

#### **ACKNOWLEDGEMENTS**

This guide has been produced for the High Peak Community Safety Partnership by Derbyshire Constabulary and High Peak Borough Council. The Partnership wishes to express its thanks to Mark Freel, Adrian Fisher, Jo Brooks and Richard Mason for their work in its production.

#### THE DOCUMENT

This document is Supplementary Planning Guidance and provides advice on design for community safety in a variety of contexts and environments. The lead partners within the High Peak Community Safety Partnership are the 'B' Division of Derbyshire Constabulary, High Peak Borough Council and Derbyshire County Council.

This document is available in alternative formats and languages on request, please contact 0845 129 7777 Ext 2127

### **Foreword**

The way we build today influences the shape of our towns and villages tomorrow. It is therefore vital that we provide for our current needs whilst leaving coming generations with the best possible legacy for the future. Attractive, well designed and above all safe, new developments play an essential role in building sustainable communities.

This guide has been prepared by High peak Borough Council, Derbyshire Constabulary and their partners to provide a practical guide on making new developments safer from the start. It builds on national advice and the established principles of secured by design but tailors them to the distinctive character of the High Peak.

We hope this guide will prove useful to all who are involved in the development process and shaping the future of our Borough

**Chair of Community Safety Partnership** 

CON	NTENTS	Page
	word duction	7
	ting Sustainable and Secure Residential Environments gn Principles for Crime Reduction	
	The Development Siting and Layout Landscaping Species of Planting for Hedges and Boundaries Lighting Vehicle Parking Building Design Boundaries Pedestrian access Play Areas  - Community Planning Issues - Play Area Design Issues - Management Issues Closed Circuit Television	9 10 12 13 15 16 19 20 22 23 23 23 24 25
	Design of the Commercial Development Development and Design Perimeter The Building Vehicle Parking Lighting and CCTV Roofs, Walls, Windows and Doors Commercial Estates	26 26 27 28 29 29 30 30
Desi	gning Out Crime in Town Centres	
Da Bra	Conservation Areas and Listed Buildings Shop Front Security Glazing Stallrisers	32 32 33 34

Internal Grilles	34
External Grilles	34
Shutters	35
Security Through Design	35
Shop Front Security on Listed Buildings	35
Applying for and Achieving Secured by Design	36
List of Figures	
Figure 1 Secure site layout	10
Figure 2 Good safe secure site layout	
Figure 3 Crown copyright. All rights reserved HPBC licence no LA078247	11
Figure 4 Poorly maintained shrubs obscure surveillance from window	12
Figure 5 Hedge as boundary	
Figure 6 Tree branches pruned from tree trunks result in greater views, opening lines of natural surveillance and deflecting offenders from their target.	13
Figure 7 Example of good lighting	14
Figure 8 Poor lighting resulting in increased fear of crime	15
Figure 9 Opposing terraces offer good surveillance over a vehicle	17
parking area Figure 10 Clearly marked boundaries discourage offenders who may attempt to climb over them. The wooden panal fencing is fitted flush to the front of the lower brick work so that no foothold is offered	<sup>,</sup> 21
Figure 11 Metal railings have been added to the top of a low stone wall to prevent, restrict and discourage access but also to surveillance in and out of the property	21
Figure 12 Metal railings have been added to prevent and discourage access but to provide as much light view as possible	21
Figure 13 Alleyway with a blind spot at the end. Offenders can lurk here creating an increased fear of crime. The wall at the end has already been graffited	22
Figure 14 Children's play area with good natural surveillance. The boundary fence is 'see through' so that there are no hiding places for persons to perform anti social activities	24
Figure 15 CCTV surveillance	25
Figure 16 Perimeter Hawthorn hedge, difficult to climb. However the	27
height has obscured the premises to the rear, reducing natural surveillance and increasing the likelihood of attack	
Figure 17 Overgrown bushes have obscured the view into and out of the adjacent building. On the left is the area before the bushes have been cut back. On the right shows the same	

	scene once the bushes have been cut back to 1m in height	
Figure 18	Use of dwarf stone walling with 'Pallisade' fencing at the	28
	top. The wall itself provides a foothold to climb the metal	
	fencing and negates its use. The adjacent alloy sheeted	
	wall is also accessible by standing on the low stone wall	
Figure 19	Good use of 'Pallisade' fencing at the perimeter of car	29
	park. However the gate across it is a metal barrier type gate,	
	which is easily climbed. The gate should be the same height	
	as the fence and should be fitted with suitable padlocks or	
	other security devices	
Figure 20	BS6206 'kitemarked' laminated glass fitted to front door 3	0
Figure 21	Hinge bolt 3	0
Figure 22	Door edge security showing thumb turn. Five lever mortice 3	80
-	lock rim latch and door chain	

# For further help and advice, please contact:

Crime Prevention Design Advisor Safer Derbyshire Derbyshire County Council County Hall Matlock, Derbyshire DE4 3AG

Tel: 01629 580000 Ext 6062 www.saferderbyshire.gov.uk

Business Manager – Forward Planning
High Peak Borough Council
Municipal Buildings
Glossop Derbyshire SK13 8AF

Tel: 0845 129 77 77 www.highpeak.gov.uk

#### INTRODUCTION

# **Purpose**

This document is Supplementary Planning Guidance designed to advise planners, architects, designers, landscape architects and prospective developers on community safety in the built environment. It was adopted 16 March 2004.

