Statement of Purpose

This chapter is intended to provide a direction for the design and development of safe and comfortable multi-storey residential developments that are consistent with the best applications of CPTED principles. It is not intended to serve as a checklist or an exhaustive resource as CPTED principles should be applied on a situational basis.

Introduction

The development of safe and secure housing is more than just achieving good site layout, building design, landscaping, physical security etc. It also requires the development of an environment whereby residents are given ample opportunity to see each other, interact with each other and build a sense of community. This commonly occurs through the provision of formal and informal facilities that serve to bring the residents together. This can include recreational/meeting spaces, community gardens, mail boxes, bulletin boards etc.

To facilitate the development of the site, you should begin by completing the space assessment found in Chapter 3. This will assist you in locating driveways, parking lots, drop-offs, buildings, amenity spaces etc. in the spaces that can best support them.

Once this is accomplished, the design of the property may begin in earnest. Begin by developing a building design that meets your primary objectives and is legible to a first time visitor. Support these objectives by designing the building’s façade, grounds and amenity spaces to meet the intended use and minimize leftover space. Consider ways to improve way finding particularly as it relates to large or similar looking spaces.

Legible design

Legible designs assist first time visitors in finding their way about a property by organizing the space in such a way that entrances and other key features are located where people would naturally expect them as drawn from their experience with other similar properties. Designs that lack legibility can create confusion and should be avoided wherever possible.

Desire lines

Desire lines represent natural shortcuts through a property by residents and outsiders. In order to minimize the potential for externally generated desire lines be extremely cognizant of the context of the development with existing and proposed neighbours. Where the development is physically situated between an outside development and retail plaza or a school for example, desire lines should be anticipated for the purpose of developing the property in such a way that the desire line is precluded. This will require the development of a strong transition between public, semi-public and private space featuring symbolic and physical barriers that may include fences and built form.

Siting of building(s)

The siting of the building can play a critical role in the development of desire lines, leftover spaces and opportunities for adjacencies. It can also have a major impact on eyes on the street and the site itself.

Structures can be used to reinforce boundaries or transitions between public, semi-public and private space.
Leftover/remnants of space

Leftover or ambiguous spaces generally lack any clue as to what it is for and who it is for and as a result are commonly used by loiterers. Leftover spaces can be created by the void between a property line and the above grade projection of an underground parking structure. All space should be assigned a purpose. Dead, unobservable spaces should be avoided.

Layout of Building

Configure the corridors so that they facilitate natural surveillance from within the corridor and waiting areas such as the elevator lobby. Minimize alcoves and hiding spots especially around suite entry doors.

Provide for a clear and direct corridor(s) especially from transitional areas of the building. Limit the need for changes in direction and multiple corridor doors.

Adjacencies

Take advantage of opportunities for direct relationships that maximize natural surveillance, access control and territoriality and improve the functioning of the property. Common examples of areas that benefit from direct relationships include visitor’s parking lot and main entrance, laundry room and toddler’s outdoor play area; lobby and mail box spaces and recreation rooms with direct access to the exterior.

Storage

Consider providing in suite storage as opposed to a common storage facility. Where common storage is provided, develop the access point from within the interior of the building in proximity to an activity generator such as an elevator lobby. Wherever possible separate the storage area from other common areas such as laundry rooms.

Wayfinding

Wayfinding includes a variety of techniques directed at orienting people as they move about a space. Wayfinding techniques are meant to complement legible design and should not be a substitute for it. Wayfinding techniques can include signage, colour symbols, site maps etc. Site maps should be used where there is more than one municipal address.

Street numbering

Street numbering should be prominently located in a highly visible area using contrasting surfaces, clear writing and night-time illumination.

Maintenance

Maintenance is critical to the ongoing perception of safety as it relates to the environment. In order to promote safety and activity, it is important to regularly monitor and deal with maintenance problems and where they are persistent take proactive steps to prevent a recurrence.

Section 7.1 Grounds

Principle: Design a legible, attractive development that will effectively guide and influence the movement of people through areas of high natural surveillance and defensible space.
Section 7.1.1 Natural Surveillance

Does the design allow us to observe?

Provide ample opportunities for residents and visitors to casually observe all areas of the grounds from within the site.

Is this natural surveillance level responsive to the needs for observation?

Strategically locate driveways, driveway entrances, sidewalks, surface parking lots, parking garage ramps and entrances, parking garage stairwells/outbuildings and outdoor amenity spaces including tot lots, childrens’ playgrounds, tennis and basketball courts, pools and gazebos in areas of high natural surveillance.

Has the need for observation been carried consistently throughout the property?

(a) Landscaping

Select and arrange landscaping so that important sightlines are not compromised now or in the future as a result of growth. Consider high branching deciduous trees and low shrubs or ground cover when choosing landscape material. Where coniferous trees are used be cognizant of the potential screen effect and allow for view corridors (gaps between plantings) to maintain critical lines of sight. Be cognizant of the rate of growth and its impact on a maintenance schedule.

