



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD



DESIGN AND MANAGEMENT GUIDELINES FOR A SAFER CITY

Best practice guidelines for the creation of sustainable, safe and lively neighbourhoods in Cape Town.

Making progress possible. **Together.**

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1.0 INTRODUCTION

The high levels of crime and violence in Cape Town, as experienced by the communities who live here and made evident by the crime statistics, require urgent attention and redress. Crime and violence deny individuals and communities many of the fundamental rights that are enshrined in the Constitution, including the right to human dignity, the right to freedom and security of the person, and the right to freedom of movement and residence (Constitution of the Republic of South Africa, 1996).

Improving levels of safety is central to the creation of a vibrant and healthy society. The City of Cape Town regards safety as a critical issue, and identified safety as the second pillar of the City's vision as articulated in the Interrogated Development Plan (City of Cape Town, 2012). The City is in the process of developing a crime prevention strategy that seeks to address the social, economic and environmental aspects underpinning the high levels of crime in Cape Town in a holistic and comprehensive manner. This builds on almost a decade's experience gained through the Violence Prevention through Urban Upgrading (VPUU) programme run by the City of Cape Town and co-funded and supported by the German Development Bank KfW.

Clearly, to make a positive impact on the city, the focus needs to shift away from the negative aspects of crime prevention, towards improving levels of safety more generally. This guideline document focuses on situational crime prevention, and recognises the positive role that spatial planning and design can play in creating safe environments, where crime and the perceptions of crime are reduced.



SOME OF THE NEGATIVE RESPONSES TO A PERCEIVED LACK OF SAFETY - NEGLECTED OPEN SPACES FORTIFICATION, ABANDONED SPACES AND GATED DEVELOPMENTS

PROBLEM STATEMENT

There is a direct relationship and complex interplay between experiences and perceptions of crime, and our responses to a lack of safety. The list below highlights the fact that our current responses to crime and violence are exacerbating rather than improving the situation, and highlights the need for change:

- Our public open spaces (parks and ecological areas) are perceived as dangerous, leftover spaces; are not used in a positive manner, and have become places for illegal activity, crime and violence.
- Communities, specifically vulnerable groups such as the disabled, women and children, fear using streets and open spaces, as they feel vulnerable and isolated while doing so.
- Citizens are reluctant to participate in social and recreational activities, as there is no safe way to get to the facilities where these activities are held.
- Due to the threat of crime and vandalism, and the associated costs to maintain public infrastructure, public facilities are being fortified and fenced off, heightening perceptions of criminal activity.
- The need to have security services at public facilities is diverting resources away from more critical development needs.
- Home and business owners have fortified their houses and buildings, giving the impression that levels of crime are much higher than what they actually are.
- Crime has had a negative impact on property values, leading to disinvestment and neglect. This is compounded by the fact that lower property values mean reduced revenue from property tax for the City, leaving the administration with fewer resources with which to address issues of safety.
- Some communities have begun to privatise the public environment through the establishment of gated developments and city improvement districts (CIDs), where public space and the use thereof are actively managed and controlled.
- Some communities have taken law enforcement into their own hands through acts of mob justice and vigilantism.

INTENT

These guidelines focus on situational crime, and the intent is to encourage good design, sound public management and community involvement in order to facilitate the development of a safe environment:

1. Where people experience less crime and violence;
2. Where criminal activity is easily detected;
3. Which is less at risk of vandalism; and
4. Where perceptions of safety and personal security are increased.

This approach emphasises that improved safety cannot be achieved by individuals acting in isolation. Improving safety is a collective responsibility best achieved through partnerships. This approach is also based on a rich body of theory, research and practice, which focuses specifically on crime prevention through environmental design (CPTED). The main emphasis is on the design and management of the physical and spatial environment within which crimes are committed. More specifically, the guidelines seek to improve safety within the public environment, namely public streets, parks and open spaces.

INTENDED AUDIENCE

The guidelines are intended to assist a range of stakeholders with an interest in working towards creating safer environments. These include:

- individual property owners;
- facility/building management teams;
- local communities;
- managing agents of CIDs;
- neighbourhood watch teams;
- homeowners' associations;
- developers and designers;
- officials implementing projects or strategies;
- officials advising applicants and developers on development applications;
- officials assessing development applications; and
- politicians and decision-makers approving development applications.

A CITY-WIDE APPROACH

It may seem self-evident to most people, but the nature of crime varies greatly depending on where it happens within the city. Crimes that occur in public open spaces, city centres, residential suburbs, low-income and informal settlements differ in terms of type and intensity, and thus require different responses.

This does not mean that the principles or objectives of how to address the problem necessarily need to change, but rather that the manner in which the principles are applied will need to be tailored to the specifics of the location.

Therefore, it is important for any intervention that seeks to improve levels of safety to be sensitive to the type of crime as well as the underlying urban, social and economic factors, so that interventions can be directed and targeted.

HOW TO USE THESE GUIDELINES

These guidelines are divided into three parts:

- Chapter 1 - provides a brief introduction to the theme of safety.
- Chapter 2 - provides an explanation of the methodology that should be followed when responding to issues of safety.
- Chapter 3 - provides good-practice advice on how to respond to issues of safety.

The illustration below explains the layout of these guidelines for maximum user-friendliness.

Safety objective

The bold heading at the top of the page
- What needs to be achieved to improve levels of safety

Safety objective explanation

In the light-blue box - Provides an explanation as to why the safety objective is important

Safety principle

Blue heading - Basic principles that will help achieve the safety objective

Safety principle description

Black text - A brief explanation as to how to meet or achieve the safety principle

Images

- To illustrate what the principles seek to achieve. Examples of good and bad scenarios are provided to promote thorough understanding of the principles

Generic guidelines

- General good practise advice divided into themes

3.2 SURVEILLANCE AND VISIBILITY DRAFT 09.06.2014

3.2 INCREASED SURVEILLANCE AND VISIBILITY

There is an unwritten rule for safe cities which goes, "Look out for one another". To give effect to this rule people feel they need to be present in the space; security they need to be able to see each other; and thirdly there needs to be a social obligation for all citizens to ensure that people using the spaces outside of their homes or places of work are safe. The combination of presence, visibility and social responsibility come together in term surveillance. Increased surveillance ensures that people feel safe on the street, that people can be assisted when required, that illegal, criminal and antisocial behaviour is visible and that offenders are identifiable. The following measures help increasing levels of surveillance:

Encourage movement and activity along the edges of ecological areas, sports facilities and open spaces

A road and footpath is the preferred interface between an open space and housing development as it increases levels of visibility, facilitates access for management and maintenance and in some cases doubles as a life belt. The road ensures that there is constant movement and activity along the edge of the open space, bringing life and eyes into the space throughout the day. Constant activity along the edge discourages illegal dumping and antisocial behaviour as perpetrators are easily identified.

Design and maintain the landscape to increase the potential for passive surveillance

Dense bush, shrubs, low hanging branches and alien vegetation limit views into open spaces and create hiding places for offenders. In the design and maintenance of all open spaces the type of vegetation specified should seek to increase the potential for passive surveillance.

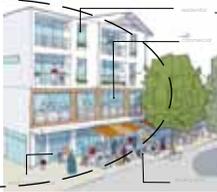
Intensify land use and activity

The feeling that a place is safe is determined as much by the concentration of potential victims as it is with the presence of potential offenders. The greater the number of people present in an area, whether living or working there or making use of the public amenities on offer there, the more eyes on the street. Land use changes such as densification can assist in bringing more people into an area and in so doing get more eyes on the street.

The intensification of land use and redevelopment under utilised sites should generally be supported but this needs to be managed carefully to avoid the negative implications and perceptions associated to higher density environments.

Encourage a mix of uses and activities

A mixture of uses within a neighbourhood gives many more people a reason to be in the area during different times of the day. The very presence of this diverse range of people in a neighbourhood increases the number of eyes on the street and therefore levels of safety. Informal nodes are often the best guardians of streets and spaces and should be encouraged in areas where appropriate.

AND MOVEMENT ALONG EDGES INCREASING SURVEILLANCE

BROADENED IDENTIFICATION OF ACTIVITIES AND A MIX OF USES ARE ABLE TO BRING PEOPLE INTO AN AREA

BEFORE



A NARROW ADJUNCTION ROUTE AND CORNER NOT SPOT THROUGH INADEQUATE VISIBILITY RESULT IN A POOR SCENARIO

AFTER



WELL-PROPORTIONED OPEN SPACES, OVERSHADING AND COMFORTIVE PLANTING CAN HELP IMPROVE LEVELS OF VISIBILITY

Urban Design

- Movement routes should only be provided if they are likely to be well used.
- Proposals for new movement routes should emerge from a thorough analysis and understanding of the place and respond positively to the way people move and the generators of movement.
- Gated development and large impenetrable land uses like industrial estates should be avoided to make it convenient to walk through an area.
- Movement routes should retain existing pedestrian desire lines unless these are unsafe.
- Movement routes should be arranged using simple geometries, be as direct as possible and avoid sharp changes in direction.
- When laying out leading areas try and reduce the number of escape routes for petty criminals.
- Movement routes should not be isolated but rather associated to or located close to buildings to ensure that they are overlooked.
- Whenever possible routes should be aligned with local landmarks and environmental features to aid with orientation and improve legibility.

Maintenance

- Movement routes should be generally proportioned and landscaped to avoid creating narrow corridors.
- The start or end of a route through an open space should be visible from either end.
- Good visibility should be maintained from either end and along the length of the route.
- Movement routes should not be routed to the back of buildings.
- Superfluous and secluded access points and routes should be avoided or closed to create a clear hierarchy of routes.
- Movement routes should be well lit.
- Directional signposting should be provided when appropriate and provide clear direction and information.
- Access points to the rear of buildings should be avoided, limited or controlled.
- Ensure that movement routes are well lit, and surfaces are well maintained so that they remain accessible to all user groups including the disabled and people with prams.

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3.3 SAFE ACCESS AND MOVEMENT DRAFT 09.06.2014

Section tab
- Indicates where you are in the document

2.0 APPROACH AND METHODOLOGY

The approach adopted in these guidelines is based on recognition that the city is constantly transforming. Any projects that seek to improve levels of safety need to be seen as part of the life of the city. The methodology suggested below has been developed by years of practice and research, and is informed by the City's experience of working with communities through the VPUU programme. The guidelines suggest a rough outline of how to go about improving safety within a neighbourhood, without getting into too much detail.

UNDERSTAND THE PROBLEM BEFORE ACTING

The situational-crime prevention approach begins by getting a better understanding of the area or neighbourhood where crime is experienced. This requires a level of analysis to assess various aspects of the environment in order to help determine what the most appropriate response would be. This can be done through a variety of methods, including mapping, perception surveys and the collection and assessment of crime statistics.

Such analysis does not need to be undertaken by professionals or specialists. It's often best done by or in collaboration with local communities. The process of engaging members of a local community and mapping out problems is commonly referred to as a community safety audit.

COMMUNITY SAFETY AUDITS

During a community safety audit, the indicators of crime are agreed with the stakeholders; the types of crime prevalent in the area are identified; specific locations and crime hot spots are identified and mapped, and the shadow areas not ordinarily identified are made visible. A guide for undertaking a community safety audit is provided in annexure A1.

- Community safety audits in themselves provide an effective tool for understanding and responding to crime in an area. The reasons for this include the following:
 - There is often an inconsistency between actual crime levels and the reporting of crime, as many crimes are simply not reported and, therefore, not included in crime statistics. Therefore, community surveys provide a more accurate reflection of the types of crime that are committed and of where they occur.
 - By becoming involved in a project at an early stage, the community is more likely to take ownership of the information and the project, remain involved, and take responsibility for projects post-implementation.
 - If undertaken regularly, participative mapping exercises and regular feedback make it possible to measure impacts and whether there has been a displacement of crime (i.e. whether crime has shifted to another area).
 - Another reason for regular mapping and assessment is that if positive indicators are identified, it is possible to measure the cumulative benefits of initiatives in the area, so that they can be replicated. This is commonly referred to as the diffusion of benefits, and is something that is rarely measured or recognised.



REGULAR CRIME MAPPING CAN HELP MEASURE THE EFFECTIVENESS OF INITIATIVES AND IDENTIFY DISPLACEMENT. THIS IS AN EXAMPLE OF A MAPPING EXERCISE AROUND A SCHOOL IN KHAYELITSHA UNDERTAKEN AS PART OF THE VPUU PROGRAMME.

THREE CRIME FACTORS

Research suggests that there are three factors that influence the nature and level of crime in an area (Clarke, Eck & Newman, 2005). These are as follows:

- Crime generators - places where crime are more likely, primarily due to a high number of people present, and where levels of anonymity are high (e.g. a shopping centre or public transport interchange)
- Crime attractors - activities that may increase the prevalence of crime, such as gangs or drugs
- Crime enablers/deterrents - circumstances that determine people's level of control in a space, such as the presence (or absence) of law enforcement officers or "eyes on the street"

Locations that exhibit the greatest overlap between these three factors are generally where levels of safety are compromised and crime is more likely to occur.

MAPPING AND SPATIAL PATTERNS

When crime is mapped, three spatial patterns can be identified. Crime can either be:

1. point-related (hot spots);
2. line-related (along movement routes); or
3. area-related.

