



DESIGN GUIDANCE NOTE NO:12 DESIGNING TO REDUCE CRIME

The London Borough of Barnet has a clear commitment to crime reduction and community safety. The use of planning and other powers to design out crime is a key undertaking within the 1997/2001 Corporate Plan (and draft 1998/2002 Corporate Plan). The improvement of environmental quality is also central to the council's Local Agenda 21 Strategy.

The council also has an active Community Safety Strategy. This strategy includes the encouragement of good design principles to reduce crime within new development as a key aim and an Action Plan project.

This document forms Supplementary Planning Guidance and complements policies included within the borough Unitary Development Plan. Crime prevention measures are a material consideration when a planning application is determined.

Designing to reduce crime covers a vast number of issues from guiding principles and behavioural theories to detailed specifications for doors and windows. In addition different types of development may need specialist approaches, for example shopping centres, industrial units, leisure developments and housing estates.

This document deals with general principles and design methodology that can be used to formulate proposals on all types of development. It also provides pointers on detailed specifications but should not be used rigidly.

Designing to Reduce Crime is aimed at all who influence the design of spaces and the buildings that create them. It is intended to assist discussion between all involved in the planning and development process, whether professionals, neighbours, occupants or users.

The council has a series of design guidance notes on a range of objects from porches to shopfronts. These notes contain additional information on crime prevention for individual

properties or development types. For copies of these leaflets please telephone our FirstContact Service on 0208 359 3000.

CRIME AND THE ENVIRONMENT

Crime as fear, threat or reality, impacts on all our lives and our communities.

How we interpret our environment influences our feelings and behaviour. The design of space and buildings affects perceptions of criminal opportunity or risk, whether for the potential victim, criminal or onlooker. Anti social behaviour, litter, vandalism and graffiti are also important determinants of how safe an area feels. Such perceptions can be as important as actual crime rates in affecting the quality of life of those living and working in the borough

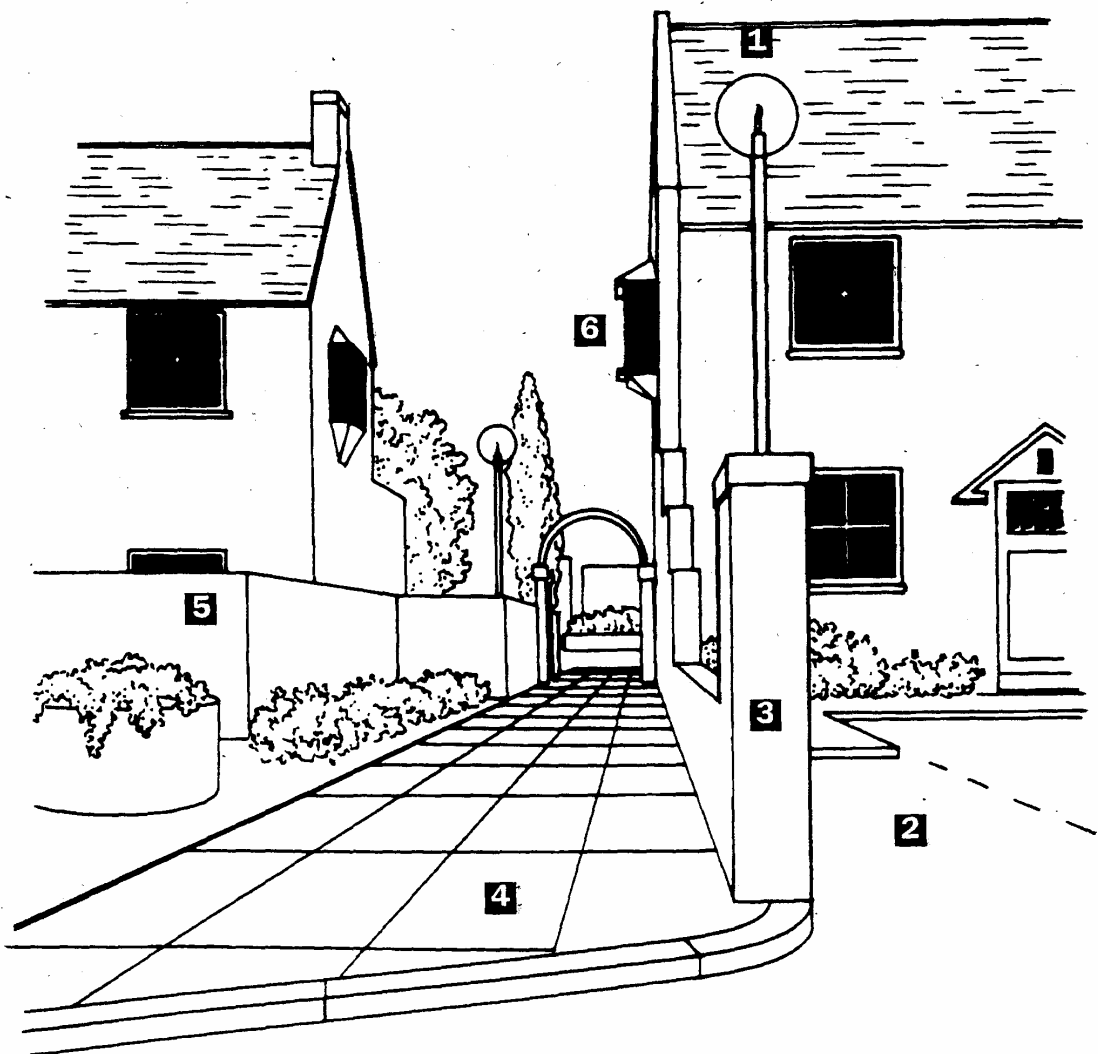
Environmental influences cannot stop all crime, but thoughtful design can help to:

- Increase criminal insecurity, rather than create criminal opportunities
- Promote a sense of community rather than isolate individuals
- Increase local surveillance rather than create unclaimed areas
- Foster the legitimate use of space rather than creating empty spaces or anti social behaviour.

There is no simple formula for success but the use of common sense is invaluable in reaching a balanced, successful design. In most cases overly sophisticated or time-consuming measures are not required. Instead a number of straightforward general principles can be applied in considering the location, layout and design of new development and the alteration of existing buildings. This leaflet lists these principles and provides advice on how they ought effectively be used to reduce crime and create better environments.

DESIGNS TO REDUCE CRIME

1. good appropriate lighting
2. overlooked parking space
3. open views over low wall section
4. short, straight footpath
5. low planting, not obstructing views or providing hiding places
6. side windows overlooking footpath



THE DEVELOPMENT PROCESS

Timing

The principles of crime reduction should be considered as early as possible within the development process. This allows for an integrated approach with density, layout, massing, access and other primary design decisions being made with consideration of their potential to reduce crime. This can help reduce problems such as remote amenity space, unobserved car parks, dangerous footpaths and unusable bin stores that cannot easily be removed later on. Such an approach helps to allow for a balance to be reached between crime reduction and other matters such as townscape quality, energy conservation and sustainability.

While details such as lighting, fencing and signposting are often discussed at a later stage, they should be introduced to the debate as early as possible.

Performance

The performance of a new development can be measured against a number of objectives. In general a well designed development will result in a balance of performance, but in some cases analysis of the surrounding area and overall policy may lead to one objective necessarily taking precedence over others. For example the need for high density mixed uses around major transport nodes, or the need for sensitive development within the setting of a listed building, in such cases a good understanding of the primary requirements should lead to a trade off within design decisions. It is advisable to establish any site-specific primary requirements at an early stage. This should be achieved through discussion, consultation and analysis of relevant policies or commitments.

It is important to gauge the performance of a development under a variety of circumstances. For example does it work at night as well as during the day: how will open space and landscaping function through the seasons?

It is vital that the foundations for a crime reducing design are laid at the outset.

Design objectives include

- Energy conservation
- Sustainability
- regeneration
- townscape quality
- historic conservation

Keep in mind the balance between different design objectives. For example, will houses positioned to provide for better security, still

Crime Profiles

At the start of any new development proposal, an assessment should be carried out of the particular criminal problems that it may face.

In many cases it may be practical to assume the development will face the average crime risks for the borough, but in some cases there may be specific threats.

Where the need arises a crime profile will help focus more detailed discussion. Such a profile should include information on the pattern of local crime and the risks specific to the proposed development. To put it in its simplest form - is there likely to be burglary or vandalism, drug related personal crime or graffiti? The crime profile need not be overly detailed or formal, but it should give all involved an idea of the problems to be tackled.

The police and in particular the local Crime Prevention Officer or Crime Prevention Design Advisor should be able to provide crime profile information. Informal information can also be gained from local groups and possibly estate agents, traders or others with local knowledge.

