

# Secured by Design Principles

## Concept

### The concept of *Secured by Design*

- 1.1 One of the government's key objectives for the planning of new housing is to secure high quality sustainable places where people will choose to live. To achieve this, the government recognises that much greater emphasis needs to be placed on the quality of design and planning. Designing for community safety is a central part of this, and the core principles apply not only to residential but also to other forms of development.
- 1.2 *Secured by Design* is a police initiative to encourage the building industry to adopt crime prevention measures in the design of developments to assist in reducing the opportunity for crime and the fear of crime, creating a safer and more secure environment. *Secured by Design* is owned by the Association of Chief Police Officers (ACPO) and has the support of the Home Office Crime Reduction & Community Safety Group and the Planning Section of The Office of the Deputy Prime Minister (ODPM).

### *Secured by Design* and other design guidance

- 1.3 Good design must be the aim of all those involved in the development process and should be encouraged everywhere. Current government planning policy strongly supports this principle and makes clear that community safety is an integral part of the design agenda. Planning Policy Guidance note 3 (PPG3) calls upon local planning authorities to:

*“promote design and layouts which are safe and take account of public health, crime prevention and community safety considerations.”*

- 1.4 As a companion guide to PPG3, the ODPM has produced guidance for residential development entitled *'By Design: Better Places to Live'*. Safety and security are a fundamental part of the philosophy behind this document. It refers specifically to *Secured by Design* and highlights the need for natural surveillance and the creation of active neighbourhoods through the design and layout of buildings, a mix of dwelling types and the creation of connected movement networks.
- 1.5 The 2004 publication by the ODPM, *Safer Places – The Planning System & Crime Prevention*, firmly establishes this subject within the planning process and identifies *Secured by Design* as a successful model.
- 1.6 In addition to the requirements of planning legislation and guidance, local authorities (and the other bodies within each local Community Safety Partnership) have a wider responsibility under Section 17 of the Crime and Disorder Act 1998 to consider the crime and disorder implications of all their activities, and to do all that they can to reduce opportunities for crime and fear of crime in the exercise of their functions. Developers and their designers and advisers need to be aware of this.

- 1.7 The ODPM good practice companion guide to Design Bulletin 32 *'Places Streets and Movement'* provides advice to local authorities and developers on the main planning considerations to be taken into account in laying out roads and footpaths in residential areas. The companion guide seeks to show in general terms how these considerations can be applied in ways to create sustainable and well-designed residential areas. **It underlines the importance of natural surveillance and designing routes that are overlooked and busy** so that the design of housing layouts can make a major contribution to both the prevention of crime and reducing the fear of crime.
- 1.8 The reduction of crime and the fear of crime are key objectives of *Secured by Design*, which are in accord with the aim of the ODPM guidance to put more emphasis on people and communities. Busy movement routes provide informal control by citizens and a heightened sense of safety, a point highlighted in another ODPM publication *'Personal Security Issues in Pedestrian Journeys'*. In particular, clear and direct routes through an area for all forms of movement are desirable. However, these should not undermine defensible space and the sense of ownership and responsibility inherent in well-designed neighbourhoods. *Secured by Design* seeks to promote routes that are active and self-policing, and where leisure routes are less busy to ensure that the design approach responds accordingly. The creation of underused and lonely movement routes is to be avoided.
- 1.9 Safe communities are stable communities. If the overall direction given by government planning policy and the ODPM guidance is combined with the principles of *Secured by Design* and put into practice by developers, this will be a major advance towards the government's goal of sustainable communities.
- 1.10 *Secured by Design* aims to achieve a good overall standard of security for buildings and for the private and public spaces around them. In respect of residential environments, detailed requirements and recommendations are set out under *Secured by Design 'New Homes'*. Through the introduction of appropriate design features that facilitate natural surveillance and create a sense of ownership and responsibility for every part of the development, criminal and anti-social behaviour within the curtilage or grounds of an estate can be deterred. These design features include secure vehicle parking, adequate lighting of communal areas, fostering a sense of ownership of the local environment, control of access to individual and common curtilages, defensible space, and landscape design supporting natural surveillance and safety.
- 1.11 The core principles of *Secured by Design* are also applicable to non-residential developments and facilities, and specific requirements and recommendations for a variety of other contexts are set out under their own individual topic headings.