While every situation needs to be analysed on an individual basis, the areas where crime is generally most prevalent are:

- frequently used public areas with high levels of pedestrian traffic, and where levels of anonymity are high, such as public transport interchanges;
- dormitory neighbourhoods where densities are low and the mix of land uses is such that there is little movement or activity for long periods of the day;
- poorly conceived or unplanned movement routes (such as isolated footpaths linking destinations through abandoned spaces);
- situated around large-scale developments (such as gated estates, industrial areas and supermarkets intended for the broader rather than the local community); and
- places of abandonment (exhibiting a number of environmental characteristics such as neglect, vandalism, waste dumping, poor lighting or being hidden from sight).
-

PLANNING INTERVENTIONS

Once the neighbourhood or site has been analysed, the issues and types of crime have been identified and the risks assessed, interventions need to be planned, designed and developed to tackle specific issues. When resources are scarce, it is advisable not to try and address all issues at once. Interventions are most successful when they target one or more of the “factors” noted previously. It is useful to prioritise projects on this basis so as to deal with the root causes of the problem.

The approach advocated in this guideline document is known internationally as crime prevention through environmental design (CPTED). CPTED is a theoretical framework for design that sets out tools to create safe, secure and defensive environments from both a physical and psychological perspective. CPTED is principle-oriented and “place-based”, which means that although the principles are broad and generic, they need to be applied in a site-specific manner and with sensitivity to the conditions of the specific site. The principles and guidelines relating to the safety objectives outlined in detail later in this document should inform the preparation, design and implementation of any proposal.

CPTED encourages and invites experimentation and innovation in the design and management of urban places. If the principles are applied consistently, the lessons learned in one project or area can easily be applied to other projects of a similar nature. Where the contexts differ, the approach needs to be adapted to ensure that the intervention is appropriate to the site and its particular issues.

Bigger, more significant interventions for a neighbourhood may require approvals and authorisation in terms of the National Building Regulations, the National Heritage Resources Act and the National Environmental Management Act, and it is important to engage the relevant authorities, where appropriate.

IMPLEMENTING PROJECTS AND INITIATIVES

There is no “quick fix” or standard solution for improving safety. The types of projects and interventions will vary depending on the scale of the problem and the ability of communities and individuals to contribute or undertake projects.

Even if resources are limited, the compounding impact of many small actions by individual stakeholders may make a very positive difference to the levels of safety.

Where high-level support is required, communities are encouraged to approach their ward councillors with the ideas and initiatives that emerge from their participative planning process and community safety audits. If proposals are well structured and rationally argued, it is much easier for the City to respond and mobilise resources.

POST-IMPLEMENTATION

It is not enough to implement a safety project. Projects and neighbourhoods need to be looked after and cared for. In any neighbourhood, different role-players are responsible for different aspects of urban management. Issues need to be recorded and reported through the correct channels, and followed up with action. It is important that all these role-players play their part and are held accountable for their responsibilities. This is to avoid the “broken window” theory, which suggests that if small signs of neglect are not promptly addressed, they become catalytic for further negative actions, which lead to a steady downward spiral within an area, with negative implications for perceptions of crime and safety.

3.0 GOOD-PRACTICE GUIDELINES

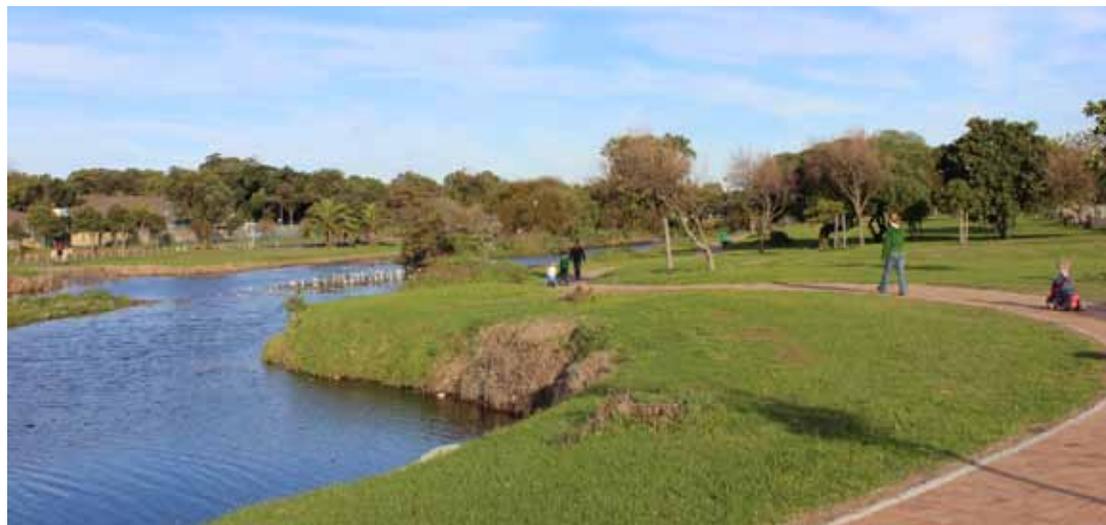
This guideline document is not intended to be prescriptive. It adopts a principle-based approach to guide property owners, city officials, councillors, designers, developers and community members in collectively developing safe environments which are contextually appropriate.

Safety and Crime Prevention Objectives:

The safety objectives that have been used to structure this guideline document are based on the tried and tested "safety principles" that have been developed by the VPUU programme since 2006. Achieving these objectives can go a long way towards increasing levels of safety. The six overarching objectives are as follows:

1. Clear boundaries and collective ownership of public spaces - instilling a sense of 'ownership' among the users of urban places and buildings, so that they identify with and take responsibility for their environment
2. Improved surveillance and visibility - increasing levels of awareness by promoting passive surveillance and the active use of the public realm to increase the number of "eyes on the street"
3. Safe access and movement - providing a safe and integrated network of movement routes, linking key destinations
4. A positive image - addressing perceptions and guarding against environmental decay
5. Positive relationships and layered spaces - creating positive interfaces between buildings and the public realm, a comfortable transition between public and private space, and designing buildings and spaces to make them more robust and resilient against crime
6. Good urban management and monitoring - ensuring the progressive improvement of neighbourhoods and increased perceptions of safety over time

In the following sections, each of the safety objectives and principles will be unpacked in greater detail, and explained through project examples and development guidelines.



3.1 CLEAR BOUNDARIES AND COLLECTIVE OWNERSHIP OF PUBLIC SPACE

Crime is always easier to commit where boundaries are ambiguous and where offenders cannot be readily recognised and identified. In busy public places, strangers naturally tend to be ignored, and offenders can take advantage of this anonymity to commit offences. The built environment can be arranged and designed so that levels of ambiguity and anonymity are minimised, thereby creating a sense of ownership and collective responsibility, which discourages crime. This sense of ownership of a place or space is sometimes referred to as "territoriality".

While the notion of private ownership is generally well understood and appreciated, the notion of the collective ownership of public spaces is an aspect of citizenship that still needs to be nurtured and developed in Cape Town. If individuals have a sense of belonging to a place, this sentiment psychologically generates a sense of entitlement and collective ownership in the minds of the community of users. This collective sense of ownership empowers individuals to take responsibility for their environments, improve their environments for themselves and for others, and approach strangers who may seem out of place.

The first step in achieving a collective sense of ownership is to engage citizens directly and at a personal level, and create a link between the person and the place. The second step is to encourage greater familiarity with a place among the community of users. The third step is to design spaces that invite people into the public realm and extend their perception of ownership beyond what is typically considered as their territory.

The following principles all help to build a greater sense of ownership.



POORLY DEFINED OPEN SPACES WITH NO SENSE OF OWNERSHIP QUICKLY ATTRACT ANTI SOCIAL ACTIVITY AND CRIME.



BLANK WALLS AND NEGLECTED PROPERTY CREATE POOR PERCEPTIONS



WELL-DEFINED AND WELL-USED SPACES ATTRACT POSITIVE ACTIVITY



OVERLOOKING AND SEMI PUBLIC ELEMENTS CREATES A SENSE OF OWNERSHIP



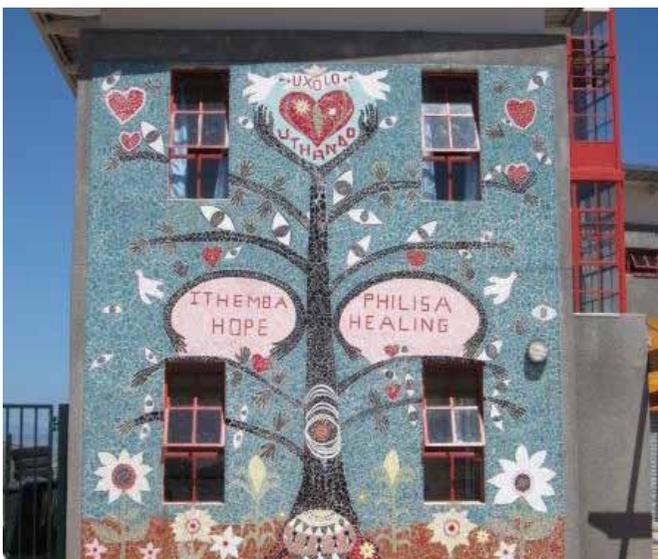
GET THE COMMUNITY INVOLVED FROM EARLY ON.

Engage local communities in the design process

In almost all cases, local communities know where the crime hot spots are and which underlying factors compromise personal safety in their area. It is therefore critical to engage the local community before projects start, so as to ascertain more accurately the nature of the problem and address communities' real concerns.

It is also best practice to engage the community during the design stage to educate and empower future users and establish cooperation and partnerships between the various stakeholders and role-players.

Opportunities should also be explored to involve members of the local community in the implementation of the projects, whether directly in construction activities or producing artwork and street furniture, painting, decorating or planting. These activities root a community to a place and increase their sense of belonging.



MURALS CAN BE USED TO INVOLVE THE COMMUNITY IN THE CONSTRUCTION AND DETAILING OF NEW PUBLIC BUILDINGS.

Engage the end users

It is also essential to ensure that a project meets the end users' needs. This particularly applies to facilities provided by the City or by developers and landlords for their tenants. Specific needs, such as storage and services for traders at public transport interchanges, and storage and change rooms at sports facilities, need to be adequately provided and accessibly located. It is the specifics of how the facilities are designed and where they are placed that matter.

Inclusive design

Considering the needs of a diverse range of users in the design of public buildings and spaces, particularly the poor and vulnerable (women, children and disabled), can go a long way towards improving levels of safety and creating greater levels of social cohesion. This is not only important from a safety perspective, but is also a requirement to enhance a sense of belonging, ownership and pride among all South Africans, as set out in the Constitution.

Consolidate and define ecological areas and open spaces

Fragmented and poorly defined open spaces, whether parks or natural or ecological areas, often attract anti-social activity and become dangerous. This is particularly challenging when dealing with systems of green open spaces, including large parks, sports facilities, river systems, wetland areas, stormwater facilities and conservation areas. In planning new neighbourhoods, open spaces should therefore be consolidated into well-defined networks of interrelated spaces that are overlooked by development.

Approach isolated dunes and wetlands proactively

From an ecological perspective, the Cape Flats originally consisted of mobile dune systems and seasonal wetlands. Due to urban development pressures, many of these systems have become isolated and fragmented, and no longer function as viable ecological entities. In many instances, dunes and wetlands that have become surrounded by development have become urban management problems, particularly when associated with low-income development. These spaces tend to become polluted, degraded and associated with crime and illegal activity, such as waste dumping, unauthorised mining and drug abuse. Preferably, natural systems should be retained and enhanced, but in many cases, it is more practical to fill in degraded wetlands and flatten or reshape dunes, so that the land can be put to productive purpose. When this type of action is considered, it is critical for the nature of the problem to be properly understood and for the required legislative environmental procedures to be followed. Due consideration must be given to impacts beyond the site, particularly how changes to the topography will affect broader urban drainage patterns and natural processes.



INTEGRATING DIFFERENT TYPES OF OPEN SPACE INTO CONSOLIDATED NETWORKS INCREASES LEVELS OF SAFETY AND MAKES THE MANAGEMENT OF THESE SPACES EASIER



DUNES THAT BECAME ISOLATED FROM BROADER DYNAMIC SYSTEMS AND SURROUNDED BY DEVELOPMENT OFTEN BECOME PROBLEMATIC FROM A SAFETY PERSPECTIVE. IN SELECT CASES ISOLATED DUNES CAN BE REMOVED OR RESHAPED TO MAKE THEM MORE POSITIVE SPACES PROVIDED THE NECESSARY ENVIRONMENTAL PROCESSES ARE FOLLOWED.



ISOLATED WETLANDS IN LOW INCOME AREAS NEIGHBOURHOODS AND IN INFORMAL SETTLEMENTS BECOME DANGEROUS AND POLLUTED ENVIRONMENTS. WHERE APPROPRIATE THESE WETLANDS COULD BE FILLED IN AND STORMWATER MANAGED MORE EFFECTIVELY WITH THE USE OF HARD ENGINEERING SOLUTIONS, PROVIDED THE NECESSARY ENVIRONMENTAL PROCESSES ARE FOLLOWED.

Ensure open spaces have a purpose, and rationalise underutilised open spaces

Open spaces are well used when there is a good reason for people to use them. Therefore, when open spaces are created, they need to be designed with intent, and not be leftover spaces that cannot be developed for any other purpose.

Where there is underutilised and degraded open space in a neighbourhood, or where developers turn their back on an open-space network, consideration should be given to reducing the amount of open space by making its edges available for urban development in order to utilise the open space in a positive manner. This, however, should only occur in consultation with the local community and where the nature and extent of the open space allow for this to happen.