This planning guidance will assist High Peak Borough Council in making decisions on individual planning applications and will be used to promote good practice.

# **Background**

The design and layout of the built environment has an impact on Crime, and the fear of Crime and Community Safety. A number of strategies and documents seek to promote safe and secure design.

Planning Policy Statements and Guidance Notes include PPS1 on General Policy and Principles, PPG3 on Housing and PPG13 on Transport. These provide specific advice on how local authorities should promote designs that are safe and which take into account crime prevention and community safety. They emphasise the importance of section 17 of the Crime and Disorder Act 1998 and the role of the planning system and the Police in formulating and implementing strategies to reduce crime.

'Without prejudice to any other obligation imposed on it, it shall be the duty of each authority to which this section applies, to exercise its various functions with due regard to the likely effect of the exercise of those functions on the community it serves, and the need to do all that it reasonably can to prevent crime and disorder in its area'.

(Section 17 Crime and Disorder Act 1998 Chapter 1. Part 1)

Anyone considering crime and security at the planning stage of the development process this guidance should be read in conjunction with the High Peak Local Plan, in particular Appendix 2 in relation to 'Guidelines for the Design and Layout of Residential Developments'. This appendix covers environmental analysis, street and scene layout, landscaping and materials. The Council will shortly be publishing separate guidance on general residential design.

The general development framework of the High Peak Local Plan considers crime prevention in section GD.10 and 11. It states that 'planning permission will be granted for development provided that, its design, layout and landscaping will help create a safe and secure environment and minimise the opportunities for crime to be committed, and it will comply with all other relevant provisions of the plan'.

Reducing crime requires measures beyond those that fall within the scope of land use planning and development. The High Peak Community Safety Partnership is committed to working together with other partners to attain this reduction.

Much can be done at the design stage to alter the way certain environments are perceived by the public and potential criminals alike. Consideration and thought at this stage can contribute to a reduction in fear of crime and the actual incidence of crime including theft of and from motor vehicles, robbery, burglary, assault and vandalism.

This Supplementary Planning Guidance aims to achieve a balance between creative designs and crime prevention and aims to create and achieve high quality developments.

This guidance will help achieve the vision of the High Peak Community Safety Partnership, which is to improve the quality of life in the High Peak, by creating safer communities, reducing crime and disorder, together with reducing the fear of crime and disorder, by tackling the causes of crime.

# CREATING SUSTAINABLE AND SECURE RESIDENTIAL ENVIRONMENTS

# DESIGN PRINCIPLES FOR CRIME REDUCTION AND COMMUNITY SAFETY

# The Development

The principle of Crime Prevention Through Environmental Design (CPTED) aims to create a physical environment that encourages community safety. This is echoed in Planning and Policy Guidance No.3 (PPG3), which promotes the provision of sufficient, affordable, and well designed housing that addresses local needs.

Design is often a balance between various factors such as historic conservation or highway safety and the development will need to be looked at as a whole.

The following points apply in considering the security of any site:

- Equal weighting should be given to both the local environment and the physical security of the development.
- Principles of designing out crime must be incorporated into the design and should be agreed with the Local Planning Authority and the Crime Prevention Design Advisor (CPDA)
- Local conditions will influence to some degree the measures to be adopted and will be site specific to individual developments.

There should be a mix of dwelling types as this then increases the potential for occupancy of dwellings throughout the day and therefore gives increased chance of natural surveillance. This then generates community interaction and environmental control. Furthermore if developments are designed in this way then the local community's need for housing will be met.

This layout on the right shows a development in New Mills in the High Peak, which is typical of sites with approval for 'Secure by Design'. This is a Police administered Security Scheme which requires approval of the Crime Prevention Design Advisor.



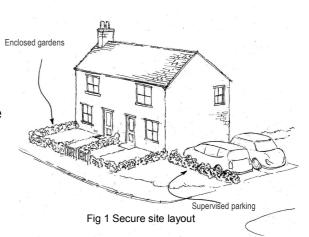
# Siting and Layout

The layout of a development can have a positive impact on the way it functions. Layout deals with the arrangements of streets, buildings, public and private spaces.

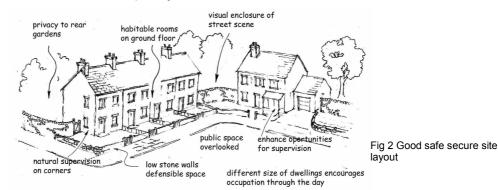
These elements affect the levels of activity in an area, which may ultimately impact on community safety and security. A steady flow of pedestrians and vehicles provides continuous supervision of an area – so called "passive surveillance".

The points below provide further illustration.

