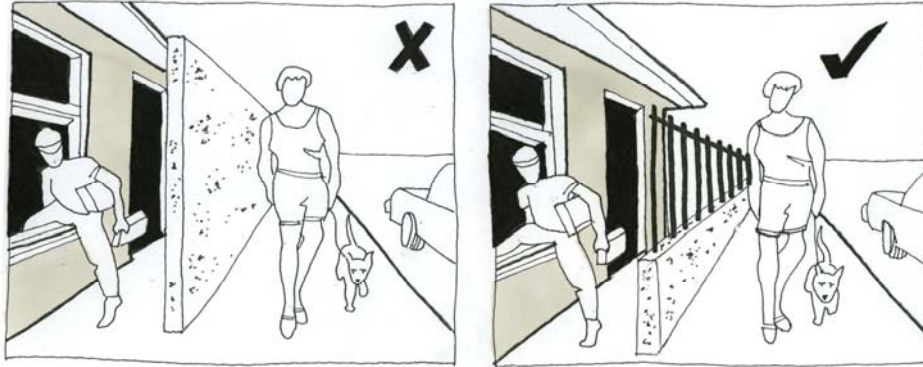


Figure 7. Solid fencing prevents visibility but permeable or semi-permeable fencing promotes natural surveillance

2.4 Target Hardening

Target hardening involves entry control systems such as:

- Access control measures at entry and exit points
- Allowing residents-only access to private car parks
- Security films on windows near doorways
- Security screens and grilles
- Alarm systems
- Security locks



3. Territorial Reinforcement

Well-designed physical features should delineate private, semi-private and public space. This clarifies ownership of an area while assisting in the timely detection of illegitimate users.

3.1 Clear definition of boundaries

The design and layout of an area should define ownership and the intended use of space so that illegitimate use of the area is apparent to observers and so is less likely to occur. A range of techniques can be used to define boundaries, ownership and intended use:

- Signage, particularly located at decision points
- Physical barriers (fences) and subtle barriers (vegetation)
- Environmental cues such as changes in surface material, grade/elevation and lighting levels
- Personalising and marking territory through creating distinctive entries to private spaces

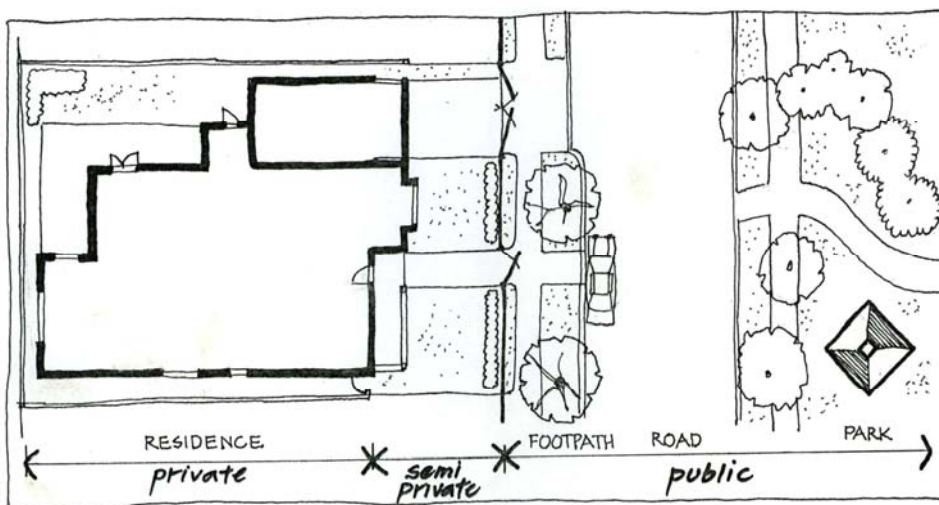


Figure 8. Clearly marking the distinction between private, semi-private and public space allows for territorial reinforcement



4. Management and Maintenance

Spaces which are well managed and maintained enhance feelings of safety, reduce illegitimate use, and increase legitimate use. Management and maintenance indicate ownership and guardianship and can be a territorial reinforcement measure.

4.1 Activity mix and generation

The combination of a range of activities and uses in a precinct has the potential to encourage legitimate use and enhance natural surveillance. Generating activity mix prevents the concentration of vulnerable activities (such as hotels and bars) and facilitates the use of space at various times. Consideration should be given to:

- Encouraging public spaces to be used during the day and night
- Avoiding potentially conflicting uses
- Balancing potentially crime generating activities (such as licensed premises) with other uses
- Promoting ground level activity

4.2 Maintenance

Prompt maintenance and repair indicates ownership and guardianship over an area which prevents crime and antisocial behaviour. Easily maintained materials should be considered in the design and construction stages of a development. This can be achieved through:

- The use of robust and durable materials such as stainless steel wherever possible
- Selecting easy-to-maintain surfaces such as tiles and darker coloured paint
- Providing contact details for the public to report vandalism or damage to facilitate prompt repair

16.5 Application

This policy is applicable to all material change of uses as determined by the Redlands Planning Scheme, capital works programs initiated by Council and management of the public realm.

Examples of land uses and public spaces where the application of safe design principles are particularly relevant are:

- Residential areas (multiple dwellings)
- Open spaces such as parks
- Industrial and commercial land use
- Neighbourhood and street design
- General building design
- Educational institutions and care facilities
- Service stations
- Car parks
- Public transport hubs and stations
- Placement of ATMs and public phones
- Pedestrian underpasses and overpasses to transport corridors
- Entertainment venues and places of worship
- Shopping centres and town/activity centres
- Public amenities
- Pathways, alleyways and laneways