Bring undeveloped and vacant land into active use

Like parks and ecological areas, vacant and undeveloped sites too often attract antisocial behaviour and become safety risks. When a site is vacant for an extended period of time, it is important to establish who the property belongs to, why these sites are underdeveloped, and what the obstacles to development are. In some cases, sites are set aside for community facilities (schools, churches, etc.) but remain vacant, as housing delivery is prioritised above the provision of public facilities. In other cases, sites may be privately owned, with the owners holding back on developing their properties until property values allow for development. It is therefore important to engage with property owners and government departments to understand the circumstances. If there is no intention to develop publicly owned sites, these should be rezoned and put on the market for development. Sometimes, holding actions need to be investigated, where vacant sites are landscaped, fenced or given a temporary use, such as a community vegetable garden or sports field.



THE CO-LOCATION OF PUBLIC FACILITIES AND OPEN SPACE CREATES A SENSE OF OWNERSHIP AND ATTRACTS PEOPLE INTO THE AREA. AT VALHALLA PARK, A LIBRARY, SKATE PARK, MULTIPURPOSE AND SPRAY PARK AND SPORTS AND RECREATIONAL FACILITIES LOCATED TOGETHER HAVE CREATED A SENSE OF OWNERSHIP AND INCREASED LEVELS OF SAFETY IN THE AREA.

Co-locate public facilities and open spaces

It is also good practice to integrate and co-locate different types of open spaces, such as parks, sports facilities and rivers, to create larger, more active spaces that are more easily self-regulated and managed from a safety perspective. This also ensures that sports facilities cater for the entire recreational spectrum (the whole family) instead of just the formal sporting codes (sportsmen and women).



WHERE THERE IS AN ABUNDANCE OF UNDER UTILISED OPEN SPACE THE EDGES OF THESE OPEN SPACES COULD BE REDEVELOPED TO PROVIDE POSITIVE SURVEILLANCE OVER CONSOLIDATED OPEN AREAS.

Define the public realm

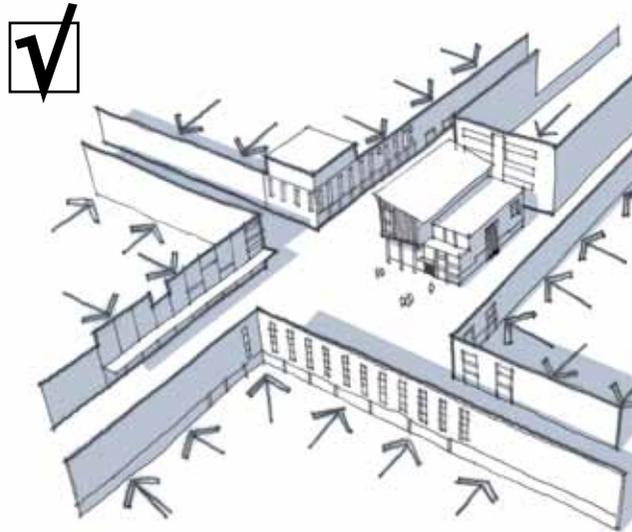
The clear spatial definition of the public and private realms helps differentiate levels of ownership, and also creates clarity between what is private and public. Defining the public realm with built form creates open-view corridors and enclosed and defensible spaces. What is important is that interfaces provide enclosure to the public realm, while at the same time ensuring visual connection between the private and public realm. This does not imply that the interface between the public and private realm needs to be stark or abrupt, however. Rather, the interfaces should be creatively designed, using simple geometries and architectural elements.

Continuous building frontage and perimeter blocks

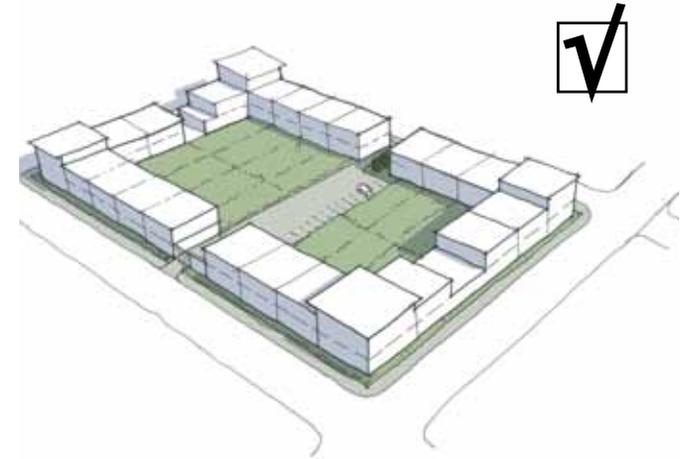
The most effective means of creating a secure private realm is by creating a "wall" of buildings along the edge of an urban block, thereby creating a perimeter block. This means that potential intruders have to enter the private realm through the front of a building, where they are visible to the broader public and other members of the community. This suggests that row housing, semi-detached buildings and attached multi-storey buildings should feature more prominently within the city. This compact type of development is already supported by the City's zoning scheme.

Avoid creating isolated public facilities and pavilion buildings

Public facilities located in open spaces often become isolated from movement routes, and are not overlooked. This makes them vulnerable to vandalism and crime. Wherever possible, public facilities should be part of an urban block, should relate directly to a street, or should back on to existing houses.



USE BUILDING FRONTAGES TO DEFINE THE PUBLIC REALM



PERIMETER BLOCKS CREATE A SECURE INTERIOR FOR URBAN BLOCKS.



AVOID LOCATING PUBLIC FACILITIES IN THE MIDDLE OF AN OPEN SPACE, AS THESE BECOME ISOLATED AND VULNERABLE TO CRIME AND VANDALISM. RATHER LOCATE BUILDINGS ALONG A STREET WHERE IT CAN BE OVERLOOKED.



CONTINUOUS BUILDING FRONTAGES CREATE SECURE ENVIRONMENTS.

Arrange land uses and design interfaces to extend the sense of ownership over the public realm

Collective ownership of public spaces and neighbourhoods is encouraged by the following:

- Locating the more public and active elements of the building on the ground floor, with direct visual connections to the street and public realm
- Designing buildings in such a way that a user's sense of ownership extends from their private domain into the public realm. This is most successfully achieved at ground-floor level through the introduction of architectural elements such as overhangs, balconies over the pavement, or stoeps and colonnades at the front of the building.
- Encouraging the occupants of a building to use the public realm directly outside their buildings on a temporary basis for sitting out (cafes) or displaying goods (shops)
- Encouraging property owners to use the public realm in front of their buildings for decorative/beautification purposes, for example putting out pot plants on pavements where they are wide enough to do so
- Developing trading plans for highly public areas that experience high levels of pedestrian traffic, and positioning trading bays in such a way that traders naturally overlook the public spaces, whilst providing sufficient sidewalk space for pedestrians
- Encouraging on-street car parking, so that people keep their eyes and ears on the street.



ACTIVE USES OFTEN EXTEND PERCEPTIONS OF OWNERSHIP INTO THE PUBLIC REALM.



ON STREET PARKING KEEPS PEOPLES EYES AND EARS ON THE STREET

Design high-quality environments with which diverse groups of people can identify

People identify most directly with the quality of the built environment. The material and spatial qualities of a public space can encourage people to engage positively with it, or to avoid and even vandalise it. While a sense of belonging can be strengthened by embedding places with cultural meaning (through memorialisation, public art and naming), public spaces should always be designed to appeal to a wider audience and fulfil the needs of the broader community. Therefore, it is important to ensure that the spatial organisation of a place, the uses associated with it, the architectural language used as well as the palette of materials are all locally relevant and do not alienate certain user groups (women, children, foreigners or the poor), who might avoid the place if they cannot identify with it.

Create opportunities for lingering

Giving people a positive reason to be in a space can encourage them to use it more regularly. Most people enjoy people-watching, and the arrangement of street furniture such as benches and chairs creates a comfortable environment, inviting people to stay longer and enjoy the qualities of the place and the activities of those who use it. When designing parks, different parts of the park can be designated for different user groups, for example including play equipment for children, exercise equipment for adults, and facilities for pets.

Safe places for children

Parks and open spaces often attract antisocial behaviour, which makes these spaces unsafe or undesirable to visit. In some cases, it is appropriate to fence and gate parks and limit access. This helps to prevent antisocial behaviour, and also allows vulnerable users of a park to “lock themselves in” to prevent potential offenders from opportunistically approaching or threatening them.



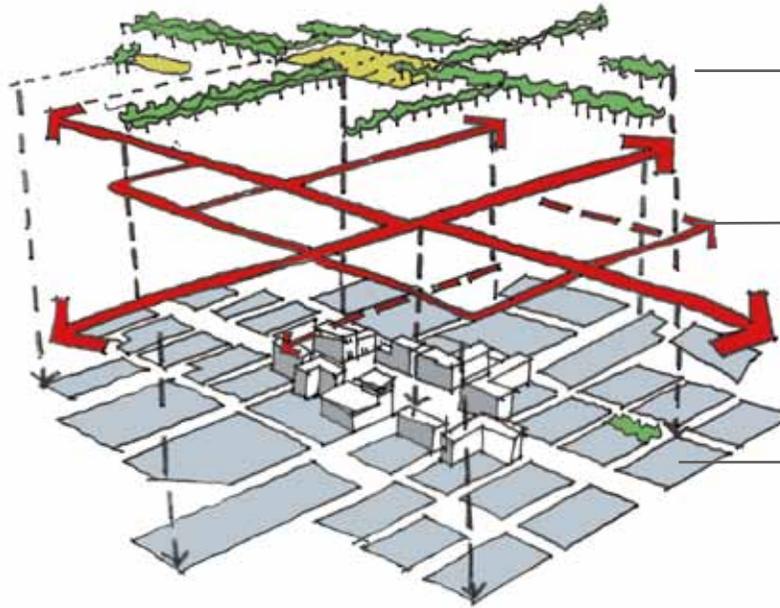
THE ARRANGEMENT OF STREET FURNITURE ENCOURAGES PEOPLE TO SPEND MORE TIME IN THE PUBLIC ENVIRONMENT.



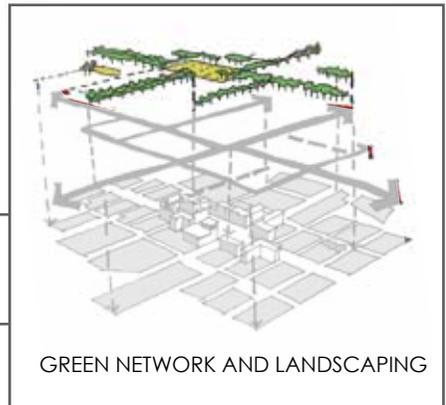
SOMETIMES, GATED PARKS WITH CONTROLLED ACCESS CAN IMPROVE SAFETY FOR CHILDREN.

Make it easy for people to know where they are

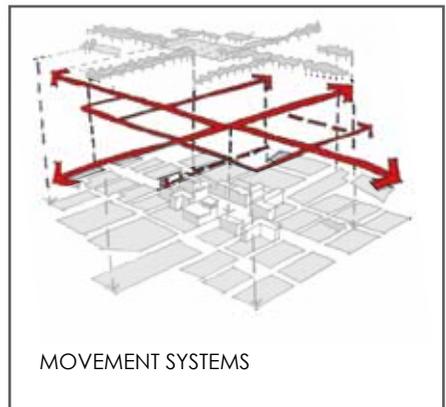
People have an innate ability to understand the layout of a neighbourhood. However, a well-structured and legible neighbourhood makes it easier for people to know where they are and how to get around. A well-structured and legible place enables people to say: "This is my front stoep, my cul de sac, my street, our neighbourhood, our local park, our high street", etc. With each level in the hierarchy, anonymity increases and the sense of ownership changes from personal to collective ownership. Once people begin to identify with this hierarchy and structure, they gain confidence and are empowered to confront strangers or make acquaintance with people they encounter regularly.



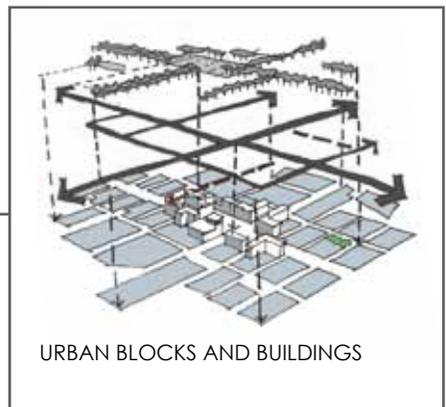
REINFORCE THE STRUCTURE OF THE NEIGHBOURHOOD AND MAKE IT EASIER TO UNDERSTAND, THROUGH THE ARRANGEMENT OF MOVEMENT NETWORKS, TREE PLANING AND BUILT FORM.



GREEN NETWORK AND LANDSCAPING



MOVEMENT SYSTEMS



URBAN BLOCKS AND BUILDINGS

Participation

- Spend time on site and in the neighbourhood to ensure that there is representation from all users of the space at participatory planning workshops.
- Involve the neighbourhood watches, the police and law enforcement in the process.
- Educate people on the value that ecological areas and open spaces add to their community.

Ecological areas

- Where the habitat supports the more active use of an ecological area, footpaths should be installed and designed to ensure that people walking through the area or enjoying nature are visible from adjacent roads and properties.
- Fence ecological areas where appropriate or where risks have been identified and ensure that the entrances and gates to these areas are easily recognisable.