 Dwellings should face onto the most public side of the road. Rear gardens should back onto areas that are themselves secured. Housing should be situated so that maximum views can be obtained increasing natural and passive surveillance. Achieving this in high density developments may be difficult but the principles should not be disregarded.



- Parking areas should be well viewed and the design of road layouts should facilitate an appropriate flow of traffic at a speed where casual observation is achieved. Consideration must be given to all road users.
- Footpaths and open spaced areas should be visible and open to natural and passive surveillance. Open boarded fencing should be used to create maximum views yet still achieve defensible space.
- A balanced integrated mixture of uses within residential areas can have positive effects. Local retail, leisure and community employment can mean that residential areas benefit from greater surveillance and thereby offer greater crime deterrence. Such balanced communities are also more sustainable and offer a better quality of life.



 Proposals for a new development in a conservation area should have a layout that reflects the character of the surrounding area.

The layout principles of a Secure By design estate.

Housing is positioned so that front doors can be seen by opposite neighbours, in curtilage parking and secure boundaries have been provided.



Fig 3 Crown Copyright. All rights reserved. High Peak Borough Council License No. LA07824.7

# Landscaping

Poorly designed landscaping can compromise the overall effectiveness and security of a new estate. For example the fear of crime can be increased if trees are planted that will eventually grow and obstruct views. The following principles should be observed when considering the layout of a new design.

- The correct use of certain attractive species of plants and trees can create a
  high quality environment and at the same time reduce the opportunity for
  concealment. The use of thorny shrubs to create physical and psychological
  barriers should provide effective control between public and private areas.
  Bushes and shrubs should grow to maximum height of 1m to allow greater
  views and tree trunks should be branch free below 2 meters for the same
  reason.
- Hard landscaping should not create a hostile environment. Paved and concrete surfaces should be designed and located to prevent opportunities for anti social behaviour. Materials should be carefully chosen to minimise the opportunity for causing vandalism and damage to buildings or vehicles. Loose stones or pebbles provide a source of potential missiles.
- Public open spaces should be property maintained to deter disorder such as fly tipping or drugs.
- If trees are to be planted, canopy size and trunk branch density should be considered. Low canopies and dense leaf coverage lead to poor surveillance and greater degrees of obscurity. Where CCTV coverage may be required, locations and canopy size should be calculated prior to any planting. This will avoid any obscurity problems at a later date.
- The siting of street furniture can also have a significant impact as a potential crime generator. Poorly sited street signage can obscure potential CCTV camera views thereby reducing monitoring capabilities.
- Overgrown shrubbery can obscure views and provide potential hiding places for offenders.



Fig 4 Poorly maintained shrubs obscure surveillance from window.

# Species of planting for hedges and boundaries

The use of shrubs, climbers and appropriate planting can make an environment more attractive, secure and reduce the potential for crime.

Hedges planted below windows and adjacent to building lines can make a contribution to defending properties from attack and keeping out intruders. Planting can be used to define private forecourts, private and semi private space.

Thorny species create a good natural barrier and small box hedges create defensible space an important aspect when defining boundaries.

As stated previously care must be taken when considering planting, to control the growth of all shrubbery and trees.

The following plants may be considered but it is important to select the right one for a particular location or need.



Fig 5 Hedge as boundary

**Yew -** Evergreen native species, easily trimmed to form an impenetrable hedge. The berries are poisonous and hedges take some time to establish.

**Holly -** Evergreen species with sharp pointed leaves that can form an imposing impenetrable hedge.

**Privet -** Species vary in hardiness and some retain leaves throughout the winter. Trimmed the hedges are thick and strong. Trimming of privet but should be done frequently to maintain its maximum surveillance height.

**Hawthorn** - Hawthorn can be managed to provide a thick dense hedge. Its spikes provide an excellent barrier to climbing.

**Blackthorn -** This is a spiny deciduous shrub that can be included in any hedge to add variety.

**Common Buckthorn -** As above this shrub provides variety to a hedge. It has spines and black fruit.

**Pyracantha –** Evergreen species, some of which have thorns. They vary in height and need to be maintained and trimmed.

**Berberris** - Some of these are flowering varieties and can have loose leaves in winter.

**Cotoneaster -** Some varieties form deciduous fan shaped growths that can be planted to protect walls from graffiti. They are vertical climbers.

**Virginia creeper –** Self clinging, climbing plant, that will protect building walls and fences against graffiti. Leaves fall in winter.

Boston Ivy - As above, this is a tough plant that survives well.

**Ivy** - Useful clinging protection for walls, but must be maintained and trimmed regularly. Stems can be strong and can if left unchecked provide footholds for climbing.

**Hydrangea petiolaris -** Another self clinging plant that can provide protection on walls against graffiti.

**Schizophragma -** Similar to climbing hydrangea.

**Roses -** There are a great many varieties that can strengthen boundaries against intruders especially if used along a trellis topped fence. Shrub roses such as Rosa Rubrifolia and dog roses are tough and thorny.

**Blackberry** - Another thorny plant that is ideally suited as a topping to a fence. It should be noted that because the shrub provides fruit, this in itself can become attractive to potential vandals or thieves.

