the value of good design

"Good design should be the aim of all those involved in the development process and should be encouraged everywhere" 'Planning policy guidance note 1'

1.1 Good Design and Policy Framework

'Design' covers a range of factors that shape our interaction with the built environment. 'Good Design' is about creating attractive and successful places that work well. Design is a subjective issue but most would agree that well-designed developments are those that add something positive to the environment and enrich the lives of those who live in, work in or visit them.

'Urban Design' is about the design of building form and the spaces between: paths, streets and squares – from a single structure to a major development. Urban Design is not just about design in towns and cities. It applies to villages and rural settlements as well.

The Government is keen to ensure that design becomes a central issue in local planning policy and decision making. Successful development is based on a balanced judgement between a variety of factors including local context and character, transport and movement and the needs of the local economy, leisure and housing.

Building communities

Good design will generate a lively, well-used environment coupled with the development of a strong local economy, safe and attractive places in which to live and work and good access to services. By contrast, poor design could create a hostile unloved environment that may lead to social and economic dysfunction and reduce the value of surrounding areas.

Seven benefits of good design

Well designed development can:

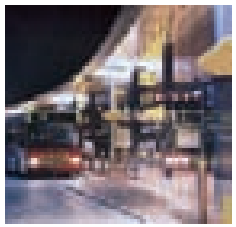
- raise people's spirits
- create a higher quality of life
- enrich the existing environment
- create higher capital value
- attract people
- increase marketability and prestige
- lift confidence in surrounding areas.

High design standards need not add to the costs of construction, but will invariably increase the marketability and prestige of completed developments and raise the quality of the environment by lifting confidence in surrounding areas. This effect has been demonstrated by many schemes in Kent.

Good Design means:

- **Enriching existing character** – reinforcing local patterns of development and landscape while not ruling out innovation
- **Diversity** – making places with variety in the form of buildings, in materials and in the mixture of uses
- **Understandable places** – having a clarity of form and layout which is easy to comprehend
- **Achieving a pride of place** – development with attractive, lively and pleasant public spaces that draw people together and create a sense of place
- **Easy movement** – easy to get to and move through; routes that are safe and welcoming
- **Enduring and flexible places** – built to last and energy-efficient according to the intended use but with the ability to be easily used for another purpose.

Diversity *A varied mix of uses and building styles create a vibrant street scene.* (Gravesend High St)



Easy movement
Good quality, accessible public transport to local amenities. (Bluewater bus station)

Understandable places
A clear and legible layout helps people find their way. (Orchard Edge Iwade, Hillreed Homes)

Elements of good design, some Kent examples

Enduring and flexible
Adaptable buildings can accommodate changing patterns of use over time. (Holiday Extras, Hythe)

Pride of place *Attractive open spaces and paths make people proud to belong.* (Ingress Park, Greenhithe, by Crest Nicholson)

Enriching character *Enhancing existing character while encouraging innovation. in style and layout* (Lacuna, Kings Hill by Environ Sunley)

The Policy Framework

The current system of regional planning guidance set by the County Structure Plan, Local Plans, Waste, Minerals and Unitary Development Plans is to be replaced by a single plan based on Regional Spatial Strategy. Up-to-date advice may be sought from the individual local planning authority concerned and Kent County Council/Medway Council as appropriate.

At present, the most significant statutory planning documents in Kent are the County Structure Plan - produced by the Strategic Planning Authorities, (Kent County Council & Medway Council jointly) - and Local Plans (to be replaced by Local Development Frameworks) prepared by the twelve District Councils of Kent and Medway Council. These are supplemented by guidance issued by central and local government, and government appointed bodies such as CABE (the Commission for Architecture & the Built Environment). These are summarised in the Appendices.

County Structure Plan for Kent and Medway

The Structure Plan identifies key growth and constraint areas; sets out policies of strategic significance; and defines the strategic framework which is elaborated at detailed scale by the Local Plans.

Local Plans

Local Plans (to be replaced by Local Development Frameworks) identify the precise boundaries of development; the design policy framework and other planning assessment criteria; and the appropriate mix of uses for a site. Local Plan policies also deal with sustainable transport, environmental safeguards and mitigation measures, so providing a clear statement of a local authority's aspirations and expectations for a particular site.

Through the Local Plan review process, site owners, developers, and the community have an opportunity to challenge the contents of the Local Plan at a public inquiry. Once formally adopted, Local Plan policies have considerable weight. They can assist developers by describing local requirements so that these can be taken into account in the decision-making process.

Local Development Frameworks (LDFs)

Local Development Frameworks are a new series of planning policy documents that will shortly replace the existing Local Plan documents and which provide the framework for delivering the spatial planning strategy for the area. They include Development Plan Documents (DPDs) covering the core strategy and Supplementary Planning Documents (SPDs) covering a wide range of more specific planning policy guidance, for example, this Kent Design Guide. They will also include a Statement of Community Involvement; defining ways of involving the community in the preparation and review of development documents and development control decisions.

Transitional arrangements will be set up to maintain continuity for development control purposes. Adopted structure and local plans in Kent will retain development plan status for a period of three years from July 2004 during which local planning authorities will bring forward Local Development Frameworks (LDFs). For plans in preparation the three-year period will start from adoption or approval of the draft plan.