Urban design

- Minimise the development footprint by including the surrounding vegetation/habitat in the development plan.
- Seek to ensure that neighbourhoods are mixed and integrated in terms of tenure and income groups.
- Buildings should be arranged to create continuous edges to the public realm. Perimeter blocks and attached building typologies are encouraged.
- Ensure that sites set aside for public facilities, particularly schools and sports facilities, are “fit for purpose”. These should not be encumbered by drainage or services, and should be flat where possible.
- Encourage inclusive design and create spaces that are gender-sensitive and accessible for people with special needs.
- Consider the needs of all users, including informal

traders, who need convenient access to overnight storage facilities for their goods.

- In designing public amenities (toilets and ablutions), carefully consider the diverse and often competing needs of the poor, the homeless, and vulnerable groups such as women and children who use these facilities.
- In intensely used public places, such as those surrounding public transport interchanges, arrange uses and activities so as to extend perceptions of ownership beyond legally defined property boundaries.
- Cluster and co-locate public facilities and open spaces to bring surveillance and activity to open spaces throughout the day.
- Consider the phasing of development, and work with all stakeholder groups to ensure that sites set aside for community facilities and other uses have a temporary use in the short term.
- Reinforce the structure of a neighbourhood to make it clear and easy to navigate.
- Rationalise underutilised open spaces in neighbourhoods if there are no positive frontages onto the area.

Landscape design

- Ensure that parks are equipped with elements to cater for a range of people from young children to active adults and dog walkers.
- Consider limiting access to parks that experience anti social and illegal activity.
- Provide appropriate signage to inform and reassure visitors of where they are.

Building design and site layout

- Create transition zones between the public and private realms to ensure privacy without reducing surveillance of the street.
- Ensure that public facilities and spaces receive adequate coverage from law enforcement.

Parking

- Encourage on-street parking so that people keep their eyes and ears on the street.
- Encourage smaller parking courts that engender a greater sense of ownership rather than large seas of car parking that increase the level of anonymity.

Construction

- Involve members from the local community and local businesses in the construction process where possible.
- Use local artists for small projects.

Urban management

- Develop trading plans for areas that experience high levels of pedestrian traffic, and position trading bays in such a way that traders naturally overlook the public spaces, whilst providing sufficient sidewalk space for pedestrians.
- When developing a trading plan, allow for flexible trading times that correspond with seasonal changes, such as earlier closing times in winter and longer trading hours in summer, so that traders remain in the public environment for as long as possible.
- Work with the owners of vacant and undeveloped sites to establish which obstacles are holding back their development. If there are no short-term plans for the site, property owners should be encouraged to fence the site, maintain it, or allow it to be used for a temporary activity, such as a community garden or skate park.

3.2 INCREASED SURVEILLANCE AND VISIBILITY

There is an unwritten rule for safe cities that goes: "Look out for one another." To abide by this rule, people firstly need to be present in the space; secondly, they need to be able to see each other, and thirdly, there must be a social obligation for all citizens to ensure that people using the spaces outside their homes or places of work are safe. These three notions of presence, visibility and social responsibility come together in the term "surveillance". Increased surveillance ensures that people feel safe on the street, that they can be assisted when required, that illegal, criminal and antisocial behaviour is visible, and that offenders are identifiable. The following measures help to increase levels of surveillance.

Encourage movement and activity along the edges of ecological areas, sports facilities and open spaces

A road and footpath is the preferred interface between an open space and housing development, as it increases levels of visibility, facilitates access for management and maintenance, and in some cases, doubles as a firebreak. The road ensures that there is movement and activity along the edge of the open space, bringing life and eyes into the space throughout the day. Constant activity along the edge discourages illegal dumping of waste and antisocial behaviour, as perpetrators can be easily identified.

Design and maintain the landscape to increase the potential for passive surveillance

Dense bush, shrubs, low-hanging branches and alien vegetation limit views onto open spaces and create hiding places for offenders. In the design and maintenance of all open spaces, the type of vegetation specified should seek to increase the potential for passive surveillance.



ROADS ALONG THE PERIMETER OF PARKS AND OPEN SPACES ENCOURAGE ACTIVITY AND MOVEMENT ALONG THEIR EDGES, THEREBY INCREASING SURVEILLANCE.

Intensify land use and activity

The feeling that a place is safe is determined as much by the concentration of potential victims as it is by the presence of potential offenders. The greater the number of people present in an area, whether living or working there or making use of the public amenities on offer, the more eyes on the street, and the safer it feels. Land use changes such as densification can assist in bringing this about.

The intensification of land use and redevelopment of underutilised sites should generally be supported, but this needs to be managed carefully to avoid the negative implications and perceptions associated with higher-density environments.



ENCOURAGE INTENSIFICATION OF ACTIVITIES AND A MIX OF USES IN AN AREA TO ATTRACT MORE PEOPLE.

Encourage a mix of uses and activities

Mixed uses within a neighbourhood give many more people a reason to be in the area at different times of the day. The very presence of this diverse range of people in a neighbourhood increases the number of eyes on the street and, therefore, the levels of safety. Informal traders are often the best guardians of streets and spaces, and their presence should therefore be encouraged, where appropriate.

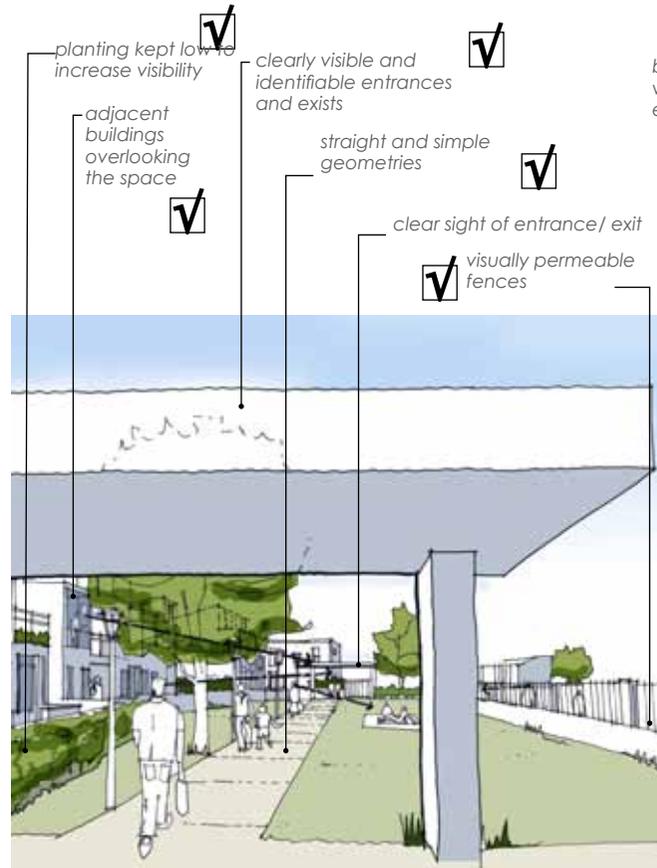
Consider visual connections in design

The spatial organisation of buildings and their surrounding spaces should be considered together to ensure clear lines of sight within any given area, and avoid blind spots. To achieve this:

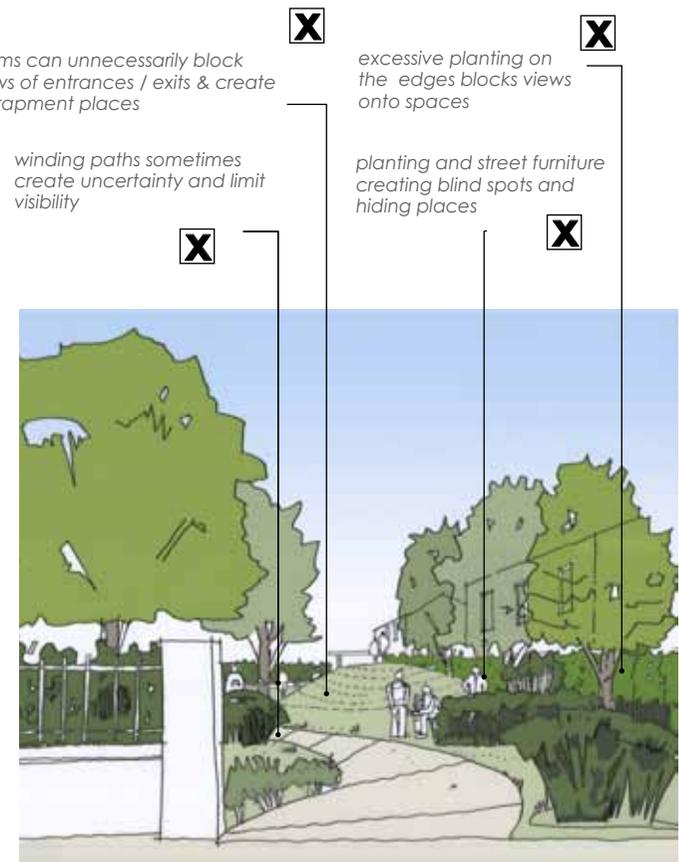
- the shape of the public realm should be simple to avoid creating blind spots, hiding places or entrapment spaces;
- the starts and ends of routes through an open space should be clear and visible, preferably from one end to the other; and
- trees, landscaping, signage, public art and planting should not block views or create blind spots or hiding places.

Encourage active uses at street level

Active streets and building frontages are created when the activities inside a building spill out directly onto the street or into the public space. Most often, active frontages occur on ground level, as they rely on direct access from the inside to the outside of the building through a door or window. Architectural elements such as porches, terraces and balconies can also contribute to making a facade or interface active.



VISIBLE ENTRANCES AND EXITS, SIMPLE GEOMETRIES AND CLEAR VIEWS.



AVOID COMPLEX GEOMETRIES WHICH CREATE BLIND SPOTS.



WELL-DESIGNED MEDIUM-TO-HIGH DENSITY DEVELOPMENT CAN INCREASE LEVELS OF SURVEILLANCE AND PERCEPTIONS OF SAFETY.

Create opportunities for overlooking

Surveillance requires a direct visual connection between inside and outside. It is primarily determined by the location of doors, windows and wall openings in a building, and wherever possible, these should be located so as to overlook the public street or open space that other people use.

Passive surveillance implies that people inside a building provide surveillance of the outside space as part of their normal activities, without consciously knowing that they are doing so. This not only requires that openings are appropriately located, but also that the interior layout of a room or building directs views towards the outside. Examples of this include locating a desk next to a window, so that users have oblique views of the outside, or ensuring that reception desks are located so that the person behind the desk looks outwards.

Avoid placing infrastructure and utility services on street corners or within public spaces

Corner sites are special. They offer the unique opportunity to provide frontage and surveillance onto two streets. This is precisely why corners are the preferred locations for small shops and local businesses. Often, however, these sites are where elements of infrastructure such as electrical substations and sewer pump stations are located. While there may be practical reasons for locating this infrastructure at these points, it is far better from a safety and public-space perspective for this to rather be located in the centre of the urban block.

Electrical substations are also often located in public open spaces. Not only are these visually unattractive and provide no frontage onto the open space, but they also create hiding places for offenders and attract antisocial activity. Electrical substations and other elements of urban infrastructure should rather be located on their own subdivisions and in the middle of the urban block.



LOCATE DOORS AND WINDOWS SO THAT THE STREETS ARE OVERLOOKED.

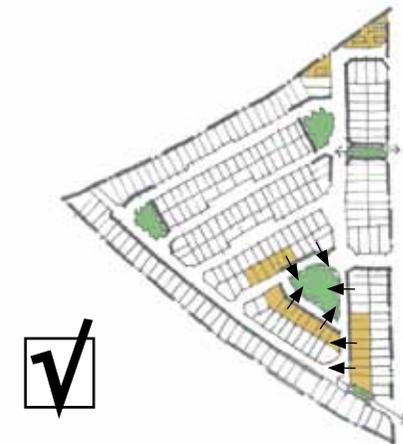


AVOID BLANK WALLS ONTO STREETS AND OPEN SPACES.

EXAMPLE



BUILDINGS BACK ON TO OPEN SPACES AND STREETS CREATING UNSURVEYED SPACES.



PLOTS FACE OPEN SPACES AND STREETS PROVIDING PASSIVE OVERLOOKING.

Use visually permeable fences

To create a safe city, the right to a safe public environment overrides the right to privacy. Therefore, when fencing an open space – whether a private garden, park or ecological area – select a fencing type that allows people to see into and out of the space. This ensures that criminal activity, perpetrators of crime and other illegal activity can be seen and action can be taken immediately. The design and selection of fencing materials around open spaces and ecological areas should also take into consideration the need for small animals and insects to move between and within biodiversity areas. Stormwater may also dam up behind a kicker wall, or be directed into areas where it could create problems. Consult the City's Boundary Walls and Fences Policy for more information.



CREATING ACTIVE EDGES AROUND AN ECOLOGICAL AREA CAN FACILITATE A VIABLE AND SAFE SPACE, AS IN THE CASE OF RONDEBOSCH COMMON.



AVOID CONCRETE PALISADE FENCING THAT LIMITS VIEWS ONTO OPEN SPACES

Provide effective public lighting

Good lighting is one of the most effective means of increasing levels of safety and deterring crime, because it increases levels of visibility when it is dark. Good lighting levels also increase perceptions of safety and reduce levels of fear. The simple objective of public lighting is to shed light on the criminal or criminal activity without spotlighting the victim. Providing a constant and even level of light is more important than the brightness of the light. Bright spotlights should in fact be avoided, as they cast shadows where potential offenders may hide.