There are many varieties and species with their own advantages. Landscape architects, nurseries and garden centres can give more advice on these if necessary.



Fig 6 Tree branches pruned from tree trunks result in greater views, opening lines of natural surveillance and deflecting offenders from their target.

# Lighting

When lighting schemes are being considered it is important to create a balance between decreasing the chances for crime to be committed and reducing the fear of crime. In some locations crime can be generated if lighting is installed as it merely assists the offender in the commission of the crime. The following points should be considered

- Appropriate use of lighting can reduce the fear of crime and increase the chance of detecting it. Lighting should be fitted so as to deter criminal activity and anti social behaviour.
- Care should be taken when considering the use of reflective surfaces as these may cause 'light flare'. This could interfere with the use of CCTV at a later time.
- Lighting should conform to BS 5489 and thought should be given to the use of robust vandal proof lighting covers. They should also be located so as to make tampering difficult.

Landscaping should not obscure lights

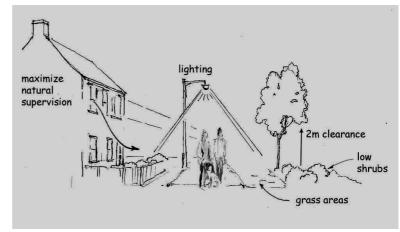


Fig 7 Example of good lighting

 Premises and car parks should be well lit and shadowed areas should be avoided.

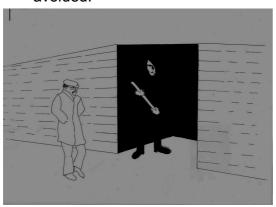


Fig 8 Poor lighting resulting in increased fear of crime

- Care should be taken to avoid <u>light</u>
   <u>pollution</u> when lighting an area. Light
   spillage and flare may cause other
   environmental issues, so the use of
   light shields may be considered.
- Light should be focused on what it is intended to illuminate as poor lighting can lead to an increased fear of crime

# **Vehicle Parking**

In the design of vehicle parking, consideration should be given to the layout of the site, lighting, boundaries and perimeters, surveillance and if it's a large parking area the management of the site itself.

Further advice can be obtained from the Crime Prevention Design Advisor and the Association of Chief Police Officers (ACPO) in relation to the Safer Parking Award.

This award is administered by the British Parking Association and assessed by the Police and covers all aspects of parking including heavy goods vehicle parks, motorcycle parking, multi storey parking, town centre and rural car parks. The award can be given without Secure by Design approval and is more applicable to car parks built away from domestic property developments.

Follow the points below when developing residential areas of parking.

- Residents parking should ideally be within the curtilage of the dwellings.
  Where other vehicle parking is provided, spaces should be visible from the
  dwellings and grouped so that residents can become familiar with cars
  and their owners. Intruders will then be noticed and could be legitimately
  challenged.
- Large communal parking areas should be discouraged or well supervised.
- Drive way parking should also have perimeter gates (where permitted by the Highway Authority) to act as a natural barrier and crime prevention deterrent.



 Garage entrances (like the one above and on the left) should be orientated so that they can be observed by occupants, for example at the front of the house or at the side as these are.



- In conservation areas 'in curtilage' parking may not always be achievable especially where its provision would be detrimental to the character of the conservation area.
- This 'Secure by Design' development shows parking spaces provided within the boundary of the house. The physical barrier of the garden wall indicates private defensible space.



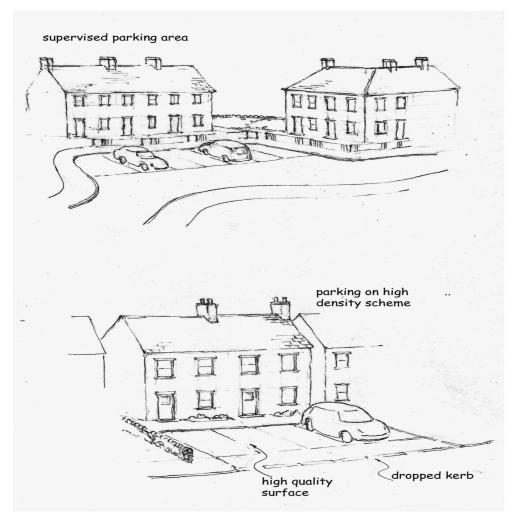




 These pictures above show vehicles parked in a court yard at the rear of a development, yet they are also overlooked by houses facing opposite and therefore have surveillance from both sides.



Fig 9 Opposing terraces offer good surveillance over a vehicle parking area.



• The drawings above further depict the benefit of preferred parking designs

# **Building design**

The safety, improved security and reduced fear of crime of a new development can be achieved by providing natural surveillance over and through the site.

The criminal feels exposed when natural surveillance is increased. This can result in crime reduction and prevention, something that should be achieved at every possible point in the development of the plans.

The points below should be considered.

 Buildings should be designed so that maximum surveillance is obtained from their positioning. The grouping of houses around a focal point or shared area creates a sense of defensible space increases the chance of offenders being seen and therefore being caught. It also discourages intruders.