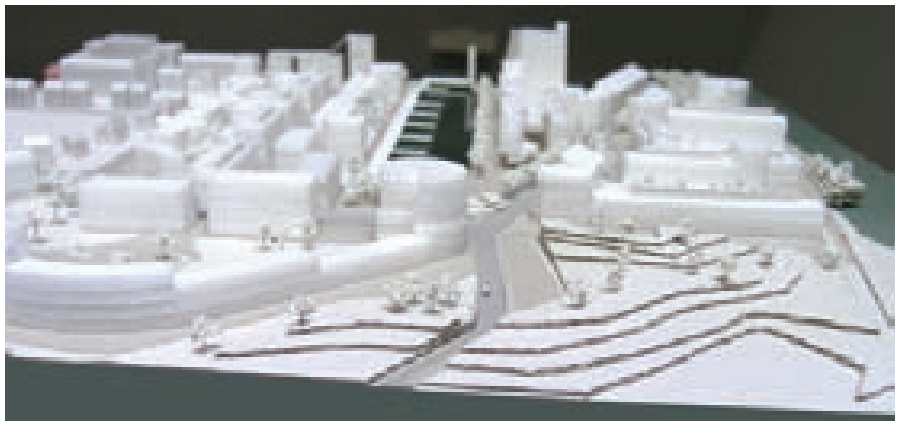
Masterplans *establish land uses, movement routes, public open spaces and phasing.* (Lord Street/Parrock Street, Gravesend)

Supplementary Planning Documents

A variety of other documents add further detail to local planning authority requirements. For certain sites more specific and detailed guidance may have been prepared to show how policies are to be applied. These are often prepared where a site's development could not be anticipated in the adopted development plan. When prepared in consultation with the public and interested parties, and if adopted as Supplementary Planning Guidance (SPG) or as a Supplementary Planning Document (SPD), they carry considerable weight. The different forms include:

- Area Development Frameworks
- Development Plan Documents
- Urban Design Frameworks (for areas)
- Masterplans (for sites)
- Development Briefs (for sites)
- Design Codes (for sites and areas)
- Village and Town Design Statements
- Design Guides
- Statements of Community Involvement
- Sustainability Statements
- Landscape Character Assessments
- Biodiversity Action Plans
- Environmental Impact Assessments
- Planning Agreements

For further information on these documents see glossary.



Using models *Model built to help local people and key stakeholders understand what a proposed development will be like.* (St Mary's Island - Housing competition entry).

A concept sketch will give the first impression of the character of a new development.

1.2 Getting the Process Right

Getting the process right is a fundamental part of good design; not an add-on. There is a plethora of design and planning guidance available so, for many well-meaning developers, trying to build a scheme that everyone agrees constitutes 'good design', can be like negotiating a minefield.

There are a number of simple steps to getting the process right:

1 **Know your site and its context:** this involves understanding the local community; the local planning policies; the area's strengths and weaknesses and the best-loved local features and buildings. It is important to visit the area and stay overnight and at different times of the week to get a 'feel' for it. Many developments are designed to concept stage without the developer or architect ever visiting the site. Do not do this if you are designing in Kent. Get to know the place first.

2 **Understand the planning process and policy framework:** these are not designed to make life difficult for developers and designers. They are intended to manage development and growth so that it achieves the best long-term benefits for the local community and the environment as a whole.

3 **Sign up to the principal planning and design objectives from the start:** if the pro-active thinking behind Kent's Local Planning Policies is regarded as restrictive and unachievable then the design process will become cumbersome and inefficient. At the end of the day, the proposed scheme may fail to win consent. Developers should work with the planners and local community and aim for the scheme to help achieve local aspirations.

4 **Keep talking:** maintain an ongoing dialogue with local planners and the community to help them gain 'ownership' and pride in the proposed development, even before it is built. If major design or planning problems are encountered, the most constructive solution can often result from sharing these and working towards a collective approach.

5 **Be flexible and adaptable:** some compromise will inevitably be required and if points of contention are not resolved at the pre-planning stage then they may become grounds for refusal or call-in. Some local requirements may appear to incur early capital cost but, if a long-term view is taken, this early cost can often be recouped in the increased value that results from building desirable well-loved places.

6 **Ask yourself whether you would be prepared to live or work in the proposed scheme** and if you would be proud to have it in your back yard. If not, why not?

See Section 3 'Getting the Planning Process Right' for further details on process.

Imaginative community involvement. *A development board game for members of the public to play showing how Ashford might grow in the future.* (designed by Urban Initiatives, 2003)

Achieving good design through all parties working together to achieve the best result.