Co-ordinate planting with the lighting plan. Allow sufficient spacing around light fixtures to provide for the unfettered distribution of light.

Promote natural surveillance opportunities with the strategic deployment of outdoor furniture.

(b) Lighting

Ensure uniform lighting of vehicle and pedestrian areas using a white light source. Minimize glare and light trespass by lighting from the perimeter of the property inwards. Provide for the strategic, after hours lighting of play areas, including pools, playground equipment, gazebos etc. so that residents can monitor the use of these facilities outside of normal operating hours by trespassers, loiterers and other abnormal users. Consider motion activated lighting for these facilities where feasible. Be careful to avoid lighting facilities such as basketball courts. This may promote and extend the use of these facilities beyond normal operating hours.

(c) Closed Circuit Television (CCTV)

Strategically locate closed circuit television cameras in areas of high visibility, such as the ramp leading to the entrance of an underground parking garage to maximize deterrence. Consider using:

- motion activated technology,
- a dome housing to disguise a fixed camera mount, and
- providing residents/staff with the ability to monitor the closed circuit television feed through the building’s cable television network.

Post signs at strategic entry points to your property and building advising visitors to your property that they will be videotaped.

Never use a dummy camera as this can give people a false sense of security and can become a liability issue.
(d) Signage

Locate large scale signage/site maps so that important sightlines are not compromised.

Section 7.1.2 Access Control

Does the design decrease criminal opportunity by effectively guiding and influencing movement?

Direct normal access to observable areas and prevent access to unobservable areas.

(a) Outdoor amenity space

Fence and gate outdoor amenity areas where appropriate. Reinforce the perimeter at strategic points where a desire line may develop using “hostile” landscape material such as rose bushes or species with thorns. Consider limiting the trespass potential of basketball facilities by providing for removable basketball nets/collapsible standards.

(b) Skateboard friendly surfaces

Limit unauthorized skateboarding by paying careful attention to the development of extensive curbs, concrete planters and other bench-like surfaces particularly where they are juxtaposed next to smooth, flat surfaces that have a gentle grade. Consider creating regular breaks in the continuity of the edge by developing a notched surface and/or recesses.

(c) Parking structure ramp

Consider strategically locating the ramp to a below grade parking structure to reinforce boundaries and serve as a transition between public and private space.

Photo #17: This ramp creates a natural barrier between the building’s amenity space and the rear alley of a shopping plaza.
Section 7.1.3 Territorial Reinforcement

Does the design act as a catalyst for natural surveillance and access control opportunities?

Develop a transition that indicates the movement from public to semi-public then private space. Accomplish this with signage and the use of symbolic and/or physical barriers at property lines and transitional zones. Transitional zones may be defined by fences, changes to walkway or driveway materials and structures including buildings.

Identify the owner of the property and include a brief trespassing message such as “NO TRESPASSING. Trespassers will be prosecuted.”

(a) Outdoor amenity spaces

Locate outdoor amenity spaces away from publicly accessible space ensuring an adequate transition so that normal users of the space develop territorial feelings.

(b) Surface parking lots

Physically separate visitor and tenant parking. Create a direct and convenient relationship between the visitor parking area and main entrances. Reinforce the intended use by posting signs.

Section 7.2 Building Exterior

Principle: Design an exterior that effectively deals with the movement of people into and around the building.

Section 7.2.1 Natural Surveillance

Does the design allow us to observe?

Provide ample opportunities for legitimate users, engaged in their normal activities, to observe the publicly accessible space around them from both inside and outside the building. Facilitate observation by varying the built form while minimizing alcoves and hiding spots especially next to accessible windows and doors.

Is this natural surveillance level responsive to the needs for observation?

Attempt to match the need for natural surveillance with the available witness potential. Be cognizant of the main sources of natural surveillance. Emphasize natural surveillance of vulnerable areas.

Has the need for observation been carried consistently throughout the project?

(a) Glazing

Maximize opportunities for natural surveillance around the property and at strategic locations such as lobbies and recreational areas. Avoid large expanses of blank walls on any one side of the building.
(b) Lighting
Install lights that provide a white light source.

(c) Landscaping
Strategically locate landscaping along an approach using landscape materials such as high branching deciduous and/or low shrubs/ground cover. Avoid the use of solid fencing which impedes critical sightlines from a public street.

(d) Mechanical forms of surveillance
Provide cctv coverage of the inside of the vestibule. Prominently post signs advising of the presence of video taping for the purpose of deterring criminal activity.

Section 7.2.2 Access Control

Does the design decrease criminal opportunity by effectively guiding and influencing movement?

Direct normal access to observable areas and prevent access to unobservable areas.

(a) Building entrances
Develop an exterior that naturally draws visitors to the main entrance while deemphasizing secondary access points. Avoid developing sittable surfaces that can provide impromptu seating next to the main entrance.