- homes should, wherever possible, have private entrances that are not recessed. Flush frontages offer little hiding space for burglars but may not be as attractive to potential property purchasers. However as in the photo to the left an alternative may be to construct an open porch area that allows natural and passive surveillance. A compromise should be struck so surveillance and aesthetics can be balanced.
- Building extensions should not obscure entrances and should not allow access to upper floors and upper storey windows.
- Within conservation areas, the design of new building should be to meet the above security guidelines but also reflect the character and vernacular style and architecture of the surrounding areas and buildings.

## **Boundaries**

Defining the boundary of individual properties, and of an estate or larger residential development, gives the occupiers a greater sense of personal space and develops ownership. Defensible space can be split into four categories.

**Private space**: your own house and contents

**Semi private space**: your own driveway where the postal services may have access at certain times

**Semi public space**: a football ground open on Saturdays to the public but closed during the week

Public space: an open park or public open space

- It is important that appropriate demarcation between public and private areas
  is clearly indicated. Dwelling frontages that are open to view may have low
  walls, railings or hedges that enhance a sense of ownership. This treatment
  should provide a clear view into the front garden or parking area of the
  property.
- Parks and other open spaces should be sited so that they are visible from the front of adjacent dwellings.
- Rear gardens should not be accessible from the front of the property, other than by gated access. 33% of all burglaries occur when a rear ground floor window is forced and every effort should be made to restrict this access.
- Rear gardens should also be protected by fences and should back onto one another for mutual protection.
- Consideration should be given to the use of trellis topped fencing as an additional deterrent feature and / or the use of thorny bushes planted to the rear of fences to deter climbing.
- With terraced properties, rear accessed alleyways should be avoided. Where
  alleys are necessary for access these should be gated and kept as short as
  possible. Gates should be adjacent with the building line and should be of a
  type that cannot be climbed. They should also have tamper proof locks and
  be 'see through' to ensure views along alleys are maintained.
- Where appropriate perimeter fencing and gates should be made from open boarded construction, railings or powder-coated mesh.

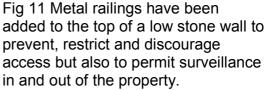
- Boundaries play an important role in determining the character and contributing to the landscape of an area. Traditional boundary features such as stone walls, must be retained especially within conservation areas and surrounding listed buildings.
- Gates are fitted to the same height to discourage offenders climbing over and offer secure parking for owners vehicles

Fig 10 Clearly marked boundaries discourage offenders who may attempt to climb over them. The wooden panel fencing is fitted flush to the front of the lower brick work so that no foothold is offered





Fig 12 Metal railings have been used to prevent and discourage access but provide as much light and view as possible.





#### **Pedestrian access**

- The nature of access routes through a development can have a major impact on whether or not an area may be vulnerable to crime. Routes should be designed so that they are clear, direct, busy and well used. They should not undermine the defensible space of neighbourhoods.
- Pedestrian routes should be clearly signposted, well illuminated, and designed in such a way as to incorporate boundary treatments that allow maximum surveillance.
- They should be wide enough to accommodate a variety of use including families with children and wheelchair users.
- Pedestrian routes should not pass close to the rear of dwellings and should not be obscured by planting or be enclosed with high walls.
- Footpaths should be unobstructed avoiding sharp directional changes and areas for concealment.



Fig 13 Alleyway with a blind spot at the end. Offenders can lurk here creating an increase in fear of crime. The wall at the end of the alleyway has already been graffitied.

# **Playing Areas**

Playing areas have the potential to generate crime and anti social behaviour and increase the fear of crime in the community. They are also vulnerable to crime, and suffering damage, which is expensive to repair. As a result of this abuse the investment in playing areas, their use and their contribution to quality of life in the community can be seriously reduced.

The following check list highlights design and management features, which need to be included in the planning of playing areas, better design and construction will help to block the opportunity for crime and anti social behaviour. The following features will be required for a Secured by Design Award for a playing area and must be resolved at the earliest possible stage of the design process.

## **Community Planning issues**

- Each play should be designed with its intended age group in mind. This should be considered relative to other local play facilities in the area. It is important that all age groups in the community are adequately provided for. The need for youth gathering and socialising should be recognised with appropriate facilities included in a positive way.
- Provide adequate space for the activity proposed on the playing area complete with a buffer zone between the activity and adjacent dwellings and other occupied buildings.
- Ensure the playing area has the appropriate infrastructure e.g. to allow adequate road, cycle/foot path access and secure parking nearby
- Locate play areas for young and very young children within the protection of the built community to provide adequate natural surveillance and supervision Ensure that ownership and management of the proposed facility is in place with adequate resource available for maintenance and improvements that will be required.