### Marketing opportunity

- 1.12 Developers who gain *Secured by Design* approval benefit from a significant marketing opportunity. They are entitled to use the official *Secured by Design* logo in their literature and advertising – the police award for incorporating design, layout and security measures that are conducive to community safety. Information about the application process and how the logo may be used is contained within the main *Secured by Design 'Standards'* document which can be obtained from your local police Architectural Liaison Officer (ALO) or Crime Prevention Design Adviser (CPDA) or from [this website] [the *Secured by Design* website [www.securedbydesign.com](http://www.securedbydesign.com)].

### Why Secured by Design?

- 1.13 Incorporating sensible security measures during the construction of a new development or the refurbishment of buildings and estates has been shown to reduce levels of crime, fear of crime and disorder. This works best if balanced with the need to achieve desirable places to live. The aim of the police service is to assist in the design process to achieve a safe and secure environment for residents and users of public space, without creating a “fortress mentality” which would be counter-productive not only in terms of the government’s objectives for the creation of attractive living environments and sustainable communities, but also ultimately in terms of security. By providing quality environments and ensuring that they are properly managed and maintained, communities can more readily be encouraged to exercise a sense of ownership and responsibility. By bringing the crime prevention experience of the police more fully into the planning and design process, a balance can be achieved, and the government’s desire to create ‘better places to live’ can be fulfilled.

## Designing for Community Safety – Introduction

- (i) The **core principles** set out in this section should be adopted when formulating development proposals for a *Secured by Design* application in order to reduce opportunities for criminal behaviour and disorder, to increase the likelihood of detection and to reduce the fear of crime. The various relevant factors need to be balanced through the planning and design process to achieve a solution which satisfies the needs of the development in question and those of the wider community. The principles are explained with particular reference to the urban environment, since that is where the majority of the population resides and is where the issues tend to be most acute, but the overall principles also have relevance outside built up areas.
- (ii) The relationships between the design of the built environment and criminal and antisocial behaviour are complex. The two main influences on criminal and antisocial behaviour in this context are firstly the nature of the physical environment, and secondly the nature of the social environment, i.e. how local communities interact with each other and with their environment.
- (iii) Certain physical features of the built environment which in themselves are strongly associated with criminal and antisocial behaviour are known as ‘**crime features**’. Examples include ‘movement generators’ (such as inappropriately located footpaths linking major centres of activity through otherwise quiet residential areas), ‘out of scale facilities’ (such as supermarkets intended for the wider rather than the local community) and ‘fear generators’ (places which cause a perception of fear and become abandoned to anti-social behaviour, such as areas of poor lighting or places that are hidden from sight). Clearly every effort must be made to avoid creating such crime features, but where they already exist, they form part of the environmental context and therefore should inform decisions on the planning, and design of new development in the vicinity.
- (iv) In terms of **community interaction**, the key factors are the ways in which members of the community interact with one another and the extent to which they exercise control over their environment, related to defensible space and territoriality, and to

promoting a sense of 'ownership' by the community. Even quite subtle changes in the physical environment, such as changing the frequency of maintenance operations, may influence community perceptions and interaction to a significant extent.

- (v) The core principles set out in this section are intended to improve the design and management of the physical environment, and to promote community cohesion.

## Designing for Community Safety – Core Principles

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Following the main text under each of these six headings is a list of *Secured by Design* 'key points'.

## 1 Integrated approach

- 1.1 Probably the single most important aspect of new development is ensuring that all significant components of its design, planning and layout are considered together at an early stage, so that potential conflicts between security and other major objectives can be resolved. Good design and early co-ordination can avoid the conflicts that may be expensive or impossible to resolve once the construction is complete.
- 1.2 Early informal pre-application discussions between developers, the local planning authority and the police can be a very efficient means of ironing out potential difficulties. Different people will need to be involved at different stages, but the sooner those responsible for design and site layout on behalf of developer and local planning authority (e.g. planners, architects, landscape architects, urban designers, engineers) enter into dialogue with the police ALO/CPDA and (in some local authority areas) the Community Safety Officer, the sooner potential difficulties can be identified and addressed. At detailed design stage, there will be a need for this dialogue to be extended to a range of other specialists such as highways and lighting engineers, etc.