Secured By Design

The police run a design approval scheme called 'Secured by Design'. The scheme encourages crime prevention measures within a number of types of development. These include new housing, the rehabilitation of existing housing, commercial developments and car parks. The scheme provides best practice advice on security and design and approved developments are awarded an official police logo.

A crime profile should include:

- information on background crime patterns in the area
- an assessment of the risks associated with the type of development proposed. For example the different risks associated with shops, pubs, houses, etc
- an evaluation of how background crime levels and site specific risks combine to produce a picture of the potential problems to be faced.

For information and a guide contact the Police Crime Prevention Design Advisor

at

Barnet Police Station

26 High Street Barnet

Herts

EN5 5RU

Tel: 020 8200 1212

DESIGN PRINCIPLES

Criminal Opportunities

The guiding objective of designing to reduce crime is to reduce the opportunities for crime.

There are two major ways of achieving this:

- increasing surveillance, legitimate use and local responsibility
- presenting physical barriers to the criminal.

Surveillance

Surveillance can be real or perceived. The object- is to turn the tables to make those contemplating crime feel vulnerable, out numbered and under the collective eye. At the same time surveillance can make the legitimate user feel less alone and more secure. Windows, cameras and neighbours can all be used.

The layout, orientation and fenestration of buildings can influence surveillance. It is also affected by landscaping, fences and other structures that can impair or enhance views. Care should be taken to appreciate how potential levels of surveillance could be affected by future changes to the development. Mixed use buildings can be useful in providing surveillance as they can offer extended hours of use.

Local Activity

Activity levels are effected by land uses and accessibility. Although these can be influenced by the planning system, they are often the product of wide reaching policies and cannot always be controlled through the design of individual sites. However where the opportunity arises designs which encourage a web of inter-linking activities should be encouraged. For example mixed house types, to increase the likelihood of someone being at home at all times of the day.

Surveillance:

- look for at least two means of surveillance on each public space
- avoid blind alleys, 'dead' car parks and dark corners
- grouping houses in clusters maximises surveillance to the front but check the effect on the rear
- if a building is on a corner or has a side wall facing a street or open space it should address and overlook that space
- avoid blank walls by using windows, doors, detailing and roof shapes.

Two points should be carefully considered within discussion on mixing uses and their impact on crime levels. Firstly care should be taken that the three main components of crime are not brought together in an area, i.e. a potential criminal, a potential target and an environment conducive to a crime going unobserved. For example a pub next to a cash point machine or vulnerable shop in a badly lit arid secluded road could invite crime.

Secondly, if a mix of uses is proposed in areas with potential targets, careful thought should be given to possible security implications. For example uses which attract a large number of strangers into a predominantly residential area could make it hard for residents to spot potential criminals. In such cases thought should be given to compensating for any possible reduction in the effectiveness of local surveillance:

Once an appropriate level and type of use has been defined for an area, it is important that its physical provision is of a good standard. That is, spaces and buildings are accessible well lit and pleasant and practical to use. For example a narrow, windy or sloping strip of 'amenity space' on the north side of a block of flats may not be attractive to residents and very well become the haunt of potential criminals. Car parking spaces a distance from entrances may be under used, even if they are overlooked.

It is important not to look at new developments in isolation. Care is needed to ensure new buildings, roads and open spaces are appropriately linked to their surroundings. Although cul-de-sacs and solid perimeter fencing can reduce escape routes, they can also encourage isolation and low levels of activity and surveillance. Cul-de-sacs can be appropriate in some cases, dependant on local circumstances and surroundings, but they are often not the best solution.

Activity

- activity can increase surveillance, but anti-social threatening activity can frighten others away
- high quality spaces encourage use
- a well used environment can aid maintenance and feelings of local pride
- quality is a product of the size, shape, enclosure and accessibility of spaces, building materials, landscaping and work standards
- quality is perceived through comfort, outlook, local climate and pollution.

Ownership

Local responsibility for public areas can help reduce opportunities for crime. If those with a legitimate right feel they have control of public spaces they are likely to help reduce vulnerability by increased activity and surveillance. Encouraging those with a right to use and Own spaces is an important part of designing to reduce crime.

Local ownership is often a product of the quality, usefulness and attractiveness of public areas. It is also influenced by perceptions of defensible space. Here real or symbolic barriers clearly define areas of influence amid opportunities for surveillance. Whether spaces are private, semi-private or public, each space has appropriate levels of collective ownership and responsibility.