Designing together. *Enquiry by Design workshop session for key stakeholders.* (Aylesham, 2003)

Getting to know the site – *Designers and local people work together on site.* (Ashford Barracks)

Tuning in. *Developers get a 'feel' for the area and those things the community value about it*

1.3 Respecting Context and Character

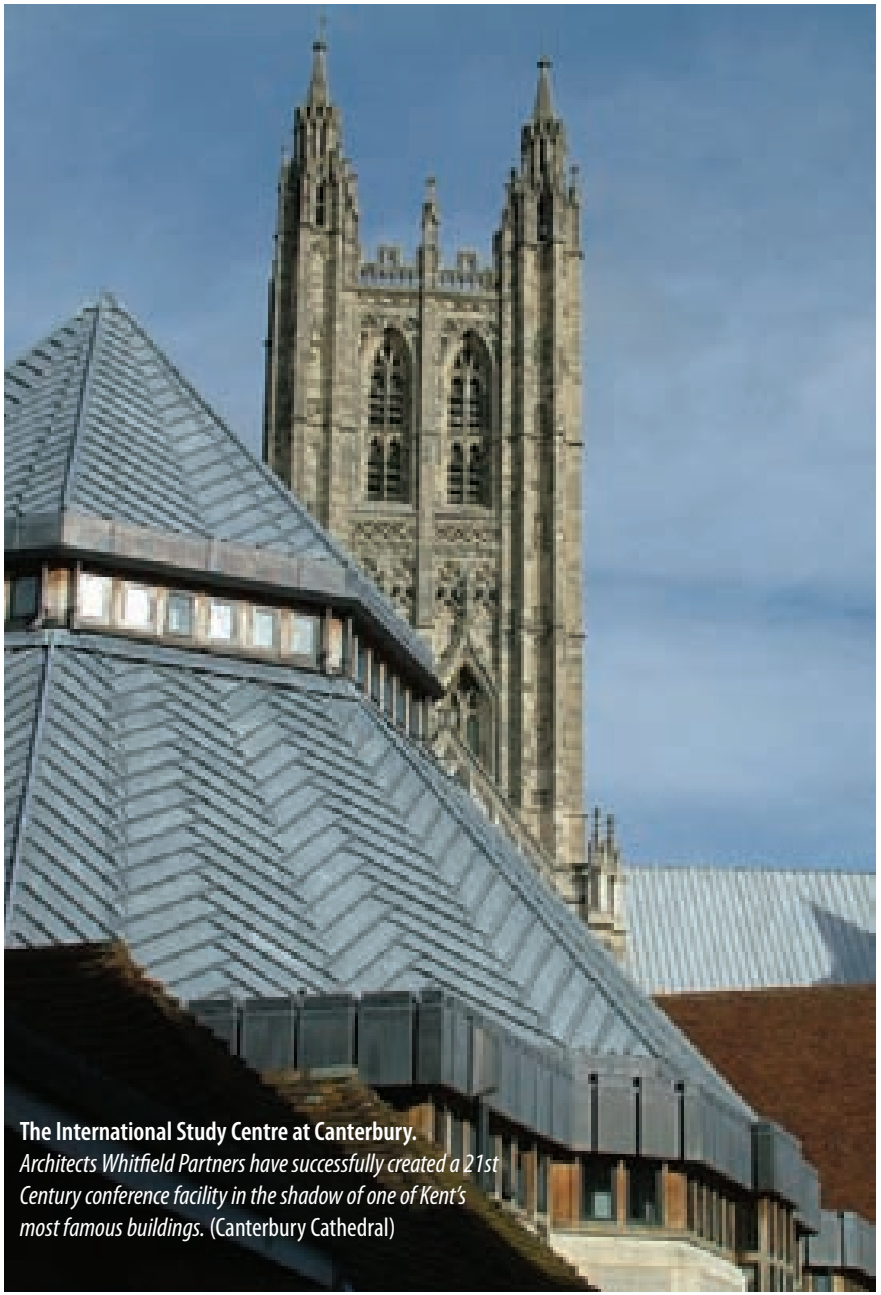
Context is of major importance, emphasising the need for the layout and appearance of buildings to be based on an appraisal of the character of the site and the adjoining land and buildings. New developments must cater for the needs of residents and visitors and must consider and raise the general aspirations and expectations of neighbouring residents and the general public. The positive features of the area should be identified and reinforced in any new proposal.

Build on local character

The traditional townscape and architecture of Kent is found in distinctive local character developed over generations. Kent's towns and villages are characterised by their compact form, building diversity, mix of uses and materials, active street frontages, irregularity of plan, pattern of narrow lanes and the informality of spaces. There are clear differences between coastal towns and inland settlements.

To achieve a well-integrated design, the established character of existing towns, villages and countryside must be respected. The design of new developments should evolve from the special local or Kentish character. This means:

- Reinforcing positive design features of an area
- Respecting the scale, street patterns, landscape, local materials, colours, style and detailing of surrounding areas
- Carefully managing differences in building and eaves height
- Including public areas that draw people together and create a sense of place, routes which make a positive contribution
- Avoiding a wide variety of building styles or mixture of materials
- Maintaining and creating good views and vistas, and
- Forming a harmonious composition with surrounding buildings or landscape features.

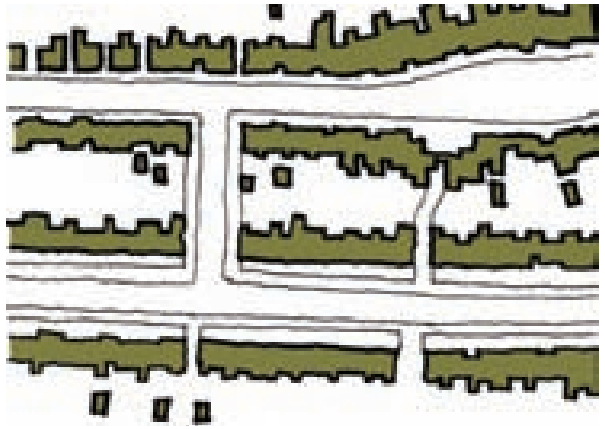


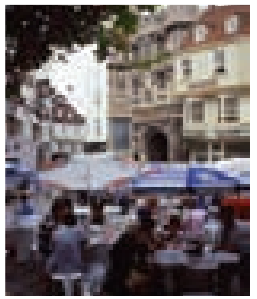
The International Study Centre at Canterbury. *Architects Whitfield Partners have successfully created a 21st Century conference facility in the shadow of one of Kent's most famous buildings.* (Canterbury Cathedral)