POSITIVE SURVEILLANCE OF PUBLIC SPACES FROM STOEPS AND LIVING SPACES.



EVENLY SPACED LIGHTING PROVIDES A MORE EVEN LEVEL OF LIGHT , WHICH INCREASES VISIBILITY AND SAFETY.

Ecological areas

- Ideally, place roads and movement routes along the perimeter of an open space.
- Where the habitat supports the more active use of an ecological area, footpaths should be installed and designed to ensure that people walking through the area or enjoying nature are visible from adjacent roads and properties.
- Ensure that parking areas at the entrance to parks and ecological areas are overlooked by development.

Urban design

- Define the public realm simply and clearly.
- Avoid complicated shapes and geometries in the design of public spaces, which can create blind spots.
- Intentionally create public open spaces and avoid creating “leftover” space that nobody wants or can use.
- Organise activities and uses within a neighbourhood or building so as to bring life and vitality to the street.
- Lay out blocks and plots in such a manner that their addresses and main frontages are directly off the street.
- Use narrow and deep plots to increase the number of houses looking onto the street.
- Avoid locating utility services on street corners or in open spaces. Rather locate them in the middle of the block.

Landscape design

- Avoid berms that obscure sight lines and unnecessarily fragment open space.
- Avoid planting and street furniture that obscure sight lines.
- Specify species of street trees with long trunks to increase visibility from street level.

Site layout and building design

- Place doors, windows and balconies on the street or public side of the building.
- Encourage active uses on the ground floor.
- Locate living spaces on the ground floor, and orientate views towards the street or public open space.
- Ensure that the windowsill heights and window opening sizes are such that they encourage passive surveillance without compromising levels of privacy.
- Where developments adjoin open space and a street, the buildings should “face both ways”, thus overlooking the open space as well as the street.

Parking

- Divide large parking areas into smaller lots, and ensure that these are overlooked by buildings.
- Locate garages and off-street car parking so as not to create long sections of street with no active frontage.
- Avoid inactive frontage and structured parking (basements and semi-basements) at ground-floor level.

Fences and walls

- Use visually permeable fencing for all sports grounds and parks, and ensure that visual corridors are unobstructed.
- Fences and boundary walls should be visually permeable from multiple angles.
- Avoid solid walls (Vibracrete in particular) and concrete palisade fences onto streets and open spaces.

Lighting

- Specify public lighting to provide an even and consistent level of light, and use LED lighting where possible.
- Consider solar-powered lighting in areas that are not electrified.
- Do not compromise the quality of public lighting in the interest of energy-efficiency.
- Provide lighting poles more regularly, at 8 m to 10 m centres and at a height of approximately 3 m.
- Direct public lighting so as to illuminate movement routes and avoid light pollution, particularly adjacent to ecological areas.
- Avoid high-mast spotlights that cast dark shadows.
- Where low-level lighting is used, fittings must be vandal-resistant.
- Where appropriate, provide additional surveillance in the form of closed-circuit television cameras.

Internal building layout

- Shop frontages should provide a visual connection between inside and outside.
- Advertising and stickers on shop fronts and windows are discouraged, as these interrupt potential views into the shop and out into the street. Similarly, window displays should be carefully considered to allow occasional visual connection between inside and outside.
- Arrange furniture to orientate views towards the street or public open space.

Urban management

- Remove alien vegetation and shrubs where these are located in problem areas and prevent views onto an open space.
- Regularly cut back low-hanging branches that limit visibility and views onto a public open space.

3.3 SAFE ACCESS AND MOVEMENT

The level of safety within any neighbourhood is influenced by the quality of the movement routes and connections within it. This particularly applies to connections between people's residences and local destinations such as places of work, shops, services and local amenities. On the one hand, too few connections can undermine vitality by limiting access; on the other, too many underutilised or poorly conceived connections can compromise levels of safety and create opportunities for perpetrators to commit crime. Neighbourhoods that are well structured have well-defined routes and clearly identifiable entrances to provide convenient movement without compromising levels of safety.



WHEN VEGETATION IS CLEARED AWAY FROM A PATH IT FEELS SAFER TO USE.

Build formal pathways through parks and ecological areas

When it is acceptable for people to access ecological areas and open spaces, footpaths should be designed and built to encourage people not to stray into sensitive areas, and to ensure that they are always visible from the outside. Wherever possible, existing vegetation should be retained and integrated with the landscape design.

Clear and legible movement networks

A clear and legible network of movement routes through the neighbourhood ensures that people can reach their destinations via a number of routes, and gives them confidence in knowing that they can get there quickly and safely.

Avoid gated developments

While gated developments provide security to those who live inside the walls, they also limit access to others and make it inconvenient to access facilities and amenities outside the estate by foot. This reduces the amount of positive activity in the streets and passive surveillance in the area, which has negative implications for public safety outside the gated development.

Respect and enhance pedestrian desire lines

Pedestrians mostly take the shortest and most direct route between where they are and where they want to be. These routes often cut across multiple properties and are referred to as "desire lines". An assessment of the desire lines in an area gives an indication of generators of movement and people's priorities and preferences for getting there. Designers should respond positively to desire lines and organise new routes using simple geometries to ensure that high levels of visibility are maintained.

Anticipate and plan for how new attractors will change movement patterns

Special consideration needs to be given to how movement patterns will change when a new attractor, such as a public transport stop, shopping mall or new public facility, is built. In these cases, the broader area needs to be analysed, and measures must be taken to ensure that pedestrians can safely access these facilities. This is particularly important if the new desire lines cut across busy roads, railway lines or ecological areas. Sometimes, in the interest of safety, it is necessary to close off existing shortcuts and redirect people onto safer routes, without unnecessarily causing inconvenience.



PLACES SUCH AS MANENBERG ARE TOO POROUS, WITH MANY WAYS FOR PEDESTRIANS AND CRIMINALS TO MOVE THROUGH THE NEIGHBOURHOOD..



ANALYSE AND RECOGNISE PEDESTRIAN DESIRE LINES IN NEW DESIGNS.

Appropriate levels of permeability

Permeability is a measure of the number of routes through an area. While high levels of permeability make access easy and convenient, unnecessarily high levels of permeability compromise privacy and safety by giving offenders access to properties and multiple escape routes once they have committed a crime. Therefore, it is important to limit unnecessary movement through a neighbourhood in order to increase levels of safety, although without causing inconvenience. In most instances, a movement network with intersections every 60 to 100 m is desirable.

Clear starts and ends to routes

When a movement route is to pass through an open space, the start and end points should be clearly marked and should ideally be visible from either end of the route. It is also important to ensure that these points as well as the open spaces themselves are overlooked by adjacent development.

Choice and alternatives

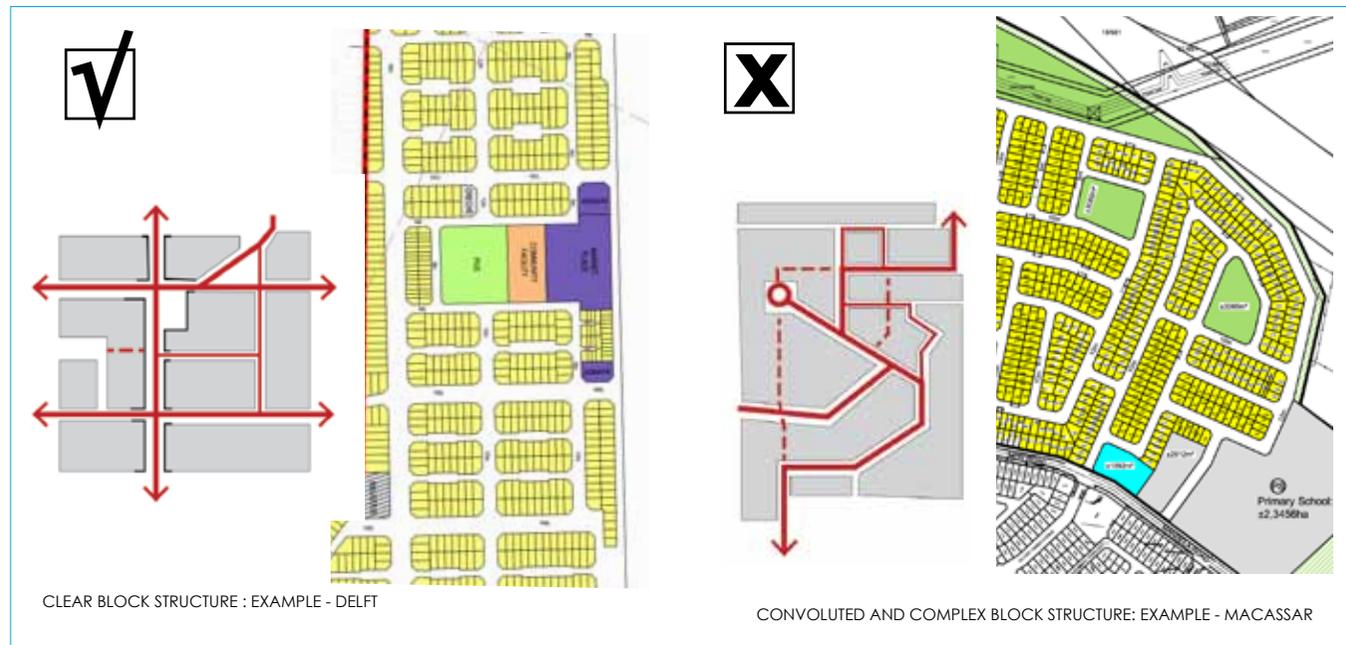
A network of routes should be provided to allow people space and time to assess their environment, anticipate oncoming danger and take appropriate action, if required. This should inform the geometry and route alignment of pedestrian and cycling routes.

Universal access

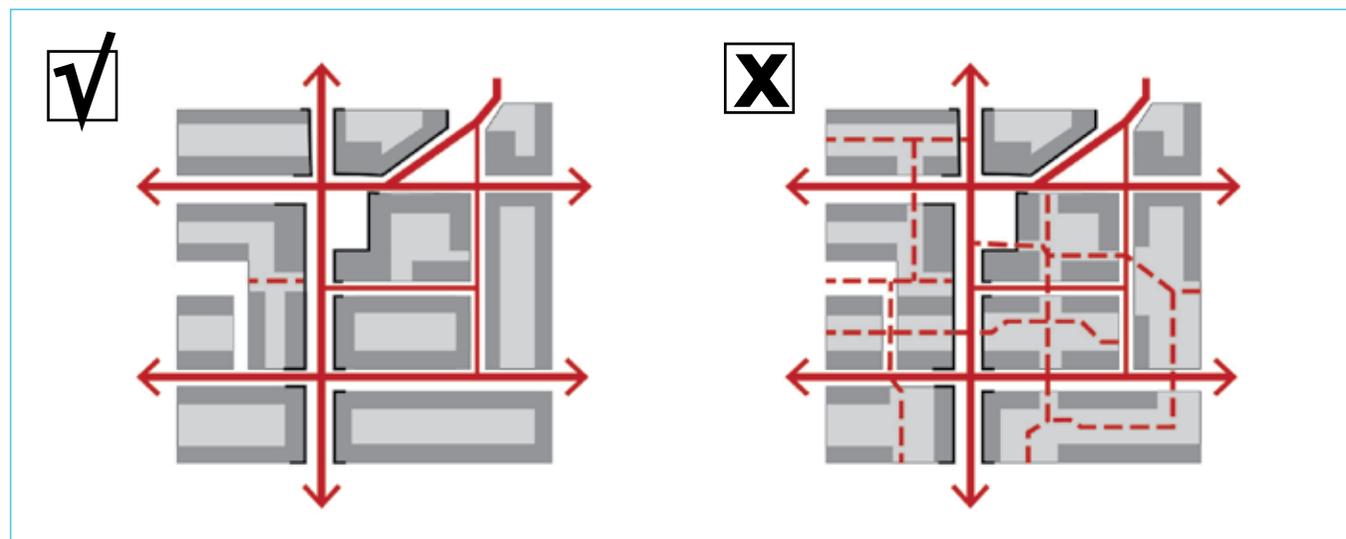
Movement routes should be designed to enable use by all user groups, particularly the disabled. This, however, requires attention to detail (particularly around surface treatment) and maintenance.

Provide structure to trading areas

In the arrangement of informal trading areas, ensure that the fine-grain network of movement routes is clear and that entrapment spaces and escape routes for potential offenders and petty criminals are eliminated.



CREATE CLEAR AND LEGIBLE MOVEMENT NETWORKS.



CONTROL LEVELS OF PERMEABILITY TO REINFORCE THE MOVEMENT HIERARCHY AND ENSURE LEVELS OF PRIVACY.

BEFORE



A POPULAR MOVEMENT ROUTE AND CRIME HOT SPOT THROUGH HARARE KHAYELITSHA BEFORE A VPUU INTERVENTION.

AFTER



ENVIRONMENTAL IMPROVEMENTS, URBAN DESIGN AND COMMUNITY ENGAGEMENT HAVE HELPED IMPROVE ENVIRONMENTAL CONDITIONS AND LEVELS OF SAFETY.