#### Play Area Design Issues

- **Define**. Boundaries clearly defined with features to prevent unauthorised motor cycle/vehicle access
- **Design**. Boundary fences and landscape to allow natural surveillance across playing areas from public areas, roads and footpaths.
- **Provide**. Lighting as appropriate provided to facilitate natural surveillance at night and reduce fear of crime
- **Discourage**. Public rights of way through playing areas discouraged
- **Control.** Control informal public access to playing areas to prevent dog fouling and littering of playing surfaces

- Use structures or landscape features that compromise boundary security providing climbing over points
- Natural landscape used for 'adventure ' play shall have limited / designed hiding places only with preference given to clear natural surveillance and no opportunities for rubbish to accumulate
- Use additional security features as necessary to reduce threat from particular local crime patterns
- Consider and take account of the effect of facilities such as public toilets changing pavilions and play area security
- 'Design in' Youth gathering shelters and avoid the provision of inappropriate and unsafe youth gathering places

### **Management Issues**

- Determine at an early stage the management of a particular site. This can be the remit of the local authority, a housing association or a property management company.
- Ensure regular maintenance. This might include cleaning routines, grass cutting, pruning, painting repair and replacement
- Monitor and record the use of play areas and facilities provided and take account of community consultation.
- Record and monitor crime and anti social behaviour patterns and consider appropriate action.
- Plan improvements and / or changes to block crime and anti social behaviour and encourage use.



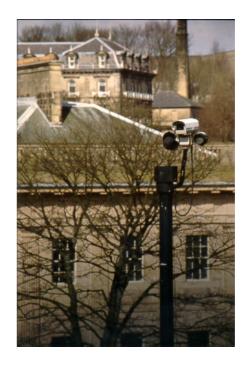
Fig 14 A children's play area with good natural surveillance. The boundary fence is 'see through' so that there are no hiding places for persons to perform other anti social activities.

#### **Closed Circuit Television**

- Closed Circuit Television (CCTV) can play an important role in the prevention and detection of crime. Any CCTV system should be of a high quality and resolution and should be accompanied by appropriate lighting.
- More importantly, the monitoring of any CCTV system should be considered prior to any installation. It must be noted that the presence of CCTV cameras does have a deterrent effect on the commission of an offence, whether the cameras are dummy types or not.
- Remote monitored systems should be proactively monitored to work on both prevention and detection levels.
- Care should be taken when assessing siting of the cameras. Assessments should be made during daytimes, nightimes, winter and summer periods. Assessments need to be made at relevant times to obtain maximum benefit from camera systems. A tree in winter gives a very different picture from a tree in full bloom in summer.
- Clear signage should be used informing visitors that CCTV surveillance is taking place.



Fig 15 CCTV surveillance



# **Designing out crime in Commercial Areas**

Commercial and retail crime costs the country millions of pounds each year. Government figures suggest the cost to the owner or retailer to be in the region of £9.1billion per year.

The effect of a burglary at any commercial premises cannot be underestimated. Items stolen in the process of this type of crime, such as computers and other IT equipment, can bankrupt a company overnight.

When new factories, business parks and industrial units are being built, designing out crime at the planning stage can pay significant dividends in the long term and reduce the opportunity for crime.

There are three factors that affect crime.

The 'factor triangle' includes the offender, the victim and the opportunity. The opportunity can be reduced by designing out 'crime generators'.

Poor lighting, little or no surveillance of the premises, recesses in the shell of the building, secluded vehicle parking, and can in some cases generate crime.

# **Design of the Commercial Development**

The following features should be encouraged when designing and developing commercial areas.

#### **Development and Design**

Frontages should allow an open view to passing visitors and thereby increase natural surveillance across the site.

Real and symbolic barriers should be used to create defensible space. Change of road surface colours, for example using 'highway standard' block paving can create areas of semi private and private space.

Public rights of way should be controlled and unobserved routes should be avoided.



Fig 16 Perimeter Hawthorn hedge, difficult to climb. However the height has obscured the premises to the rear reducing natural surveillance and increasing the likelihood of attack.

#### **Perimeter**

A balance should be kept between high boundary fences and surveillance. Boundary fences should be high enough to discourage access. The use of 'spikey bushes' planted to the rear of fences discourages climbing and can produce an aesthetically pleasing crime deterrent. It should be noted that the maintenance of tress and shrubs has to be taken into consideration. Overgrown planting can compromise security.





Fig 17 Overgrown bushes have obscured the view into and out of the adjacent building. On the left is the area before the bushes have been cut back. On the right shows the same scene once the bushes have been trimmed to 1m in height.

## The Building

Design features such as recessed entrances, climbable drainpipes and natural

ladders such as stepped walls should be avoided.

Where low walling is used and fencing is constructed on the top of it (such as in this picture to the right), fencing should be mounted to the front of the wall so that no foothold can be found.

Sight lines should be straight avoiding recesses.



- Walls constructed from soft alloy sheeting can be vulnerable to attack and should be strengthened with the use of welded steel mesh.
- Anti ram raiding measures should also be employed at premises that are vulnerable. Advice on this can be sought from your Crime Prevention Design Advisor.



Fig 18 Use of dwarf stone walling with 'Pallisade' fencing fitted to the top. The wall itself provides a foothold to climb the metal fencing and negates its use. The adjacent alloy sheeted wall is also accessible by standing on the low stone wall

# **Vehicle Parking**

Car and other vehicle parking should be located within view of regularly occupied areas to provide surveillance and ideally be situated near to the entrance of the building.