CHARACTER AREA GUIDELINES

URBAN AREAS

- Existing urban character of good quality should be reinforced by the continuation of its density and layout characteristics.
- In Kent's traditional urban areas, densities are relatively high *(50-70 units per hectare)* and different uses are typically closely integrated.
- Non residential uses normally cluster around 'nodes' where streets intersect and a small square or other open space should result.
- The way buildings enclose the open space and the pattern of streets and squares is often called the 'urban grain'. It is typically intricate and sometimes irregular, flowing naturally and following contours rather than arranged in a rectangular layout.
- The ratio of height to width in streets will average 1:1.
- Typical materials will be local brick, sandstone, clay tiles, copper, lead or zinc roof claddings, painted render, painted or stained timber, painted ironwork.
- Colours will be strong and natural, with crisp, elegant lines.
- Formal landscaping with concentrated areas of lush greenery and public art.
- Good amenity lighting everywhere.
- Surface car parking is limited.
- Opportunities for improved refuse management.
- New spaces and squares should be encouraged.



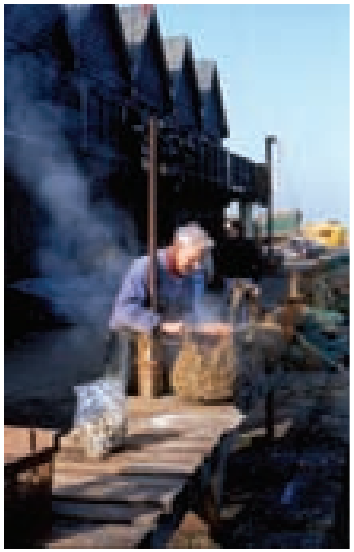


Urban areas contain a mix of uses and have a tight grain that attracts activity and vibrancy. Materials tend to be varied, with local brick and tile alongside sandstone, copper and painted render.

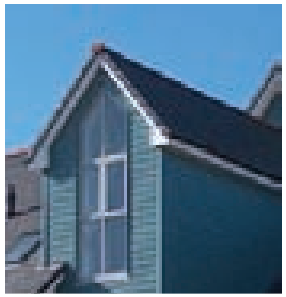
CHARACTER AREA GUIDELINES

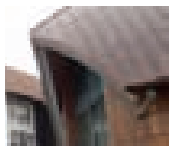
COASTAL TOWNS

- Coastal town densities are usually as high as other central urban areas, and often much higher *(70-120 units per hectare)* around the central seafront.
- Main commercial areas are usually concentrated in central areas in linear form, either parallel or at right-angles to the seafront. They will include homes as well as shops, cafes, restaurants, hotels, leisure and sometimes offices.
- Wide promenades act as the main public open space.
- The 'urban grain' will be tighter with narrow streets, alleyways and small unexpected squares, often providing shelter from the prevailing wind and acting as a winter suntrap.
- Unexpected glimpses or vistas of the sea.
- The ratio of height to width in streets will be greater than 1:1.
- Typical materials will be painted, stained or natural timber, local brick, black glazed bricks, painted render, large areas of glazing, painted metalwork and stainless steel.
- Palette of fresh, light, pastel colours intermingled with black and white.
- Use of projecting bays, oriel windows and balconies.
- Mainly hard landscaping with some robust seaside planting, public art, banners and innovative attractive lighting.
- High car accessibility and visible parking.
- Opportunities for improved refuse management.



Activity in coastal towns is focussed around a promenade and main street, where densities are generally high. Robust materials and hard landscaping prevail to stand up to the harsh weather conditions, but sometimes featuring strong colours such as pastel renders.

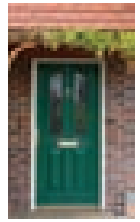




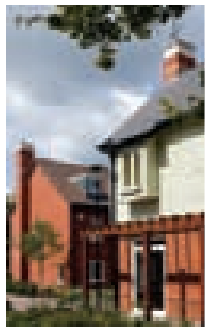
CHARACTER AREA GUIDELINES

SUBURBAN AND URBAN FRINGE

- Usually single use – mainly residential or light industrial.
- Urban grain will be looser – midway between urban and rural in character.
- Density needs to remain compact *(30-50 units per hectare)* to avoid urban sprawl but form needs to scale down so that the urban fringe blends easily into the countryside.
- Good public transport links to urban centres needed.
- Strong individual form and character needed to avoid sense of 'anywhere' places.
- Important to create a 'heart' to maintain a sense of identity with some open space and local facilities within walking distance of housing.
- Ensure quality landscaping and boundary treatment eg; hedges, fencing needed around industrial estates to avoid 'siege' effect.
- Avoid large areas of car parking by enclosing within courtyards surrounded by buildings or good planting.
- Keep lighting soft and directional to avoid light pollution.