### **Secured by Design Key points**

- Investment in a well integrated and co-ordinated approach to design and project planning will pay dividends through resolution of potentially conflicting interests;
- The best available advice should be utilised, from the earliest stages of a project.

## 2 Environmental quality and sense of ownership

### **Poor environment: alienation and fear**

- 2.1 A poor quality and sterile environment can create feelings of alienation amongst residents and other users, and result in an area where people feel uncomfortable, where pride and sense of shared ownership of the environment is low. Few people will want to linger in public spaces where crime and disorder/or fear of crime is high. In the extreme, this might be the bleak inner city “concrete jungle” characterised by barbed wire and heavy duty security hardware on buildings, where broken glass and graffiti are commonplace. To varying degrees however, similar effects may be seen in other less severely degraded urban environments.

### **Well-designed environment: community cohesion**

- 2.2 In an environment which is **well designed, attractive, clearly defined and well maintained** people are likely to take pride in their surroundings, will tend to feel comfortable and safe and have a sense of shared ownership and responsibility.
- 2.3 A '**well designed**' environment is one that fulfils all its intended functions in an effective and harmoniously co-ordinated manner.
- 2.4 An '**attractive**' environment in this context means one which has evolved or has been successfully designed to meet the needs of its legitimate users, such as the need for safe convenient means of access, the need to enable social interaction, to cater for recreational needs, etc. Legitimate users (ie the responsible majority of the population) will naturally find the environment 'attractive' because it is responsive to their needs. The greater the attraction for legitimate users, the less will be the attraction for the criminal minority.
- 2.5 A '**clearly defined**' environment means one in which there is no ambiguity as to which areas are private, which are public, and how the two relate to one another. There may be transitional zones of semi-public or semi-private space [often referred to as 'buffer zones'], or there may be strong physical demarcation between public and private areas by means of a wall, fence or hedge. The critical point is that the environment should be capable of being easily 'understood' by those experiencing it.

### Anonymity

- 2.6 Crime is always easier to commit where offenders cannot be recognised, so in consequence they will take opportunities to offend where they are likely to benefit from this **anonymity**. The built environment, including areas of open space, can be organised so that it either creates the potential for, or alternatively reduces the levels of anonymity. In busy public places strangers will naturally tend to be ignored, and offenders can take advantage of this anonymity, and therefore opportunity, to commit offences. This can lead to problems where public space directly abuts private space because it can allow potential offenders to come into close proximity with private property without being noticed. This problem can be addressed by changing the nature of the part of the public space nearest to the private land or property, by reorganising it so that residents/property owners are able to exercise a degree of control over it, in effect creating a buffer between the wider public space and the private space. This 'buffer' might or might not still be legally public space, but if it is reorganised or redesigned in such a way as to create a zone of more 'defensible' space, anonymity will be reduced and potential offenders will correspondingly be discouraged.

### Site management

- 2.7 **Maintenance standards** send powerful signals that undoubtedly influence people's behaviour. It is vitally important that ownerships and responsibilities for external space are clearly identified, and that design should facilitate ease of maintenance and management. Sufficient resources must be made available to adequately maintain buildings and communal spaces, including open spaces, footpaths and landscaped areas. High standards of maintenance will encourage active use and enjoyment by the community, and engender a sense of civic pride and vitality. On the other hand, poor maintenance (such as failure to sweep up broken glass or remove graffiti, damaged paving and street furniture, failure to repair walls and buildings etc) can lead to a downward spiral of neglect, loss of environmental quality

and reduced levels of use by the community, leaving the door open to vandalism and other anti-social or criminal behaviour.