(b) Parking garage entrance
See 4.1.2(g)

(c) Physical security
Provide a mechanical form of access control on the entry doors and consider a door enunciator. Ensure that the mechanism and door is kept in good working order.

Section 7.2.3 Territorial Reinforcement

Does the design act as a catalyst for natural surveillance and access control opportunities?

Create a building design that promotes pride of ownership by residents.

Section 7.3 Building Interior

Principle: Develop a safe and pleasant communal living space.
Section 7.3.1 Natural Surveillance

Does the design allow us to observe?

Provide ample opportunity for legitimate users, engaged in their normal activities, to observe the space around them. Accomplish this by strategically matching areas that require natural surveillance with areas that naturally provide it.

Is the natural surveillance level responsive to the needs for observation?

(a) Entry vestibule

Maximize glazing in and around the entry vestibule.

Photo #18: This entry vestibule is glazed on three sides maximizing natural surveillance and limiting hiding opportunities.

(b) Lobby

Create a dynamic lobby that maximizes opportunities for natural surveillance from a variety of sources such as a management office, mail room, elevator waiting area, corridors etc. Maximize these opportunities by minimizing visual obstructions between these points.

(c) Mail room/pick-up area

Consider developing an exterior service access to the mail room. Configure the area to avoid large hidden spaces and/or corners.

(d) Main floor elevator waiting area

Prominently locate the elevator waiting area so that it is visible to and overlooks the lobby.
(e) Management office

Where a management office is located adjacent to the lobby provide for natural surveillance by introducing a window that allows staff working at their work station to see and be seen by visitors.

(f) Main floor corridors

Strategically locate the corridor entry points so that they offer some natural surveillance to the lobbies. Where the corridor is separated by a doorway (see stairwell/corridor doors next section) introduce glazing to maximize natural surveillance opportunities.

Photo #19: Windows in and around the hallway door provide for natural surveillance and make users feel more comfortable.
(g) Laundry room/equipment

Locate laundry rooms adjacent to active areas such as main floor corridors. Develop a strategic relationship between the laundry room and exterior play areas. Maximize surveillance opportunities by introducing glazing. Design the interior to minimize obstructions and hidden corners from within.

![Photo #20: This laundry room has been strategically located to maximize natural surveillance of the nearby tot lot.](image)

Cash Reload Machines

Locate cash reload machines in active corridors opposite a potential source of natural surveillance such as a management office or mailbox area.

(h) Fitness area

Locate fitness rooms in active areas. Maximize natural surveillance by introducing windows.

(i) Parking

See chapter 4.1.1 and 4.1.2

Has the need for observation been carried consistently throughout the project?
(j) Suite doors

Install a door scope or a good quality peephole viewer that affords a wide angle view. Install 2 peepholes where required for person with disabilities.

(k) Stairwell/corridor doors

Install a fire rated vision panel in all stairwell doors.

(l) Closed Circuit Television (CCTV)

Invest in good quality closed circuit television equipment and provide coverage of the front lobby, entry/exit points and other vulnerable areas such as storage and laundry rooms and unavoidable hidden areas. Provide residents with the ability to monitor these systems with their cable tv. Prominently house the cameras in visible areas utilizing a speed dome. Record the feed and conduct regular maintenance on the equipment and/or tapes. Prominently post signs advising of the presence of video taping for the purpose of deterring criminal activity.

(m) Common area window coverings

Limit window coverings where privacy is not required. When privacy is desired consider a type of blind that can provide a partial privacy option.

(n) Mirrors

Consider the strategic use of large, conventional mirrors in lobbies, elevators and any other location that facilitates natural surveillance within a vulnerable area.

Limit the use of parabolic (security) mirrors to areas where natural surveillance is limited and conventional mirrors are not a suitable option.

Section 7.3.2 Access Control

Does the design decrease criminal opportunity by effectively guiding and influencing movement?

(a) Ingress/egress routes

Provide a mechanical form of access control on the entry doors. Ensure that the mechanism, door and door closer are kept in good working order.

(b) Parking

See Section 4.1.2 and 4.2.2
(c) Roof access

Consider precluding the development of an infrequently used and poorly observed landing and stairwell to the roof by constructing a permanent ladder with a hinged metal sheet that can be secured by a padlock.

![Photo 21: This fixed ladder eliminates the need for a seldom used and often problematic stairwell and landing.]

(d) Corridor ceilings

Avoid using suspended ceilings to limit hiding spots within the corridor.

(e) Recreation room

Provide direct access to the rec room from the exterior. Discreetly design and locate the entrance so that it is not confused with the main entrance of the building.

(f) Fire alarm pull station

Protect the fire alarm pull station with an approved plastic cover.

Section 7.3.3 Territorial Reinforcement

Does the design act as a catalyst for natural surveillance and access control opportunities?

Develop inviting, comfortable and respectful common spaces such as lobbies and hallways that promote use and/or pride of ownership.