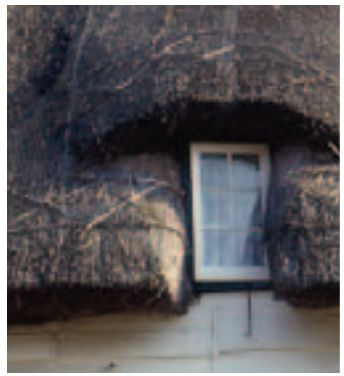
Suburban areas are generally lower density with regular plot forms, but often lack a distinct centre or heart.



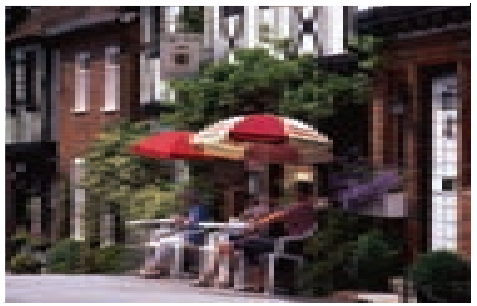
CHARACTER AREA GUIDELINES

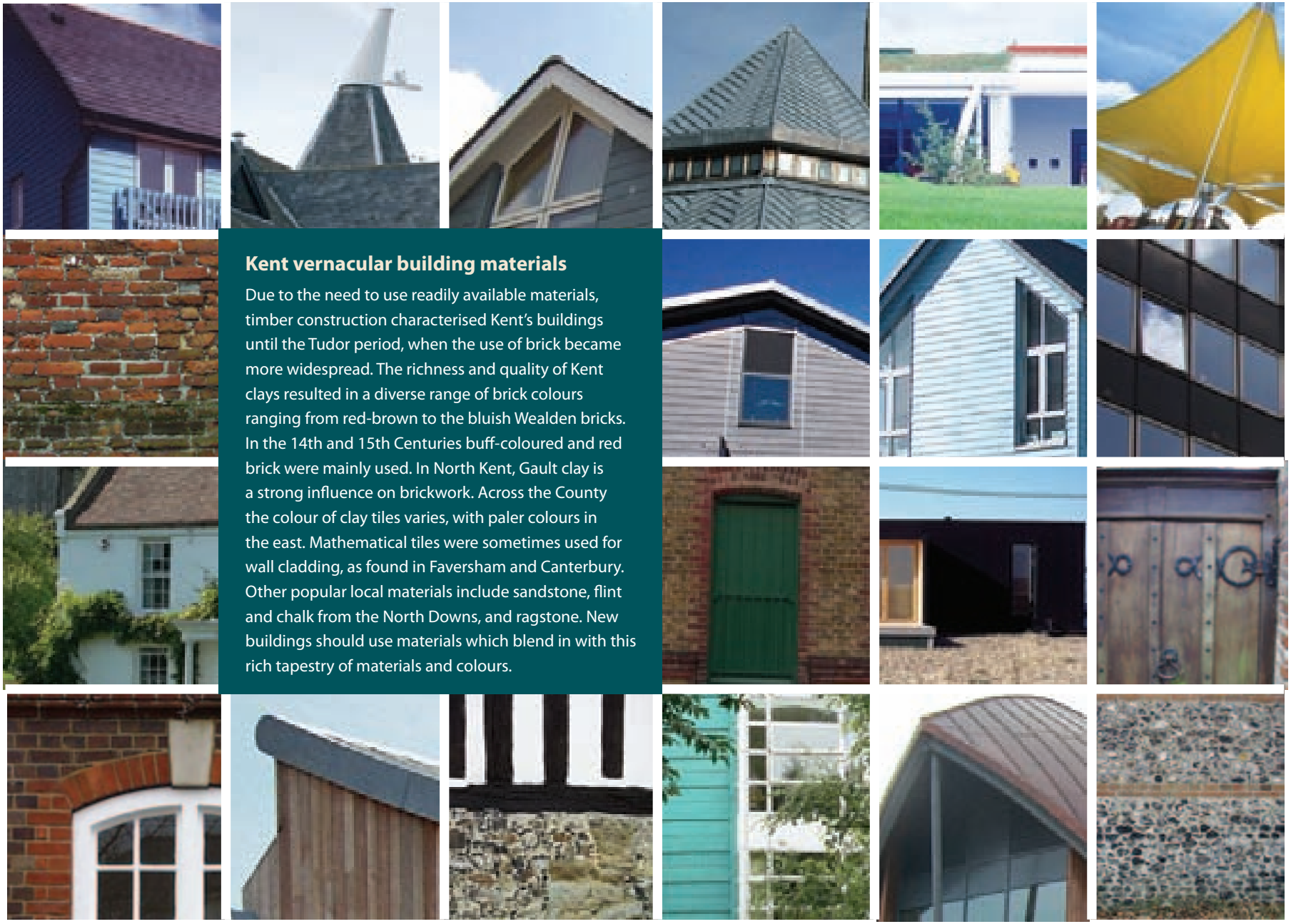
RURAL AREAS AND VILLAGES

- As elsewhere in rural Britain, traditional Kent villages are usually built to very high densities (50-70 units/hectare) concentrated on a few streets or around a village square, green or other public space where the community can congregate for special events.
- In contrast to urban areas, the buildings are set within landscaped areas. The role of the village square or green is therefore as a public space with amenity value rather than just a landscaped area – so seating, parking and commercial/ community activity must be provided to stimulate community interaction. Such spaces are important to retain and should be encouraged in new development.
- The ratio of height to width in streets will be less than 0.5:1
- Typical materials will be local brick, clay tiles or slate, stone, painted render, painted or stained timber, painted ironwork.
- Mix of strong and soft natural colours; soft natural forms with a mix of rectangular and curved lines.
- The landscape is all around so no formal public landscaping except street trees will be needed – private gardens will enhance the public realm so hard car standings should be avoided and front gardens encouraged.
- Good amenity lighting and sensible refuse management will be needed.