GUIDELINES

Urban design

- Movement routes should only be provided if they are likely to be well used.
- Proposals for new movement routes should emerge from a thorough analysis and understanding of the place, and should respond positively to the way people move and the generators of such movement.
- Gated developments and large, impenetrable land uses such as industrial estates should be avoided to enable convenient pedestrian traffic through an area.
- Movement routes should retain existing pedestrian desire lines, unless these are unsafe.
- Movement routes should be arranged using simple geometries, should be as direct as possible, and should avoid sharp changes in direction.
- When determining the layout of trading areas, try and reduce the number of escape routes for petty criminals.
- Movement routes should not be isolated, but rather associated with or located close to buildings to ensure that they are overlooked.
- Whenever possible, routes should be aligned with local landmarks and environmental features to aid with orientation and improve legibility.
- Movement routes should be generously proportioned and landscaped to avoid creating narrow corridors.
- The start and end of a route through an open space should be visible from either end. Good visibility should also be maintained along the entire length of the route.
- Movement routes should not be located behind buildings.
- Superfluous and secluded access points and routes should be avoided or closed to create a clear hierarchy of routes.
- Movement routes should be well lit.
- Directional signposting should be provided when appropriate, and should provide clear direction and information.
- Access points to the rear of buildings should be avoided, limited or controlled.

Maintenance

- Ensure that movement routes are well lit, and surfaces well maintained so that they remain accessible to all user groups, including the disabled and people with prams.

3.4 A POSITIVE IMAGE

The way a place looks and feels impacts directly on a person's experience of that place and can create positive or negative perceptions of safety. Environmental decay and unmanaged spaces tend to be associated with crime and hence tend to be used less or avoided. Places which project a good image and which are well maintained, on the other hand, are perceived as being safe and attract healthy levels of activity which can have positive knock-on effects on the way places are used. Design can play a crucial role in the creation of a positive image by considering aesthetics, paying special attention to detail, specifying appropriate, high quality and durable materials, and by providing adequate lighting.

Use the natural environment to make neighbourhoods more pleasant living areas

There is a need for more high quality conservation areas in Cape Town and on the Cape Flats more specifically. When ecological areas are well-managed and valued by the communities who live along side them they have positive implications on the health and well being of the community. It is thus important to conserve Cape Town's unique biodiversity, secure ecosystem services and provide safe access to nature for the public.

Avoid hard engineering solutions in open spaces

The way we design and engineer the elements of urban infrastructure which run through parks, open spaces and natural areas reflect our attitude to nature and to others. Wherever possible soft engineering solutions which integrate with and are sensitive to natural environment create more attractive places for people to use.

Create attractive streets and pleasant public spaces

Creating a safe street is not simply a traffic engineering exercise, as attention needs to be paid to what a street



CREATE PLACES WITH WHICH PEOPLE CAN IDENTIFY.



INTRODUCE PUBLIC ART INTO SPACES TO IMPROVE AESTHETICS.

looks and feels like. This is as much about the design of the road space as it is about the buildings that look onto it. The making of a street is therefore a collective effort, which involves the City, who designs, builds and maintains the road, and the homeowners, who build and maintain the buildings that frame it. Differentiation within the public realm can be achieved through landscape design and the careful selection of materials, street furniture, lighting elements, landscaping and tree planting. Wherever possible, existing trees and vegetation should be retained and protected.

Introduce public art

Communities should consider integrating works of public art with the public realm to add interest and variety within a neighbourhood. Not only do elements of public art add to the aesthetic character and identity of a neighbourhood, but the use of local labour in creating these elements contributes to skills development, local economic development and community ownership. These activities can include graffiti art, mosaic work, sculpture, metal work, earthen ware and weaving.

Ensure that buildings are aesthetically pleasing and in keeping with the character of the neighbourhood

While the measure of beauty is subjective, designers and property owners should always seek to ensure that their buildings are attractive when viewed from public spaces, whether this is from a park, street or mountaintop. New buildings, additions and alterations should "fit in" harmoniously with the surrounding buildings in terms of architectural language, scale and form. The personalisation of buildings through planting, decoration and rendering adds to the richness of an environment, and is encouraged. However, excessive and inappropriate use of colour, architectural elements and decoration should be discouraged.



BOARDED-UP FENCES CREATE UNSURVEYED SPACES.



HOMES THAT ARE FORTIFIED CREATE THE IMPRESSION OF A CRIME-RIDDEN AREA.



NM & Associates

SECURITY FEATURES INTEGRATED WITH THE FACADE DESIGN AS A SCREEN - MASIBAMBANE SECONDARY SCHOOL.



DESIGN ATTRACTIVE AND EFFECTIVE VISUALLY PERMEABLE SECURITY SCREENS.

Provide design advice

Most property owners would benefit from some direction in terms of how they could improve their buildings without compromising safety and the public environment. Opportunities to support property owners should be explored, and the establishment of local design review committees within ratepayers' associations and other community organisations can go a long way towards assisting property owners in adding value to their homes and neighbourhoods. These committees may even be able to identify suitable contractors and negotiate bulk discounts on materials for a more significant project that may cover the entire neighbourhood.

Design attractive physical barriers and deterrent devices

If there are good reasons for security fences, burglar bars or any other physical barriers, these must be considered from the start of the design process. This is particularly pertinent for public buildings, which are often vulnerable to vandalism. Security screens should be designed as practical and decorative elements, whilst still allowing visual connectivity between inside and outside spaces. Burglar bars in particular should be painted and located in such a manner that they recede into the facade or wall opening, allowing for the wall opening to feature as the more dominant architectural element.

Robust materials and simple detailing

The ability of a place to maintain its image over time is determined as much by the selection of materials as it is by the level of management and maintenance. The materials selected for a building or public space should be fit-for-purpose and robust, and should require minimum maintenance while still being attractive. The detailing of the junctions between different materials should be straightforward and uncomplicated, so that elements that do become damaged can be replaced without difficulty. The pallets of materials for public-realm improvement projects should include locally sourced materials and should take reference from the materials used elsewhere in the city or local neighbourhood.

Consider human scale and the five senses to promote awareness and a sense of safety

Safe, people-friendly places are sensitive to the physical and emotional needs and limitations of the human body. Therefore, designers need to be sensitive to the way in which people experience a place through their five senses, and pay attention to the scale, proportion and detailing of buildings and the spaces between them. When a space is well composed, people feel safe and comfortable, and ultimately enjoy being there. Poorly considered buildings and spaces can overwhelm the senses, feel chaotic or oppressive, and make people feel unsafe, intimidated, isolated and insecure, resulting in them avoiding the place.

Consider local environmental conditions

People are more likely to use places where the environmental conditions encourage them to do so. Take care to provide adequate protection from the elements (sun, shade, wind and rain) and man-made impacts (noise or pollution). This can be achieved in a number of ways, but should always emerge from an understanding of the site and how it is used. Also ensure that there is a balance between addressing issues of human comfort and maintaining high levels of visibility by not cluttering the public realm.

Avoid visual clutter

Unnecessary street furniture and signage can reduce levels of visibility and surveillance, and create the impression of a messy and untidy environment. Street furniture and signage should be used sparingly, in the right locations, and only when appropriate.

Rapid responses and urban management

Although the topic of urban management is dealt with in detail in the final safety objective, good urban management is also critical to ensure that a neighbourhood projects and maintains a positive image. Broken windows, graffiti, litter and illegal dumping of waste all tarnish the image of a neighbourhood and indicate that the community does not care about their environment. As small negative messages reinforce each other, it is important for swift action to be taken as soon as antisocial behaviour, vandalism or signs of decay emerge, to protect the image of a place and improve perceptions.



THE USE OF ROBUST MATERIALS WITH LONG LIFE SPANS AND LEVEL CHANGES MAKES FOR A VERY PLEASANT ENVIRONMENT.



A VOID VISUAL CLUTTER AND LOCATE METERS AND CONTROL BOXES AWAY FROM THE STREET EDGE.

Urban design

- Ensure that natural systems (such as streams) that may run through an open space are sensitively integrated with the design of the area to ensure that they remain attractive and easy to manage.
- Avoid hard engineering solutions such as canals and embankments steeper than 1:4, which are susceptible to erosion.
- Consider the look and feel when determining the layout of new neighbourhoods.
- Employ landscape architects and urban designers to work with transport planners and engineers to arrive at a detailed street design that also considers the space between the buildings on either side of the street.
- Use tree planting and street furniture to improve the attractiveness of the streetscape.
- Analyse the local environmental conditions and design places that provide pedestrians with protection from wind and rain.
- Public art and street furniture should be considered early on in the design process.
- Avoid unnecessary street clutter, including street furniture, signage and road markings.

Building design

- Pay attention to making a building look attractive during the development process, particularly in large developments intended for people with a low income.
- Design extensions, alterations and new buildings that are in keeping with the architectural language of the neighbourhood, and increase visual coherence with the neighbourhood.
- Design breaks in the built form and introduce rhythms within the architecture to create interest and respond to human scale.
- Consider the impact of a building on the public realm and people in terms of sunlight, shading and wind.
- Consider security features and “target hardening” devices from the start of the design process.
- In designing and detailing buildings and public spaces, take a long-term view of the maintenance and management of the area.
- Limit the amount of signage and advertising on the sides of buildings.
- Limit the height of fences and boundary walls as far as possible.
- Avoid creating a feeling of fortification with razor wire, burglar bars, high walls and electric fences.
- Ensure that bins are provided in appropriate locations (at traffic lights and at the start and end of a path).
- Ensure that roller shutter boxes are located inside buildings.

- When designing other elements of urban infrastructure, such as electrical substations, floodlights, steel posts and water pumps, carefully consider what these look like and how to protect them from theft and vandalism in a manner that does not detract from the aesthetics of the neighbourhood.

Materials

- Use a simple pallet of materials within the public realm.
- Specify attractive, robust materials with long life spans.
- In coastal areas, ensure that the materials specified are corrosion-resistant.
- Keep detailing simple, and ensure that elements that are likely to be damaged can be easily replaced.

Urban management

- Respond immediately to signs of physical decay and anti-social behaviour.

3.5 POSITIVE RELATIONSHIPS AND LAYERED SPACES

The way in which buildings and open spaces are designed reflects to a large extent the relationships within society. In order to create a safer city, it is important to ensure that the right messages are communicated to others, and that the arrangement of the built form facilitates relationship-building.

Perhaps one of the most common responses to perceptions of safety in a neighbourhood is the erection of physical barriers in the form of walls, security gates and burglar bars. The security industry has to some extent encouraged this, and popularised the military term “target hardening”, which encourages making buildings more robust, resilient and resistant to crime and vandalism. In reality, though, traditional target-hardening measures have proved ineffective and have led to other problems. Private estates, high walls and fortification are also signalling a withdrawal from the public realm by local communities. It is also argued that the heavy investment in security systems has led to a shift in the nature of crime from residential burglaries to armed robberies and other forms of violent crime.

With the above in mind, the use of militaristic language such as “target hardening” and “defensible space” needs to be discouraged, as it likens the city to a war zone and implies that citizens are unable to respond positively to crime and violence. Buildings and their associated spaces can be made more secure without resorting to the visually offensive additions of electrified fencing, barbed wire, shutters and other visually intrusive security barriers. The most appropriate response involves the careful design and layering of the interface between the public and private realm, and installing appropriate barriers that strike a balance between levels of enclosure and levels of visibility.



A STREET OR MOVEMENT ROUTE AROUND AN OPEN SPACE ENSURES A POSITIVE RELATIONSHIP WITH SURROUNDING BUILDINGS.

Create a positive interface between development and open spaces

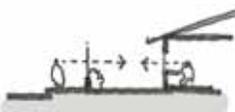
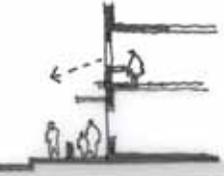
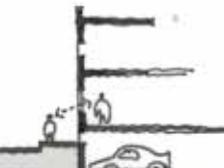
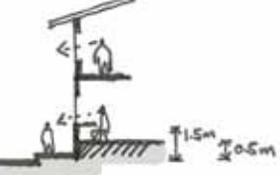
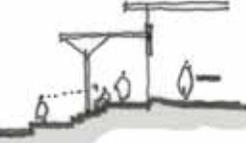
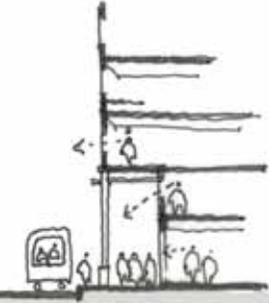
Open spaces can be transformed into real assets by the way in which the interface between the open space and buildings is dealt with. In most cases, having a road between open spaces and development encourages movement and activity along the edge of the space, and properties that are accessed via these roads automatically overlook them. In some instances where risks are identified, access can be appropriately restricted with the installation of a visually permeable fence, but this needs to be designed, specified and installed taking cognisance of its location and habitat. Where fencing is not considered necessary or appropriate, the edge should be lined with bollards to minimise vehicular access and consequent damage.



ARCHITECTURAL ELEMENTS SUCH AS SCREENS, STAIRS AND PLANTING CAN BE USED TO CREATE LAYERS OF SPACE BETWEEN THE PUBLIC STREET AND PRIVATE SPACES.

Transitions between public and private spaces

The boundary between public and private spaces does not necessarily need to be defined by a wall or a fence. Homeowners and designers should investigate other means of transitioning between the private and public realm, which may include creating semi-public or semi-private spaces between the building and the street. They should also ensure visual permeability between the inside and outside to promote visibility and surveillance. This can be achieved through a number of architectural features, including colonnades, stoeps, pergolas, level changes, landscaping or planting.