Goods and delivery vehicle access should be separated from visitor parking.



Provision should be made for parking of vehicles, motor cycles and pedal cycles.

Fig 19 Good use of 'Pallisade' fencing at the perimeter of a car park. However the gate across it is a metal barrier type gate, which is easily climbed. The gate should be the same height as the fence and should be fitted with suitable padlocks or other security devices.

## **Lighting and CCTV**



Consideration can be given to the use of CCTV for preventing and detecting crime.

Lighting should be used to deter criminal activity during the hours of darkness when commercial premises are most at risk.
Lighting should cover all external doors with higher levels for vulnerable areas. If CCTV is to

be used, then lighting levels will need to be compatible with the system.

Again it is important that light is carefully directed to areas of concern and light pollution minimised.

## Roofs, Walls, Windows and Doors

Access to roofs should be made extremely difficult. This can be done by 'collaring' existing 'climbable' drain pipes and the use of non drying paint. Roof lights should be constructed from polycarbonate and should be secured with non returnable screws. They should also be fitted with internally secured mesh.



Fig 20 BS6206 'kitemarked' laminated glass fitted to this front door.

- Low roofs should be avoided as these can be used to gain access to other floors and windows.
- Doors should be secured with multi point locking devices and should be solid in construction.
- Three hinges or a continuous hinge should be utilised supplemented by hinge bolts.





Fig 21 Hinge bolt

Fig 22 Door edge security showing thumb turn, five lever mortice lock rim latch and door chain.

- Letter boxes should be built into the fabric of the building and should incorporate a fire resistant container.
- New windows should comply with BS 7950. Glass should be BS 6206 laminated type.
- All opening lights should be fitted with two locks per window.

#### **Commercial Estates**

If the estate is a multi occupancy site then a staffed gatehouse should be considered to monitor access in and out of the estate. The physical presence of a guard can also be a significant crime prevention deterrent.

Consideration should be given to the use of an approved alarm. These are required by users of commercial premises and should comply with BS 4737 or BS 7042 high security or BS 6795 Wire fee system.

Shutters should be secured with suitable padlocks and external locks should be secured within a lockable metal box so that the lock cannot be forced. The pictures below show three types of padlock. Picture 1, shows a 'stormproof' disc lock with a very close shackle allowing very little leverage. Picture 2 shows a larger lock with a more open shackle. This affords a greater amount of leverage and may allow it to be forced from its mountings. Picture 3 shows another padlock that is housed within a metal box section. This affords greater protection of the lock and affords no space to introduce any lever or bar.







Pic 1 Pic 2 Pic 3



 Alcoves can create hiding areas and can reduce natural surveillance.

# **Designing out crime in Town Centres.**

### Conservation areas and listed buildings

With the exception of Hadfield, all of High Peaks town and village centres are designated as conservation areas containing a wealth of historic buildings, many of which are listed as being of architectural or historic importance. Within these areas special attention will need to be paid towards balancing the need to improve security measures with the need to enhance the character of the area. Where security measures impact upon listed buildings careful consideration will be required in retaining the buildings historic and architectural interest.

Security measures affecting listed buildings and buildings within conservation areas may require planning permission and listed building consent may be required. You are advised to discuss your proposals with one of the Council's Development Control Officers or, Conservation Officers prior to submitting an application.

## **Shop front Security**

Shopping centres should be attractive places to visit both during shop open hours and outside shopping hours.

In many town centres after the shops have closed, the evening economy then replaces it and greater use can be made of bars, restaurants, off licences and take away food spots.

This change of use between daytime and night life can bring with it increased problems in respect of security for shop frontages.

In some town centres at night, vandalism, assault, graffiti and burglary replace reports of shop lifting and parking problems.

It is important that a balance is struck between shop security and the creation of a hostile environment.

The character of shop frontages can be dramatically altered by the use of shutters or grilles. Solid window shutters prevent window shopping and contribute to the sense of hostility because of their fortress-like appearance.

Measures such as stallrisers, laminated glass and internal trellis are encouraged as opposed to external shutters or grilles.

Shopping centres should be attractive places to visit both during and outside shop opening hours. In many town centres after the shops have closed the evening economy replaces it, providing bars, restaurants, off licenses and take away food spots. This change in use between daytime and nightlife can bring with it increased problems in respect of security for shop frontages.



The Council understands and supports the need for security measures to protect commercial and other premises, as a means of reducing the risk of crime. However, security measures must be well designed to minimise their

potentially detrimental visual appearance. In the photo above, shutters provide enhanced security but aesthetically give a fortress like appearance and can increase fear of crime. Especially In the borough's conservation areas and on listed buildings careful consideration must be paid in the design of security proposals.

The character of shop fronts and the street scene as a whole can be dramatically altered by the use of shutters and grilles like this, which contribute to a sense of hostility and present opportunities for graffiti and vandalism. Open shutters like these on the right, offer a good degree of security and

The interlainment of the second of the secon

permit shoppers or passers by to see into the premises even when they are closed. Guidelines for alternative and more acceptable measures are presented below:

#### Glazing

Laminated glass provides security without affecting the appearance of the property. It does not require planning permission to be fitted.