Villages are usually intimate in character and centred around a square or green. Materials tend to be limited to locally available brick, timber, tile and render, softened with age.





Kent vernacular building materials

Due to the need to use readily available materials, timber construction characterised Kent's buildings until the Tudor period, when the use of brick became more widespread. The richness and quality of Kent clays resulted in a diverse range of brick colours ranging from red-brown to the bluish Wealden bricks. In the 14th and 15th Centuries buff-coloured and red brick were mainly used. In North Kent, Gault clay is a strong influence on brickwork. Across the County the colour of clay tiles varies, with paler colours in the east. Mathematical tiles were sometimes used for wall cladding, as found in Faversham and Canterbury. Other popular local materials include sandstone, flint and chalk from the North Downs, and ragstone. New buildings should use materials which blend in with this rich tapestry of materials and colours.

1.4 Sustainability

Sustainable development will ensure a better quality of life, now and for generations to come. The key national and regional policy objectives lie in creating more sustainable development, and making better long-term use of natural resources. The UK government incorporates sustainability into many of its policies. The UK Strategy for Sustainable Development sets out five principles and four priority action areas.

The five principles are:

- Living Within Environmental Limits
- Ensuring a Strong, Healthy and Just Society
- Achieving a Sustainable Economy
- Using Sound Science Responsibly
- Promoting Good Governance.

The four priority action areas are:

- **Sustainable consumption and production** - working towards achieving more with less.
- **Natural resource protection and environmental enhancement** - protecting the natural resources on which we depend.
- **From local to global: building sustainable communities** creating places where people want to live and work, now and in the future.
- **Climate change and energy** - confronting the greatest threat.

A sustainable approach to development requires that location, transport connections, mix of uses and community facilities, together with careful husbanding of land and energy resources all combine to produce social and economic benefits:

- Healthier living and working environments
- Improved efficiency and productivity in use
- Reduction of fuel costs and the costs of vehicle ownership.

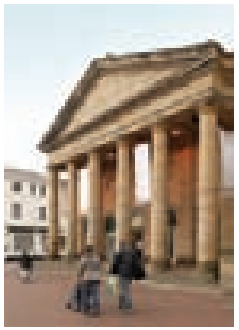
How does the development contribute to:

- ☐ Developing on brownfield or recycled land rather than on greenfield sites
- ☐ Promoting more mixed-use development to reduce commuting
- ☐ Reducing car use
- ☐ Reusing buildings and minimising waste during the construction process
- ☐ Designing buildings which are adaptable for different uses over their lifetime
- ☐ Designing and adapting buildings that use less energy to build, heat and light
- ☐ Using materials which take less energy to produce and are easy to recycle
- ☐ Providing recycling facilities for waste in the home and neighbourhood
- ☐ Using water saving devices and natural drainage to prevent depletion of the water table
- ☐ Reducing long term maintenance costs

New habitats can provide an attractive and popular feature while encouraging biodiversity. New pond system overlooked by houses and integrated into the layout. Canterbury

Cutting energy costs. *Canadian technology went into creating this highly insulated timber framed house cutting energy bills to a minimum.* (Lacuna, Kings Hill, by Environ/Sunley Homes)

Reusing old buildings. *Effective re-use of a former chapel as a shop by the Habitat chain* (Tunbridge Wells)



Minimising impact on-site *This school keeps energy consumption to a minimum by hugging the contours of the site and maximising solar gain* (Riverhead School, Sevenoaks, KCC)

Using natural and local materials. *Straw bale construction provides high thermal insulation on an exposed site with a tight budget. Very little energy was used in its construction.* (Romney Marsh Visitor Centre, New Romney)

Helping reduce global warming. *Highly efficient modern sustainable house design, cutting energy consumption, minimising CO2 emissions and helping protect our environment through sustainable construction methods.* (The Boundary House, Tunbridge Wells)

Brownfield Land

The government has set a target of accommodating 60% of new homes each year on recycled *(or 'brownfield')* land to be achieved by 2016 *(Kent's target is 80%)*. This means that development which re-uses land or buildings is more likely to achieve planning consent.

Lifetime Adaptability

The fastest route to building a functional, supportive, neighbourly community is to build homes that people can and want to live in for most of their lives instead of having to move every time domestic circumstances change. 'Lifetime' homes means designing in the flexibility and adaptability needed to allow for easy incorporation of wheelchair accessibility, addition/removal of internal walls, and ease of extension - both vertically and horizontally. This is particularly important for the aged, infirm or expanding/contracting families who may be dependent on nearby friends and family for emotional and physical support.