 <p>SOLID BOUNDARY WALLS CREATE INACTIVE STREETS AND COMPROMISE SAFETY.</p>	 <p>TALL HEDGES ALONG THE FRONT BOUNDARY BLOCK VIEWS OF THE STREET.</p>	 <p>PARKING AT GROUND LEVEL PREVENTS THE SURVEILLANCE OF THE STREET SPACE.</p>
 <p>LOW BOUNDARY WALL WITH PALISADE FENCING.</p>	 <p>LOW WALLS AND SMALL BUILDINGS SETBACKS.</p>	 <p>SEMI-BASEMENT PARKING WITH WINDOWSILL HEIGHTS LOW ENOUGH TO ALLOW VIEWS OF THE STREET FROM INSIDE.</p>
 <p>BUILDING SETBACK WITH A LEVEL CHANGE OF UP TO 0.5M.</p>	 <p>LEVEL CHANGES OF UP TO 0.5M.</p>	 <p>LOW BOUNDARY WALLS AND FRONT STOEPS.</p>
 <p>BLANK WALLS ONTO THE STREET OR OPEN SPACE.</p>	 <p>STEPS, LEVEL CHANGES AND ENTRANCE FOYERS (PUBLIC BUILDINGS).</p>	 <p>COLONNADES AND ARCADES IN PUBLIC STREETS AND INTENSELY URBAN ENVIRONMENTS.</p>

EXPLORE ALTERNATIVE INTERFACE CONDITIONS TO ENSURE VISUAL CONNECTION BETWEEN THE PRIVATE AND PUBLIC REALMS.



ENSURE ENTRANCES ARE CLEARLY EXPRESSED AND VISIBLE.

Clear address and positive frontage

Most buildings have a front and a back, a public face and a private back, and a front and a back door. These messages need to be clearly communicated through design to ensure that people know where they should enter a building or development.

Buildings should always address and provide a positive interface to public streets and open spaces. Designers should not locate blank walls, bathrooms or service areas on the parts of the building facing onto the public realm.

Having a clear address makes it easier to identify when people are in the “wrong place”, in which case they can be appropriately redirected or identified as potential offenders.



TAKE CARE IN THE DESIGN OF THE INTERFACE ZONE AND CAREFULLY CHOOSE MATERIALS.

Detail the interface zone

Detailing and material specification can also help to increase people's awareness of what is happening around them and thereby increase perceptions of safety. A simple example is specifying crushed stone within the interface zone can alert people inside of a building of the presence of others by the sound that is made by foot movement across it. Also, dense planting and the use of thorny plant species within the interface zone can help to discourage people from using these areas.



PUBLIC BUILDINGS CAN BE USED TO DEFINE THE PUBLIC EDGE IN A POSITIVE MANNER - GRASSY PARK CLINIC.

Allow public and commercial building to define the public realm

Privacy is less of an issue for commercial and public buildings, which means that these buildings can be used to define public spaces in a more direct way. Designers and property owners are encouraged to use the building facade to define the public realm and to design and detail interfaces, facades and openings to create a positive relationship with the public realm. This will require designers, users and facility managers to be innovative in ensuring that deterrent and security measures are considered as an integral part of the design, and that provision is made for these features early on in the design process.

Urban design

- When designing new neighbourhoods, try to have roads running around open spaces, sports facilities and ecological areas.
- Incorporate an ecological buffer into areas that intersect with conservation areas.

Building design and site layout

- Avoid large setbacks from the front boundary, which dislocate buildings from the street.
- Buildings should be designed with clear fronts, backs and entrances.
- Include architectural elements that create semi-public/semi-private spaces within the interface zone between the private and public realms.
- Avoid high walls, screens and shutters, which create the impression of fortification.
- Perimeter fences around public and commercial buildings should be avoided. The facade of the building should be used to define the public realm.

Landscaping

- Dense planting and the use of thorny species of shrub can help keep people out of areas that could become problematic.
- Specify materials in the interface zone (such as crushed stone) that alert people inside the building to the presence of people approaching the building.

Security measures

- Security measures should be considered during the early conceptual design stages of a project.
- Alternatives to walls and fences should be considered during the design process.
- Security screens should be visually permeable, allowing connection between the inside and outside.

Materials

- Paint and detail burglar bars and other barriers in recessive colours so that the wall opening features as the dominant architectural feature



GREENING A BLANK WALL BY PLANTING A CREEPER CAN HAVE VERY POSITIVE IMPACTS ON THE APPEARANCE OF THE STREET. BEFORE DOING SO IT IS IMPORTANT TO ENSURE THAT SOMEONE IS RESPONSIBLE FOR TRIMMING AND WATERING THE HEDGE.



WHERE REQUIRED EXTERNAL BURGLAR BARS CAN BE DESIGNED AS AN ATTRACTIVE FEATURE AND ADD CHARACTER TO A NEIGHBOURHOOD.

3.6 GOOD URBAN MANAGEMENT AND MONITORING

The theme of management and monitoring cuts across all the aforementioned objectives, and is essential to ensure that the city and its neighbourhoods become progressively safer over time. The following principles should therefore inform the design and development process as well as post-implementation maintenance and management.

Secure funding for post-implementation management before starting the design

Even before one starts to plan a project, it is critical to ensure that sustainable funding can be secured for projects to be sustained and buildings and infrastructure to be managed and maintained. Once the project has been designed and costed, the operational budget should be reviewed and additional funding secured, if needed.

Engage all relevant stakeholders and City line departments to ensure buy-in during the design process

When intervening in the public realm, it is important that all public stakeholders and line departments who will play a role in the construction and post-implementation management are engaged in the design process. This also ensures that those responsible for safety and security, law enforcement, maintenance and management can make meaningful and practical contributions to the design process. Key stakeholders in this process include the departments of Environmental Resource Management, City Parks and Roads and Stormwater, who are largely responsible for the city's public spaces, but may also include the police, private security companies, CID management teams and other, community-based organisations.



USE SIMPLE DETAILING AND SPECIFY ROBUST MATERIALS.

Develop operational and maintenance plans for the public realm during the design process

It is critical to ensure that operational and maintenance programmes are developed to guarantee that the public environment is safe, maintained and improved over time. The development of these plans must be embedded in the design process, as this will inform material selection and detailing. It also allows those stakeholders who will be responsible for maintenance and management to give their input on the project design, so that the management of the facility becomes easier. It is good practice to ensure that the individuals who will be ultimately responsible for maintenance, and not management alone, are involved in these decision-making processes.

Confirm institutional arrangements in writing

Where the management of the public space will be shared, institutional arrangements need to be agreed between the parties involved. Roles and responsibilities must be clearly allocated, and the parties responsible for maintenance must be adequately resourced. It is best for these agreements to be put in writing through service-level agreements or memorandums of understanding.

Area-based management and policing

The establishment of area-based operational and management teams is strongly advised to coordinate the management of the public realm within dedicated areas. This team should be introduced to the community to ensure that those individuals heading up the team are both contactable by members of the community and held accountable for operational maintenance.

The area-based management of crime and safety is already embedded in current policy and practice through community police forums (CPFs), which consist of representatives from local communities, the South African

Police Service and private security companies. Good relationships and coordinated action between CPFs and area-based management teams will help address safety issues.

Develop maintenance plans for buildings

Both public and private property owners should develop maintenance plans for the upkeep of their buildings, and should review these on a regular basis. These plans should consider two, five and ten-year investment cycles, setting out, at the level of principle, which elements of the building need to be repaired or replaced, when this is likely to occur, and what the estimated costs will be so that these can be budgeted for.

Engage local communities and businesses in the management of public spaces

Civic pride is built through individuals and organisations' active participation in civic activities. While the maintenance of the public realm is, strictly speaking, the City's responsibility, the involvement of the community in maintaining their neighbourhoods through volunteerism, preferential procurement policies and community-rooted initiatives should be explored across the City, and be linked to corporate social investment programmes.

Community event days should be organised by area-based management teams, where the broader community is invited to gather in a street, park or square and partake in a community fun maintenance day. This has been hugely successful with the "Milnerton Beach Clean-Up" events organised by the Ocean Conservancy Initiative, which have seen the entire community, irrespective of gender, age or race, partake in simple activities, such as litter collection, tree pruning, seasonal planting, etc.

Specify for long life, and build robustly and sustainably

The materials used for both public and private projects should be hard-wearing and robust, whilst at the same time maintaining high standards of aesthetic quality and environmental performance. The use of local and renewable materials should also be explored, as this will help reduce the carbon footprint of projects.

Monitor safety on an ongoing basis

It is important to measure the effectiveness of projects in addressing the issues of crime and safety, particularly where public funds are invested in neighbourhood safety projects. Ideally, crime and safety surveys should be undertaken prior to projects being initiated, so as to inform the design and priorities for a project or neighbourhood. Post-implementation monitoring is also important to measure the effectiveness of safety initiatives, identify whether the projects have led to displacement of crime, and to suggest where additional interventions are required.

Adequate funding needs to be put aside for these exercises as part of the initial project budget. It is hoped that, in future, these responsibilities can be assumed by neighbourhood safety officers, who will be tasked with improving safety at the local level, as contemplated in the Community Safety Bill.

Maintain open spaces to increase visibility

Maintenance teams should pay particular attention to maintaining trees and soft landscaping to ensure that levels of visibility are high. This implies the regular removal of alien species and the cropping of low-hanging branches to maintain clear lines of sight at ground level.



LOW AND HEAVY BOLLARDS CAN BE USED TO PREVENT VEHICULAR ACCESS TO OPEN SPACES



HARD ENGINEERING SOLUTIONS FOR STORM WATER MANAGEMENT ARE UNATTRACTIVE AND MAKE IT DIFFICULT TO CLEAN AND MAINTAIN WATER COURSES.

Institutional arrangements

- Engage local community organisations, community policing forums, the police and law enforcement in the preparation of plans.
- Engage City line departments and identify role players who will be responsible for maintenance.

Funding

- Ensure that operating budgets are secured for the entire life span of projects.
- Engage local businesses and look for opportunities to link into corporate social investment programmes.
- Seek to secure funding for non-spatial initiatives, such as social and economic development initiatives and neighbourhood watches, which help address the underlying causes of crime.

Design and detailing

- Ensure that the perimeter of open spaces and ecological areas is suitably detailed with bollards or non-mountable kerbs to prevent illegal access by vehicles.
- Specify robust materials that are vandal-resistant and easy to replace and repair.
- Specify appropriate tree species that are low-maintenance and drought-resistant.

Environmental management

- Consolidated conservation areas must be actively managed on the ground to secure the open space as an asset for the local communities, and to ensure the continued flow of ecosystem services and the protection of biodiversity.

Maintenance

- Establish maintenance teams who are contactable, empowered and responsible for all maintenance.
- Establish design committees within the ratepayers' associations and other community organisations to assist and direct property owners in adding value to their homes without compromising safety.
- Ensure that refuse is removed regularly.
- Immediately address illegal dumping of waste.
- Ensure that damaged or broken items of public furniture are replaced or repaired.
- Where isolated dunes and wetlands become a safety risk, consider reshaping and filling so that they can be used in a more positive manner.
- Regularly remove alien vegetation, unnecessary shrubs and low-hanging branches to increase the potential for passive surveillance.

Monitoring

- Make it easier for people to report crime and issues of safety.
- Budget for pre-implementation and post-implementation assessment and monitoring.
- Undertake pre-implementation and post-implementation surveys to identify and track changes in crime patterns.
- Regularly monitor the effectiveness of projects in increasing levels of safety.

Active policing

- Provide additional patrols in areas which experience high levels of crime and encourage the establishment of neighbourhood watch teams.
- Install active surveillance (closed-circuit television cameras) in critical hot spots.

Awareness-raising

- Undertake awareness drives to inform people about refuse disposal sites.
- Educate communities on the value of ecological spaces.

4.0 CONCLUSION

It should be clear that building a safer city and safe neighbourhoods requires a collective effort and long-term commitment. It needs people and communities to come together to address the broader challenges that affect our society. This document simply serves as a guide, and the City encourages communities, businesses and organisations to approach the administration for assistance and guidance in improving their living spaces.

There are a number of other good resources available, which will help communities in approaching situational-crime prevention. These include the following:



Policy

- Urban Design Policy, City of Cape Town, 2013.
- Gated Development Policy, City of Cape Town, 2007.
- Boundary Walls and Fences Policy, City of Cape Town, 2009.
- Operational Policy for Assessing Pedestrian Lane Closure Applications in Mitchells Plain, City of Cape Town, 2012.
- Standard Operating Procedure Guidelines for New Developments Adjacent to Conservation Areas, Environmental Resource Management Department City of Cape Town 2013.

Bylaws

- Graffiti Bylaw, City of Cape Town, 2010.
- Public Parks Bylaw, City of Cape Town, 2010.
- Problem Buildings Bylaw, City of Cape Town, 2010.
- Outdoor Advertising and Signage Bylaw, City of Cape Town, 2001.
- Streets, Public Places and The Prevention of Nuisances Bylaw, City of Cape Town, 2007.
- Draft Western Cape Community Safety Bill, 2012

Good-practice guidelines

- Urban Design Principles for a Sustainable Neighbourhood, - Violence Prevention through Urban Upgrading, 2012.
- A Manual for Safety as a Public Good - Violence Prevention through Urban Upgrading, 2014.