- 2.8 For in-fill and many 'brown field' developments, and for refurbishment programmes, it will be essential to consult local communities at the initial planning stage and during the design process. Social, recreational and service needs of residents must be considered, for example relating to shops, telephone kiosks, meeting rooms, footpaths/cycleways and public transport facilities, open space, play spaces, youth facilities, etc.
- 2.9 Where people's surroundings help them to enjoy being out of doors, public spaces will tend to be well used. Individuals who feel some sense of responsibility for areas and spaces around their homes and premises are more likely to take an active interest in their condition and protection. Potential criminals will also feel more vulnerable to detection and crime is less likely to occur.

### Role of landscape design

- 2.10 *Secured by Design* sees sensitive landscape design as essential to achieve an environment that creates a sense of place and community identity. 'Landscape design' in this context encompasses the planning, design and management of external spaces, especially public spaces in the urban environment. It is one of the key disciplines involved in successful urban design. Both 'hard landscape' (constructional elements) and 'soft landscape' (planting) are important in this respect. Care must be taken in the design of the external environment to avoid inadvertent creation of opportunities for crime through, for example, providing hiding places or facilitating access to the upper floors of buildings. The positioning and choice of planting should be such that the potential for such problems is minimised as far as is possible.
- 2.11 It is vital that open space is positively designed, i.e. that function, location, layout and detailed design are all carefully thought through with due regard for the social and environmental context. To simply accept leftover undevelopable parts of a site as public open space is an invitation to future crime and disorder problems. Positive design and planning is equally important in the case of footpaths, and here too professional landscape design skills can be particularly valuable.



### **Secured by Design Key points**

- Sensitive design that takes full account of the social and environmental context and encourages positive community interaction can help foster community spirit and a sense of shared ownership and responsibility. Where possible, the local community should be involved in the planning and design process;
- Provision of high quality landscape settings for new development and refurbishment, where external spaces are well-designed and well integrated with the buildings, can help create a sense of place and strengthen community identity;
- Well designed public spaces which are responsive to community needs will tend to be well used and will offer fewer opportunities for crime;
- Long-term maintenance and management arrangements must be considered at an early stage, with ownerships, responsibilities and resources clearly identified.

## **3 Natural surveillance**

**3.1** Natural surveillance is a cornerstone in the achievement of community safety. Where the likelihood of being seen is low, the risks perceived by potential offenders are also low and the likelihood of crimes being committed will be higher. Ensuring that spaces around buildings, footpath routes, open spaces and parking areas in residential developments are open to view from adjoining occupied properties and/or well-trafficked routes can assist in discouraging criminal activity, by increasing the risk of detection, reducing opportunities for crime and making potential offenders feel more vulnerable. The greater the level of use of public spaces by responsible citizens, the greater will be the degree of natural surveillance. This is one of the key mechanisms by which attracting more people to use communal spaces through investing in a high quality environment pays dividends in a reduced incidence of crime.

**3.2** In general, surveillance increases the likelihood of detection, but at the cost of reducing privacy. In the design of any development, particularly housing proposals, care must be taken not to infringe upon privacy to an unacceptable degree. Overlooking of public spaces by surrounding properties is desirable, but direct overlooking from one property into neighbouring properties should be avoided.



**Secured by Design Key points**

- Public and semi-private areas should be readily visible from nearby buildings or from well used rights of way;
- Natural surveillance is to be strongly encouraged, but care is needed particularly in residential development to ensure that privacy is not infringed;
- For residential development, parking should be provided close to and visible from the buildings where the owners live.

## 4 Access and footpaths

### Planning issues

- 4.1 Vehicular and pedestrian access routes are often problematic from a crime deterrent point of view, and the planning issues can be challenging to resolve. The provision of convenient access is an essential ingredient of new development, yet this can also provide easy access to buildings and means of escape for burglars, and create opportunities for crimes against people.

### Access design and escape routes

- 4.2 To satisfy the requirements of individual developments, and in the interests of good urban planning, new development must provide adequate access to meet functional and recreational needs, including for example paths and inter-connecting open spaces, and access for emergency services. However, multiple footpaths and points of access can make crime easier to commit by providing a choice of alternative escape routes from the scene of the crime. Careful attention to the disposition and design of access, and in some cases limiting the means of access to developments and to buildings, can assist in reducing opportunities for crime, be it illegal entry, vandalism, crimes against the person or vehicle theft. Uncontrolled rear accessways to buildings and footpaths that are unduly secluded provide opportunities for crime with a low risk of detection and are to be strongly discouraged. It may on occasion be necessary to restrict access to a development to one main point, and it is always advisable to carefully consider the desirability and design of secondary access routes.