Mixed Use

Substantial levels of commuting to Greater London for employment developed throughout Kent over the last century. As a result, many modern housing developments are virtually abandoned for large parts of the day. There has been an accompanying decline in the economic viability of many services which, otherwise, could be locally provided. A reduction in the need for commuting can increase the vitality and economic welfare of communities, as well as benefiting people's health, increasing leisure time and reducing travel costs.

Minimising Energy Use

Buildings contribute almost half (46%) of carbon dioxide (CO2) emissions in the UK. The government has set rigorous targets for the reduction of CO2 emissions and minimising fossil fuel energy use. It is the responsibility of all new development to minimise energy use in the construction and ongoing use of buildings and to maximise passive and active technologies.

New mixed use centres *can allow people to work and shop close to home, and can help stimulate a sense of community.* (Kings Hill)

Attractive routes for walking and cycling *can encourage leisure and fitness activities too*

Solar or photovoltaic panels *can provide a cost effective and environmentally responsible form of energy.*

Minimising Construction Waste

Construction waste accounts for an alarmingly high proportion of all waste produced in this country. Government targets aim to reduce construction waste on major sites by 30%. Careful design and specification, including off-site manufacture, can help reduce waste during construction.

Recycling Materials and Buildings

Reusing buildings, parts of buildings or elements of buildings such as bricks, tiles, slates or large timbers all help achieve a more sustainable approach to design and construction. Recycling and reuse of materials can help to minimise the extraction of raw materials and the use of energy in the production and transportation of materials. Development should also maximise the re-use of existing buildings (which often supports social, environmental and economic objectives as well).

Reducing Car Use

Developments which do not require the use of a car to reach local facilities or enjoy a high quality of life will help reduce traffic, pollution, road accidents and environmental impact for all the community.

They will also encourage healthy activities such as walking and cycling and enable more social interaction and neighbourliness.

If developments incorporate local shops and facilities, are close to public transport, and include attractive, safe pedestrian and cycling routes, this will help reduce car usage without reducing car accessibility or car ownership. It will also enable a high quality of life for those least likely to own a car – the very young and the very old.

Recycling materials and good site management *can minimise the harmful effects of construction by reducing waste and the use of water and energy.*

Reuse of buildings *is sustainable and can lend a character that raises values in new development.* (Caterham Barracks, by Linden Homes)

Versatile and adaptable homes *can be provided by terraced housing.* (Kings Gate, Horsham. Belmont Homes)

1.5 Attractive, Safe and Secure Places

For communities to function well and foster a sense of well-being, people need to feel safe in their homes and in the streets and spaces around them. Well-lit and well-maintained paths, streets and squares that are overlooked without compromising on privacy are essential to making places feel safe.

A Safe and Secure Design Involves:

- **Privacy where needed in the home and garden** – careful layout of buildings, boundary walls and considerate planting to avoid overlooking from neighbouring properties or public areas
- **Easy access for people with disabilities and the emergency services**
- **Protection from noise nuisance** – careful layout and arrangement of uses; soundproofing
- **Clear definition of space** – providing a sense of belonging and helping users exercise control over their environment
- **Deterring crime** – buildings facing onto streets and footpaths with windows facing onto them; car parking visible from homes
- **Deterring vandalism** – public spaces well lit and overlooked; facilities for young people.

Human Scale

Most attractive and sought-after homes and businesses in towns and villages were built in close proximity to one another, providing a human scale and intimacy which people find sociable and comfortable yet private. Some modern developments fail to overcome perceptions of overlooking and visual intrusion, demonstrating that distance alone is an inadequate measure of privacy.

In new development, the aim should be to achieve the qualities that people find attractive in traditional settlements, using variation of form, space, ancillary buildings, garages, planting and boundary walls to create high quality environments and to achieve a more efficient and sustainable use of land.

In aiming for increased privacy, a balance must be struck between providing the natural surveillance needed to keep public paths and spaces feeling safely overlooked and the privacy needed to prevent visual intrusion from public spaces into private areas. Upper windows overlooking paths and streets and front entrances facing the street are good ways of creating a sense of safety without intrusion.

Neighbourhood Grouping

Neighbourhood groupings foster community development in housing and mixed use schemes and help to create a localised sense of place within larger developments. The need for the creation of "neighbourhoods" will vary from site to site and the advice of the local planning authority should be sought. There are generally social and safety reasons for keeping the size of cul-de-sac house groups to not more than 20 dwellings.

Safe pathways and spaces *achieved by overlooking* (Stonegate Place, Wye, Environ Country Homes)

"Crime, fear of crime and antisocial behaviour are major concerns for society today...success in stopping and reversing 'crime climb' has been down to a number of themes...[including] a focus on and the development of crime prevention through environmental design".
Dr Tim Pascoe, Building Research Establishment, foreword to 'Design out Crime' by Ian Colquhoun, 2004.

Design clues for safety and security. *Illustration showing the most important elements that go to make a safe and secure neighbourhood.*

Using the streets. *Careful design making the highway a safe place for all.* (Homezone at Cavell Way, Sittingbourne)

Overlooking without reducing privacy. *Streets and spaces feel safe and secure when overlooked from homes and public spaces.* (Lacuna, Kings Hill.)

Lively and active places *offering natural surveillance and lifting the spirits.* (Canterbury)

1.6 Movement and Connections

The design of the street system should start from the need to establish a clear, legible, joined up structure for the area, not from the technical demands of traffic. This layout may, in part, be suggested by the topography, natural desire lines and access routes to the site.