A ANNEXURES

A1 HOW TO CONDUCT A COMMUNITY SAFETY AUDIT

Ideally, crime and safety surveys should be undertaken prior to projects being initiated so as to inform the design and prioritise projects or neighbourhoods. During this process, it is important to broaden the scope of the analysis to include the wider neighbourhood, as focusing on a specific area too early on could result in important factors being overlooked.

The following generic process is suggested for those communities and organisations wanting to undertake community safety audits on their own.

1. Establish a group to run the process and document the outcomes.
2. Invite community members.
3. Invite law enforcement officers from the South African Police Service.
4. Have a briefing from the police on crime statistics.
5. Engage other support services (such as emergency services, local clinics and hospitals) to allow them to provide input on how crime is affecting their services.
6. Identify broad issues.
7. Agree on crime indicators.
8. Identify types of crime and where these occur (crime against property/crime against the person).
9. Map the specific location of hot spots or routes where crime occurs.
10. Identify potential crime attractors.
11. Identify crime generators (known drug-dealing spots, gang territories).
12. Walk the neighbourhood with the local community.
13. Revisit stages 4-11 and review the crime map, adding any additional information.
14. Identify small interventions that can help address each individual problem.

A2 SAFE CITY CHECKLIST

The following check list is provided as a guide for communities to be able to identify which issues need to be addressed in order to improve safety within their neighbourhoods.

	Action required	Good
Clear boundaries and collective ownership of public space		
Is there a lot of underutilised and poorly maintained open space in the neighbourhood?	Yes	No
Is there a sense of community pride in their environment, and collective ownership of their neighbourhoods and open spaces?	No	Yes
Is it clear where public and private space begins and ends?	No	Yes
Do people feel empowered to approach strangers in the street when in a group or alone?	No	Yes
Increased surveillance and visibility		
Are open spaces and ecological areas fragmented, or does their shape obscure certain parts?	Yes	No
Are people present in the streets or in the buildings throughout the day?	No	Yes
Do buildings overlook streets and open spaces?	No	Yes
Are there blind spots and hideaway spaces?	Yes	No
Does vegetation obscure views onto open spaces?	Yes	No
Do boundary walls or fences allow for people using streets and open spaces to be seen from inside buildings?	No	Yes
Is there sufficient lighting at night time?	No	Yes
Safe access and movement		
Do people feel safe walking through the neighbourhood?	No	Yes
Is the network of streets and pedestrian routes clear and legible?	No	Yes
Are there alternative ways into, out of or through a place?	No	Yes
Are there isolated routes in the neighbourhood which people avoid or alternatively can't avoid?	Yes	No
Is there more than one way of entering a property?	Yes	No

	Action Required	Good
A positive image	No	Yes
Does the neighbourhood look like a nice place to live?	No	Yes
Are the buildings in the area well kept?	No	Yes
Do the security devices that people use (burglar bars, barbed wire, and electric fences) give the impression that there are high levels of crime?	Yes	No
Do the open spaces contribute positively to the identity of the neighbourhood?	No	Yes
Positive relationships and layered space		
Is there a layering of spaces from public to private between buildings and the street or open space?	No	Yes
Is the space between the building and the street or open space well maintained?	No	Yes
Do windows, doors and balconies look onto the street or public space?	No	Yes
Have architectural elements such as porches, verandas, colonnades or pergolas been used to create interest along the street edge?	No	Yes
Good urban management and monitoring		
Are streets and open spaces clean and well maintained?	No	Yes
Is it clear which individuals are responsible for the maintenance and management of buildings and spaces? Do they have the necessary budget to do so effectively?	No	Yes
Is it easy for the police and law enforcement to patrol the neighbourhood?	No	Yes
Are community members monitoring crime and safety?	No	Yes
Are community members policing their own neighbourhood through neighbourhood watches, for example?	No	Yes

A3 CASE STUDIES: Safety tips for different types of neighbourhoods

Because a picture speaks a thousand words, and because each street is different, the following collection of examples illustrate some basic concepts and suggest how a typical street can be improved and made safer through simple changes.

✓ High levels of street lighting.

☹ The street would benefit from more residential development above the shops providing views onto the street.

✓ Overhangs create shelter from the wind and the rain.

☹ The street appears very cluttered, with signage, traffic control boxes and traffic lights scattered along the sidewalk.

☹ The street has been designed around cars and traffic making it a very unpleasant place for pedestrians. It could benefit from wider pavements, tree planting and spaces for informal trade.



✓ Streets that are aligned with major landmarks help people determine where they are and orientate themselves.

✓ High-density residential development close to public transport.

✓ Attached urban buildings offer little opportunity for criminals to hide or entre buildings.

✓ There is a healthy mix of uses along the street, bringing life and activity into the area throughout the day.

✓ On-street parking makes it convenient for people to access shops and enlivens the street.

Goodwood: Voortrekker Road

❌ The spaces between the buildings provide perpetrators of crime with ample opportunity to enter the back of a property, where they cannot be seen.

✅ Higher densities with windows and balconies overlooking the street help increase safety.

✅ A small level change between the street level and the ground floor helps to create privacy for the ground floor unit.

✅ Stairs to the main entrance help articulate the interface between the public and private realm.

❌ The front boundary of the property is poorly defined. A low wall would help define this semi-public space and still maintain high levels of visibility.

✅ Low boundary walls allow a visual connection with the street.

❌ The addition of a second storey can provide more eyes on the street.

❌ Blank walls prevent visual connections between the houses and the street.

❌ If road verges are not maintained or planted, the street looks unkept and wind blows sand into the road which can block the storm water system.



Khayelitsha: Ngcwalazi Road

✓ The space between the building and the street has been designed with a comfortable transition from public to private space.

✓ Low walls boundary walls allow a visual connection with the street

✓ Adequate street lighting

❌ Avoid burglar bars on the outside of windows. If they are necessary paint them in a receding colours.

✓ Semi-detached and row houses create a more continuous frontage onto the street making it more difficult for criminals to force entry.

❌ This planted hedge cuts out views of the street from the inside the house.

✓ On-street parking encourages people to keep their eyes and ears on the street.

✓ Trees make the street a more pleasant place.

✓ Windows enable overlooking of the street.

✓ Burglar bars located on the inside of the windows help create a positive image of a safe neighbourhood.

✓ Building facade defining the public realm.

✓ Change in level used to create privacy for people inside the building.

❌ Gravel left on the sidewalk can create the impression that the area is not maintained or cared for.

✓ Clean streets with no litter help create positive impressions of safety.



Observatory: Lower Trill Road

✓ Trees make the street more attractive, but could be pruned back slightly to allow a partial view of the street.

☹ Adding another storey with a slight increase in density would help increase eyes on the street.

✓ Low walls and windows increase levels of overlooking.

✓ Burglar bars located on the inside of the windows decrease maintenance and help send a positive image.

☹ Garages at ground floor sterilise the street environment and make it feel unsafe.

☹ Blank facades facing onto the street at first-storey level.

✓ Second storey close to the street boundary improves levels of overlooking.

✓ Attached building typologies reduce the number of opportunities for criminals to enter properties.

✓ Building located towards the front of the property with windows overlooking the street.

☹ Poorly defined front boundary.



Mitchells Plain: Bonfoi Road

Glossary

Accessibility

The degree to which a site, building, service or environment is accessible to people, irrespective of who they are or how they move around.

Active frontage/interface

Refers to street frontages where there is an active visual engagement between those in the street and those on the ground floors of buildings. This quality is assisted where the front facade of buildings, including the main entrance, faces and opens towards the street, and also where ground floor uses accommodate activities that provide a level of interaction between pedestrians and the uses within the building, for example cafes/restaurants, shops, offices etc.

Adaptability

The capacity of a building or space to be changed so as to respond to changing social, technological and economic conditions.

Antisocial behaviour

Behaviour that goes against socially acceptable norms. This may include the consumption of drugs and alcohol in public, public indecency, the performance of sexual acts in public, defecation and urination in public places and bullying.

Blank facades

An elevation of a building that has no door or window openings.

Built form

The shape and massing of development. Built form relates to qualities such as density or quantum of development (often referred to as massing), coverage (how much of the site is built up), building height and the distance from property lines.

Community facility

A building or structure that houses a service to the public or a select group or community. Such facilities include crèches, religious institutions and clubs. Full public access to such facilities is often restricted or limited.

Context

The broader environment within which a development or site is located. Context is a broad term and can refer to natural systems, topography, the social and economic environment, the built environment, access, public institutions, public space, and public utility services.

Cultural landscape

A physical area with natural features and elements modified by human activity and resulting in patterns of evidence layered over time in the landscape. These qualities give a place a distinct spatial, historical, aesthetic, symbolic and memorable character.

Desire line

An imaginary line linking facilities or places. Desire lines become evident when watching people move through an area, and are often visible through informal footpaths across open spaces.

Diversity

A place which offers variety and choice in terms of land use activity and mobility options.

Enclosure

An experience in that a pedestrian feels sheltered within the public realm. Buildings, walls, trees, landscaping and street widths are all factors in creating a sense of enclosure.

Form

The layout (structure and urban grain), density, scale (height and massing), appearance (materials and details) and landscape of development.

Higher order structuring route

Streets or movement corridors that play a critical role in determining the structure of the urban environment. The following are characteristics of structuring routes: high levels of spatial continuity and access; a concentration of mixed land uses and activities; higher-order public facilities; more dense development, and an intensity in the movement of people, goods, public transport and private vehicles.

Integration

The spatial and functional linking of areas of development and their inhabitants. Integrated areas form a coherent physical whole where, in liveability terms, the whole is greater than the sum of its parts.

Intensity

Refers to achieving a greater spectrum of mixed land uses through increased use of space, both horizontally and vertically, within existing areas, properties and new developments.

Landmark

A building or structure that is recognisable and stands out from its background by virtue of height, size or some other aspect of design.

Landscaped

The intentional arrangement of soft (trees and planting) and hard elements (paving / benches etc.) within a space.

Layout

The way buildings, routes and open spaces are placed in relation to each other.

Legibility

The degree to which the qualities or structure of a neighbourhood or building can be perceived and understood.

Massing

The combined effect of the arrangement, volume and shape of a building or group of buildings in relation to other buildings and spaces.

Overlooking/overlooked

When a building has doors and windows positioned in such a manner that they allow the occupants inside a building to visually connect with the spaces outside of that building.

Passive surveillance

The casual observance of public and private areas by people in the course of their normal activities.

Permeability

The degree to which an area has a variety of pleasant, convenient and safe routes through it.

Positive interface

See definition for active frontage/ interface.

Public facility

A building that is owned, built, managed and maintained by a governmental institution or which provides a service on behalf of government.

Public good

The condition in which all citizens are able to enjoy the benefits of urban living to the extent that no individual's actions lead to a subtraction or diminishment of any other individual or group's ability to act or enjoy the same benefits.

Public realm/environment

The collection of physical and non-physical elements that are accessible to or affect the general public. Some aspects of the public realm are privately owned and managed. The public realm includes, amongst others, all forms of media, open spaces and streets

Public space

The public space includes the natural and built environment used by the general public on a day-to-day basis such as streets, plazas and parks.

Streetscape

The distinguishing character of a particular street, as created by the elements at ground floor, including building frontages, setbacks, materials, form, road space, landscaping, street furniture, etc.

Significant negative impact

In relation to development, when a proposal has the potential to affect the structure of a neighbourhood or part of the city; detrimentally alter the character of a neighbourhood; cause undue inconvenience for public access; limit adjacent property owners' ability to enjoy or realise the rights to which they are entitled, or undermine the market value of an adjacent property or of a neighbourhood as a whole.

Situational crime

Situational crime is crime that occurs physically in a space, and where the victims or subjects of the crime (in the case of property) are engaged in activities that form part of their normal daily life

Surveillance

The ability of a person or thing to observe and control activities within a defined space. Surveillance may be achieved passively by providing physical opportunities to connect a surveyor to a space, or through active or artificial means such as closed-circuit television cameras or law enforcement patrols.

Sustainable urban drainage systems (SUDS)

A branch of water-sensitive urban design that focuses specifically on stormwater management.

Target hardening

A militaristic term that implies making a building more difficult to attack or destroy. In design terms, it implies making a property more resistant to crime by installing burglar bars, fences and other security devices.

Vibrant

A place characterised by energy and activity.

Views and vistas

A visual quality within the landscape/urban landscape that typically provides some visual amenity. The importance of the view typically relates to the level of amenity it provides. A vista is a corridor view, usually framed by an avenue of trees or buildings.

Urban grain

A description of the density and nature of development that results from the arrangement of buildings in space. The term "urban grain" is used at a variety of scales, and can refer to the density of urban blocks, streets, plots or building footprints.

Urban structure

The structuring framework of a region, town or precinct, showing relationships between zones of topography, natural environments, activities, built form and open space. It encompasses broader systems, including transport and infrastructure networks.

Acronyms and abbreviations

CID	City Improvement District
CPF	Community Policing Forum
CPTED	Crime Prevention Through Environmental Design
IDP	Integrated Development Plan of the City of Cape Town
LUMS	Land Use Management System
LUPO	Land Use Planning Ordinance
NHRA	National Heritage Resources Act 25 of 1999
NEMA	National Environmental Management Act 107 of 1998
PBDM	Planning and Building Development Management Department of the City responsible for processing land use and building applications
SDF	spatial development framework
SDP	site development plan
SPUD	Spatial Planning and Urban Design
SUDS	sustainable urban drainage system
VPUU	violence prevention through urban upgrade
WSUD	water sensitive urban design

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