The concept of semi-private space has led to the promotion of buffer zones of defensible space between public and private areas. In some cases these can be useful in deterring vandals and other criminals, but care should be taken to ensure buffer zones' do not dilute ownership and commitment to truly public areas. Ill-considered or poorly detailed buffer zones can also use up valuable space without providing useful or amenable areas. For example un-enclosed small front gardens or amenity space around flats may disrupt successful, cohesive townscape layouts, provide no useful space, lack planting or maintenance and so add little to the environment. Such layouts can also reduce the amount of space available for more useable back gardens.

The success of buffer zones relied greatly on the detailed design of the development. The provision of good quality walls, railings or hedges around such areas can clearly define them as private, allowing for more controlled use and maintenance. A mix of solid and transparent boundary treatment can provide strength without undermining surveillance.

The concept of local ownership of semi-private space can be taken further to pull vulnerable public areas into local control. An example of this would be voice entry phones within blocks of flats.

Local identity

Help create an identity and sense of ownership by:

- defining boundaries
- providing a visible identity for example, through building designs and materials
- traffic management
- layouts to encourage community interaction.

Buffer zones:

- should fit within the overall design of the development
- can incorporate internal space for example, entrance lobbies
- Should not become dead areas of rubbish or overgrown plants but should be well defined and maintained.
- Should not hamper views
- Should be accessible and useful to those they serve.

Management

The management of new developments can have a significant impact on criminal opportunities. Active, positive management can help a design get closer to meeting the aims of crime reduction outlined in the first section of this leaflet.

At an early stage thought should be given to ensuring development will be easy to service, repair and clean. A well-maintained environment and buildings can help deter anti social behaviour and give the appearance of local responsibility and ownership. It can also help encourage the legitimate use of open spaces.

Thought should also be given to providing and managing Closed Circuit Television (CCTV) or other security systems. Such systems can reduce crime and are of particular use in small or private areas where they offer a good degree of flexibility. They can however be expensive both to fit and run in large public areas. If a CCTV system is proposed specialist advice should be sought on the position and specification of cameras, and on operating and response arrangements.

In addition Neighbourhood Watch schemes can be effective in promoting a sense of community, local ownership and defensible space. The surveillance offered by such schemes can help make an area feel safer.

Access and Integration

The concepts of surveillance, activity and ownership rely heavily on how the buildings fit in with the transport network. It is important that people can easily understand and use transport routes whether pavements, paths, cycle tracks, roads or trains. As such, developments should be well integrated into the surrounding network, paying particular attention to main junctions including crossings, stations and bus stops.

Manage to reduce crime through:

- maintainable and maintained landscaping
- anti-graffiti and vandalism measures including graffiti repellent paints and materials and designs which reduce access to potential targets
- controlled access to vulnerable areas, for example, entry phones
- adequate and easily accessible litter stores
- permanent, managed surveillance, for example, CCTV, concierge, maintenance staff
- external meters to avoid potential bogus callers.

A balance is needed between minimising access points within an area to reduce escape routes for criminals and providing a useable, sustainable environment that can help foster mixed uses, activity and surveillance. For example shops need to be seen. To survive they must be accessible, and to be accessible they must sit at the correct place within a well-integrated access network. This is normally on a junction between roads fed by other roads. It is not necessary for all parts of an area to be equally accessible, but care is needed to make sure appropriate levels of access are available for different building types and uses.

Physical Deterrents

The term 'target hardening' is often used to describe measures for increasing the physical security of potential targets. These measures include security locks, alarms and security shutters. Such features, along with highly defensible building designs (for example, unbroke walls, minimum use of fenestration) can help improve security, but are often a last resort and should not be used in place of wider preventative strategies. It is important to avoid producing a fortress society with people retreating into their homes as this may well affect wider safety by reducing local ownership, responsibility and surveillance of the wider environment.

Sonic designs can help deter criminals. For example gravel surfaces make it very difficult for an intruder to approach unheard. However care should be taken to ensure that walls, plants and their supports, bins, stores, low flat roofs and balconies are not designed so as to provide climbing aids and hiding spaces for intruders.

It is important to choose secure doors, windows and fences to help deter the criminal. The next section - Down to Details - includes advice on such issues.

Access:

- avoid isolated inaccessible areas
- look to integrate public transport into the access network
- think about the convenience of users.

Keeping the criminal out:

- an English home may be a castle - but can an estate of castles provide adequate homes or a safe and usable environment?
- avoid producing a development where security perceived as the users primary concern.