If fitted correctly, Laminated glass can withstand several blows, before it gives way, making it ideal for use in low shop windows.

Shop windows that are divided into several panes are less susceptible to wilful damage and are often a traditional feature of shop frontages. Laminated glass is sensitive to design in conservation areas as it leaves the appearance of the property basically unaltered.

Toughened or laminated glass provides security without affecting the appearance of the property and does not generally does not require planning permission to be fitted (exception may be made in the case of listed buildings where listed building consent may be required).

Sub division of shop windows into several panes can be less susceptible to wilful damage and are often a feature of traditional shop fronts.

The use of toughened or laminated glass can be beneficial to town centres and environmentally sensitive locations such as conservation areas as it has a minimal impact upon the appearance of the property.

#### **Stallrisers**

These offer a degree of protection against ram raid and vandalism. On traditional shop fronts the use of a stallriser is appropriate combined with the use of internal strengthening beams or bars.

Depending on the location, use can be made of flower planters, bollards and high kerbs to keep vehicles away from shop fronts.

#### **Internal Grilles**

Internal open grilles located behind the glass provide protection for the goods on display whilst maintaining the visibility of the goods from outside.

All the fittings for the grilles can be located internally so that the character of the shop front is not altered.

Fitting of internal grilles is unlikely to require planning permission. However, if the building is listed, listed building consent may be required.

## **External grilles**

External grilles can be fixed or removable and allow the window display and illumination of the shop to be seen. They should be of a simple design, painted in a colour, which compliments the rest of the shop front. Fixings for external

grilles should be discreet and the area covered by the grille should not exceed the glazed display area.

Fitting external grilles will require planning permission.

#### **Shutters**

Solid external shutters look unattractive and should be avoided. They attract graffiti, and fly posting contributing to an area's run down uncared for appearance. They hide the shop display and have a deadening impact on the street scene. In addition, the housing for the shutter projects forward from the fascia and often obscures architectural details.

#### **Security through Design**

In the design of a new shop front, all the above aspects of security including items like burglar alarms should be an integral part of the design to avoid a 'tacked on' appearance. Traditional stallrisers can be constructed in stone or concrete behind timber panels to improve their appearance and protect against ram raiding. Such extensive work will require planning permission.

#### **Shop front Security on Listed Buildings**

If the building is listed then, as well as planning permission, listed building consent will also be required for any security measures or physical alteration of the building (both external and internal). Higher standards will be expected in the design of security measures, as modern methods of security may not be acceptable in appearance.





# Applying for and achieving 'Secured by Design'

Secured by Design is the UK Police flagship initiative supporting the principles of designing out crime. It encourages the building industry to adopt crime prevention measures. Secured by Design supports one of the Governments key planning objectives to create secure, quality places where people wish to live and work . (PPSI and PPG3)

So having read all this information what happens next? What do you have to do to make your proposed scheme achieve the Secured by Design award, and what do you, and your potential customers get out of it?

- Firstly there are two other documents you will need to have a look at. They
  are both available from High Peak Borough Council, and are called, 'A
  Householders Guide to Making a Planning Application' and 'Application for
  Planning Permission or Approval of Details of Development'. They both
  contain the necessary forms and advice to help you with the planning
  process.
- Once you have applied to High Peak Borough Council your application will go onto a list of other applications. These are notified directly to the Crime Prevention Design Advisor who is a statutory consultant within the planning process. He or she will look at applications for developments, all commercial and industrial units, parks and youth facilities and any other schemes that may impact on police resources.
- The Crime Prevention Design Advisor (CPDA) may then make contact with the architect or developer with a view to discussing the plans. This is merely an informal introduction and discussion with a view to looking at the principles of Crime Prevention Through Environmental Design, (CPTED)
- If you as a planner, architect, designer or developer wish to speak to the CPDA before this process and discuss the design at an early stage then contact should be made through Derbyshire Constabulary Headquarters on 0345 123 3333

- A meeting is then held between the architect, client and CPDA to discuss any relevant areas, such as site layout, physical security of the buildings, lighting, fencing and access. Once the principles and design have been agreed, the client or architect can then complete the application form.
- Once the SBD application has been submitted to the CPDA, 2 copies of site layout plans, elevations and location maps must be submitted. The design can then be given outline Secured by Design approval.
- At this point a site inspection is then made by the CPDA. (This can be in conjunction with the initial meeting to save time).
- In some cases, once this stage has been completed, approval for the use
  of SBD badging can be given, to be used on promotional materials to
  assist in marketing of the development.
- Once the site construction has commenced a further inspection will be made by the CPDA to provide continuity.
- At the completion of the development construction, a final inspection will then be made by the CPDA.
- Providing all the recommendations have been complied with, the scheme will then be given Full Secured by Design Approval.

Some developers decide at this stage to hold a 'press release' meeting and invite the media to attend the development. This is usually held on site with senior Police Officers, developers and architects.