Designers should therefore consider the general arrangement of buildings and enclosures first. Buildings can then be laid out to suit the desired urban form with footways and kerbs helping to define and emphasise spaces. Widths of carriageways, footways and verges will not necessarily be constant and will contain all the functions of the street, including parking and movement of vehicles.

It should be possible for pedestrians and cyclists to move freely between all parts of a layout, both locally and on a wider scale. The disadvantage of a layout based entirely of culs-de-sac and loops is that routes for pedestrians are indirect and boring and therefore pedestrian movement is discouraged. This creates dead areas which are vulnerable to property-related crime. Furthermore, culs-de-sac layouts result in higher traffic levels on feeder roads, with a consequent loss of amenity to residents of those roads.

Pedestrians and Cyclists

Developments should be 'permeable' (easy to move through in all directions) and linked to the surrounding network, allowing pleasant safe, direct routes for pedestrians and cyclists. Walking and cycling can be encouraged by schemes such as 'Safer routes to School'. Convenient cycle storage should be provided in homes and outside community facilities, shops and other destinations.

Movement Appraisal

A movement appraisal should be carried out for proposed developments to ensure a clear understanding of existing and possible future movement patterns. The movement appraisal will inform the preparation of a movement framework for the development and should include the following elements for each mode of transport:

- how the site relates to existing routes
- how the best connections to these routes can be made
- what improvements need to be made to these routes

Street Hierarchy

All developments should relate to a network of streets that form a clear hierarchy. Larger scale developments will need to include a hierarchical network. Layouts should be legible, 'permeable' (to make walking and cycling easier) and should form good connections within the site and to adjacent areas, including potential development on adjacent land. The function of each road should be considered.

Public Transport Links

Good public transport should be available at the initial phase of a new development, either by linking to existing networks or by establishing new routes. A coordinated approach between different transport modes should be encouraged.

Motor Vehicle Provision

Access provision for motor vehicles should cater for the size and frequency of essential vehicles and should reflect the need for public safety and the requirements of all modes of transport.

Parking

Parking provision should be determined by locality and the availability of other forms of transport. Adequate spaces should be provided to prevent people parking in inappropriate places (e.g. on footways or verges).

Support for Sustainable Transport

A comprehensive movement framework will not be effective unless people are aware of it and are willing to support the more sustainable forms of transport. In major developments, schools, businesses and developers should submit Green Travel Plans which encourage staff to think about their travel choice and consider alternatives to the car. It is not an all-or-nothing choice. The essence of a travel plan is 'travel blending', where an alternative to the car is used perhaps once a week. Incentives can be offered to those supporting such initiatives.

Catering for Disabilities

Almost 7% of people suffer from some form of disability which affects mobility. This figure may rise as life expectancy increases. Consideration must be given to the comfort and mobility of people with disabilities. The documents `Highways suitable for the mobility impaired' (Kent County Council) and `Reducing Mobility Handicaps' (www.iht.org.uk) cover highway design aspects. In some cases the Local Planning Authority may require submission of a Disability Discrimination Act 1995 (DDA) audit with the planning application. A safety audit under section 38 of the Highways Act may also require this.

1.7 Landscape and Open Space

Landscape is a combination of nature and culture; it is formed by topography, trees, hedges, paths, roads, structures and materials. These elements determine the landscape character of an area. A well-designed landscape will provide:

- An attractive setting for a development, its users and occupiers
- A positive environment of wider economic benefit
- A sense of place with a clear identity
- A sense of space and enclosure
- Spatial benefits including integrating the visual impact of the built environment with nature
- Environmental benefits including micro-climate creation, pollution attenuation and the reduction of water and energy consumption
- Noise and visual screening, and
- Retention of cultural associations with the natural environment.

Amenity Space

Amenity space is outdoor space used by people for pleasure, recreation and contact with nature. In addition, amenity space can accommodate sustainable drainage techniques. The appropriate amount of open space should be considered locally. Amenity spaces can provide:

- An enhanced quality of life, promoting social and physical well-being
- Places to meet, relax and exercise
- Space to hold events
- Facilities such as children's play areas, tailored to meet local needs
- Links between built up areas and the countryside reinforcing, where possible, the character of existing local routes, and
- Opportunities for residents to manage their environment, reinforcing a sense of community.

Ecology

Ecology is the existing or potential natural habitat of a site. It is measured by biodiversity. Ecology and nature conservation will provide:

- Opportunities for retaining or enhancing local biodiversity
- Educational benefits – wildlife areas can provide informal or formal field laboratories for biological, geographical and environmental sciences, and
- Plants and animals that keep people in touch with their natural environment.

Green Space and Health

The benefits of green space have a direct effect on the quality of life in terms of both physical and mental health. Physical exercise can help to counteract obesity while the opportunity to stroll through green space – especially where immediately accessible – has benefits both in terms of longevity and mental health [The Value of Public Space – CABE Space, March 2004]. Shade provided by vegetation can reduce the risk of skin cancers. Foliage absorbs harmful pollutants from car exhaust fumes and releases oxygen into the atmosphere.

Green space can improve physical and mental health, and encourage biodiversity. **(Crossways Business Park, Dartford, Land Securities)**