### Perceptions of safety

- 4.3 If an access route is deemed to be desirable, for instance a proposed route that is shown in an adopted Local Plan, Local Development Framework or equivalent, it should be designed in such a way that it is safe and will be perceived to be safe, and minimises the opportunities for it to be used to commit crimes.

## Footpaths and cycleways

- 4.4 Public footpaths and cycleways form a vital part of the communications network in both urban and rural settings. They also often provide an important local or strategic recreational amenity. Their provision is strongly encouraged by current government planning guidance, but awareness is needed of the potential problems that poorly located or poorly designed footpaths can have. They can, for instance, provide opportunities for unobserved access to the rear of buildings, means of escape for offenders and opportunities for crimes against people. Furthermore, poorly designed or sited footpaths may cause users to feel ill at ease and give rise to fear of crime, particularly after dark. This is likely to lead to reduced levels of use, which reduces the benefit to the community and will in turn exacerbate the problem. Well-designed, well-used and well-maintained footpaths on the other hand provide fewer opportunities for crime and are likely to feel safer.

## Road design

- 4.5 Changes in surface colours and materials and the use of physical and psychological barriers such as gates or thresholds are important in creating a sense of community ownership and deterring potential offenders from areas that may be perceived to be private or semi-private.

## Canals and rivers

- 4.6 Particular design issues need to be addressed in relation to development adjoining rivers and canals, especially where the watercourse provides public access or amenity. Valuable help and advice on these issues can be found in a design guide '*Canal Crime - Under Lock and Quay*' jointly issued by British Waterways and the Metropolitan Police (available from [www.crimereduction.gov.uk/vehiclecrime34.pdf](http://www.crimereduction.gov.uk/vehiclecrime34.pdf)). In effect, the advice is to treat canals and rivers, especially those with associated towpaths and footpaths, as if they were roads. In urban environments, the guide recommends 'double-fronted buildings' to ensure that the waterside and the street are both overlooked. This can be achieved by a suitable layout of rooms within the building, for example by means of a 'through lounge'.

### **Secured by Design Key points**

- Superfluous and unduly secluded access points and routes should be avoided;
- Access points to the rear of buildings should be controlled, for example by means of lockable gates (see also *The Alleygater's Guide to Gating Alleys*, – link from SBD website);
- Roads to groups of buildings should be designed to create a sense of identity, privacy and shared ownership;
- Footpaths and cycleways should only be provided if they are likely to be well used;
- Footpaths and cycleways should be of generous width and have a suitable landscape setting to avoid creating narrow corridors which could be perceived as threatening;
- In terms of security, the design of the footpath is of equal importance to the design of the building. Where possible, the footpath should be at least 3 metres wide with a 2 metre wide verge on either side. Any shrub planting should start at the back of the verges.
- The position of planting and choice of species should be such that hiding places are not created. Thorny species of shrub can help to deter intruders;
- Good visibility should be maintained from either end, and along the route of footpaths and cycleways. Sharp changes in direction should be avoided;
- Footpaths and cycleways should not generally be routed to the rear of buildings, but if this is unavoidable a substantial buffer should be planted between a secure boundary fence and the footpath's margins, with planting designed so as to discourage intruders;
- Where developments adjoin waterways or rivers with towpath/footpath access, the buildings should 'face both ways', i.e. overlook the watercourse as well as the street;
- Footpaths and cycleways should be lit in built-up areas, except where the route is passing through woodland or an ecologically sensitive area, in which case an alternative lit route should be made available, such as a footway alongside a road;
- Alternative routes to important destinations may be beneficial, although a balance has to be struck between the advantages of greater choice and perceived security against the disadvantage of providing additional means of escape or of encouraging inappropriate movement of people