DOWN TO DETAILS

The following includes advice on various design elements that, if thoughtfully and appropriately used, can offer practical opportunities to reduce crime. However in certain circumstances, for example within conservation areas, some of the specifications listed may not be appropriate. They should be taken as starting points for decisions and not a hard and fast blueprint. More detailed specifications are included within Secured by Design Guidance. Phone the Police on (020) 8200 1212 for more details.

Doors

- The Metropolitan Police in the London Borough of Barnet recommended standard for doors is PAS 24-1 'Doors of Enhanced Security'. Doors should be either kite marked or BBA certificated.
- Look for solid well made doors that are not hollow.
- Make sure the frame is strong and properly fixed into the building. -
- Door styles should be wide enough to house good quality locks (5 lever BS3621 mortise dead/sash locks).
- Provide natural surveillance for doorways.
- Keep glazing to a minimum with glass panels glazed internally into solid rebates.
- Consider placing side windows on the hinge side of the door to prevent easy access if the glass is broken.
- Rear doors should be of the same standard as the front door, but should be outwardly opening for greater security.
- Provide key operable security bolts or hinge bolts at the top and bottom of the door.
- Patio doors should be fitted with a multi-locking system and an anti-lift device. Alternatively provide two patio door locks at the top and bottom of the central stile.
- Use spy holes where possible.
- Make sure properties are clearly named and numbered to help residents, users and emergency services.

Windows

The Metropolitan Police in the London Borough of Barnet recommended standard for windows is BS7950 "Windows of Enhanced Security". Windows should be either kite marked or BBA certificated.

- a balance is needed between safety from fire and safety from criminal attack.
- Windows should overlook wherever possible.
- Ground floor and easily accessible windows should have key operated locks. In some cases opening restrictions will be useful.
- Windows should be securely fixed to the surrounding structure with at least 600mm centres.
- Use top openers and fixed bottoms where possible.
- There are many types of glass available, front annealed glass that is easily fractured, to toughened (tempered) glass that resists attack. Consider the security implications of the glass you choose.
- Sub frames should use material in compliance with the relevant British Standard (for example, BS 1186 for timber frames). Fittings should penetrate at least 10mm into the wall.
- Frame fixing and glazing should be in accordance with the current Glass and Glazing Federation Codes of Practice.
- Consult the local Fire Authority if you wish to use bars or grilles. Windows are often a vital means of escape.
- Shutters should be used with care. They can improve security but also reduce surveillance. Solid shutters should be avoided and open grilles inside the glass used where necessary. For more information on shutters see Design Guidance Note 10 - Shopfronts.

Boundary Treatments

- For advice see Design Guidance Note 10 Gates Walls and Fences
- In addition use sloping coping stones and retain important surveillance views.

Landscaping

- Plant for easy maintenance.
- Where appropriate consider planting close to fences or railings to reduce hiding spaces.
- Where appropriate use thorny plants.
- Try to make landscaping vandal proof.
- Provide a management plan to ensure long term management and quality.

CCTV

Seek expert assistance in the designing of a feasible CCTV scheme.

- Decide what has to be seen and where.
- Decide on picture quality and content.
- Plan observation and response times.
- Look for vandal proof, defensible camera sites.

Lighting

- Lighting is proven deterrent against crime.
- Try to provide a good level of lighting throughout but pay particular attention to vulnerable areas.
- Think about the edge of the lit area. Is the lighting creating contrasting shadows in unlit but important areas?
- Avoid triggered security lights that can instil fear in the vulnerable when accidentally triggered.
- Light all possible points of entry including fire escapes and loading bays.

Car parks and parking

- Car parks should be overlooked.
- Identify pedestrian routes within the car park.
- Make sure car parks are well lit.
- Provide adequate and clear signs.
- Try to avoid providing racing tracks within car parks.
- Private parking should be visible from the users' building.
- If private, off street parking spaces are provided, they are best positioned within each individual home. They do not however need to be at the front of the house.
- Where possible ensure car parks are likely to be used. (Think about combining client uses to help increase use at different times of the day).

Footpaths and alleyways

- Take account of main desire lines. In particular existing paths across a site.
- Make foot paths as short and direct as possible.
- Provide as much surveillance as possible from surrounding buildings
- Locate paths to encourage maximum use.
- Illuminate paths at a level which allows easy recognition of people

- Provide clear vision both into and out of the footpath.
- Make paths as wide as possible.
- Avoid, corners, tunnels or places of concealment.
- Avoid footpaths to the rear of buildings.
- Avoid narrow paths bounded by high walls.

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