## 5 Open space provision and management

### Amenity open space

- 5.1 The provision of adequate areas of open space within new development for the benefit of present and future generations is an important planning objective, and makes a significant contribution to its character and in providing recreational facilities. Locally adopted Development Plans\* normally include policies specifying requirements which developers must adhere to in the provision of private and public open space. The provision of open space must be considered as an integral part of the overall scheme design, and its functions must be clearly defined.
- 5.2 However, the use of land to gain access to properties to commit other crimes and engage in antisocial behaviour are problems that may be associated with areas of open space and it is important to have regard to these matters in designing development schemes. Intimidation of younger children by older ones in play areas may also be a problem. The initial design quality, degree of natural surveillance, standard of subsequent maintenance and level of use by the local community are all important factors in minimising these problems. Focal points or likely gathering places should be situated well away from adjoining properties. Provision of recreational facilities and meeting places for local communities can help reduce crime in specific areas by providing positive alternatives, particularly for young people. The provision of 'youth shelters' is a potentially valuable option, but one that demands particularly careful attention to planning, design and community consultation. [see also 'Youth Shelters and Sports Systems – A Good Practice Guide' by Thames Valley Police – link from SBD website]

### Long term management

- 5.3 A successful development will require long-term site management. If this is neglected, an environment that allows crime to flourish may unwittingly be created. It is essential that a programmed management system is in place to maintain the physical development including its external spaces. Regular grass cutting, grounds maintenance, litter and graffiti removal will need to be planned for.
- 5.4 In order to ensure the long-term maintenance and management of public amenity open space, footpaths and cycleways, the preference will generally be for these areas to be transferred into public ownership. Developers are required to demonstrate to the local planning authority and the police that adequate provisions have been made for the future maintenance of open space. The local planning authority will normally require a developer to enter into a legal agreement covering the transfer of the land and any associated provisions. In some instances other arrangements such as the setting up of residents' management companies may be appropriate. In all cases, early consideration of management objectives, maintenance specifications, and long term responsibilities is essential to ensure that amenity benefits are fully realised and safeguarded for future generations.

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\* Local Plans, Structure Plans and Unitary Development Plans, Local Development Frameworks

### **Secured by Design Key Points**

- In the urban setting, open space, footpaths and cycleways should preferably be overlooked from buildings or traffic routes. Buildings should preferably face onto these areas, provided always that acceptable security for rear elevations can still be ensured;
- Property boundaries, particularly those at the side and rear, which adjoin public land, need to be secure. Windows should not provide easy access from public land. A substantial buffer planted on the outside of the fence line may help to discourage intruders;
- Long term management responsibilities and resources must be clearly identified at the planning stage to the satisfaction of the ALO/CPDA.

## **6 Lighting**

### **Research on lighting and crime**

- 6.1 Research confirms that where public lighting is weak or patchy, increasing the levels and consistency of illumination reduces the fear of crime and makes people feel more secure. The relationship between lighting and crime itself (as opposed to fear of crime) is somewhat more complex, but recent research (Farrington & Welsh 2002, Home Office research study 251) indicates that improved lighting can indeed result in crime reduction, particularly when this has been combined with other community safety initiatives.

### **Variety of lighting sources**

- 6.2 Different sources and patterns of lighting need to be considered for different environments. Recent research suggests that for a given lighting intensity, white light is more beneficial in safety terms than coloured light such as from sodium lamps. The objective of increasing lighting levels and avoidance of deep shadow for safety reasons does not preclude the use of varying light levels and diverse sources such as spots and floodlights, which may be appropriate in special areas such as historic towns. Where low-level lighting is used, fittings will need to be highly vandal-resistant. PPG15\* suggests that high-pressure sodium lamps with well-controlled light spillage may be preferable in environmentally sensitive areas.

### **Light spillage**

- 6.3 Care must always be taken to ensure that the environmental (including astronomical) impact of “light spillage” or “light pollution” is kept to a minimum, and does not create problems for residents or motorists or have a harmful effect on the ecology or local character of an area.

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\* Planning Policy Guidance Note 15 “Planning and the Historic Environment” DETR 1994

***Secured by Design Key Points***

- Improved lighting can be effective in reducing fear of crime, and in certain circumstances reducing the incidence of crime;
- Different lighting sources need to be considered for different environments - the character of the local environment must always be respected.