4.3 Placemaking & design principles
Local area: existing/proposed

Parking
Parking provision can impact significantly on the overall quality of place in new development, and the design and method of provision should be incorporated into the planning and design from the outset. The means of parking provision should reflect the character of development proposed. Parking should not dominate the streetscene in rows of front-garden driveways or parking courts, but instead be designed sensitively as integral to other elements of the street such as garden boundaries, tree planting and building line(s).

Parking requirements
As a general guide, the requirements for communal/ unallocated parking and for allocated/curtilage parking are as follows:

Communal or unallocated parking
Where residents parking is provided within courtyards/car parks
No of parking spaces = no. of units x 1.75
for residents and visitors
= 175% provision

Curtilage or allocated parking
Where residents parking is provided within driveways or within allocated spaces
No of parking spaces = no. of units x 2 for residents
no. of units x 0.25 for visitors
= 225% provision

Courtyards
In high density development of terraced housing or flats, parking can be provided through a combination of front and rear courtyards. Rear courtyards can alleviate the potential dominance of cars in the street scene - the use of pends can help maintain the building line while providing vehicular access to the rear. Courtyard parking should always be designed with a degree of overlooking from adjacent housing (to maximise security), and high quality boundary materials/ landscape planting to reflect the semi-private quality of the space and avoid an overly sterile, 'municipal car park' character.

In-curtilage
The design of in-curtilage parking, where parking is required to be within individual plots, should ensure front gardens are not dominated by driveway parking by enclosing driveways within the building line. The use of high quality boundary walls and hedges can help to visually contain parking and break up potentially monotonous series of driveways.

Visitor
This should be integrated into the street scene at appropriate points. In traffic-calmed or narrow/shared surface areas, on-street parking can be instrumental in slowing traffic speeds – where applicable this needs to be demonstrated as integral to a clear concept for traffic management and the public realm. In all situations, parking should be sited and designed to be well overlooked by adjacent residents and people moving through the public realm. This minimises crime risk by generating opportunities for passive surveillance.


Coutyard parking with pend access at Darnick


In-curtilage parking at Peebles well contained by boundary treatment


On street parking at Denholm

4.3 Placemaking & design principles
Local area: existing/proposed

Layout and Legibility: a summary

- ✔ Avoid the creation of arbitrary street patterns and housing layouts without a clear concept or local understanding
- ✔ Create a clear sequence of spaces: key frontages and arrival points that lead to streets, lanes and meaningful public spaces
- ✔ New development sites are expected to be permeable to pedestrian and vehicular movement where appropriate.
- ✔ Movement patterns should seek to tie in with existing street and path networks
- ✔ Consider the varying characters of primary/ secondary streets, crossroads, public and semi-private spaces: each will be viewed differently and can enhance legibility and distinctiveness
- ✔ Always remember the importance of boundary treatments: walls, fences and hedges are almost as important as the buildings in defining the streetscene
- ✔ Ensure streets and spaces are well-overlooked to create a sense of community safety and 'eyes on the street'
- ✔ Consider the buildings and spaces they enclose first, before fitting in the road network second: create spaces rather than 'distributor roads'

The design statement should provide a clear understanding of:

- ✔ The local context: surrounding streets and landmarks that make the area distinctive and legible
- ✔ The design concept: the shapes and links that have helped to form the layout and will make the place easy to navigate
- ✔ The role of buildings in the public realm: to shape spaces and to provide 'eyes on the street'
- ✔ Appropriate ease of through access to ensure safe, crime-free neighbourhoods

New development with permeable layout and strong frontage (Farningham McCreadie)

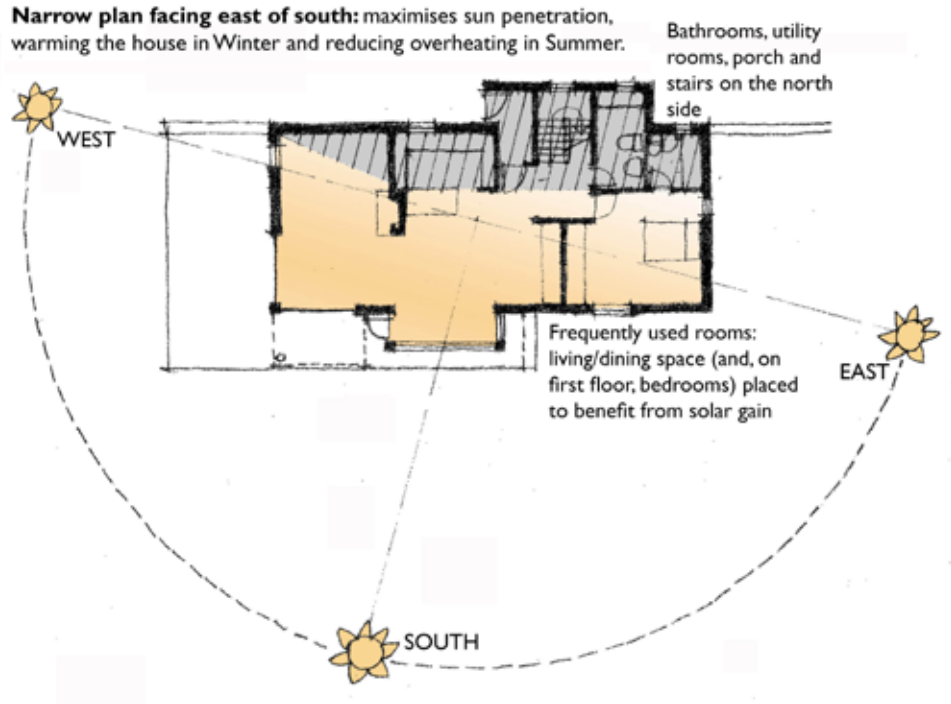
4.3 Placemaking & design principles
Local area: existing/proposed

SUSTAINABLE DEVELOPMENT
Objective: is efficient as is practicably possible in the use of natural and man-made resources

Only by creating places that make optimum use of layout, design and natural resources for minimising energy demands can development be truly sustainable. This should be demonstrated in all development within the Scottish Borders. At the site planning and design stage, the design and layout should be informed by the need to minimise demand for energy required for heating, cooling and lighting. Minimising the need for energy cuts costs for future residents. Energy that is required can increasingly be met from a variety of renewable energy technologies.

Sustainable approaches to energy
Any future development must consider a sustainable approach to energy. In accordance with Supplementary Planning Guidance 18: Renewable Energy (June 2007), the 'energy hierarchy' establishes the importance of 'designing out' energy needs at the building design stage as the first step in achieving energy efficient buildings. Consideration of renewable energy technologies should only be given once energy efficiency has been maximised/energy needs minimised.

Building orientation and form
The orientation of streets, courtyards or buildings must be carefully considered. Southerly orientation - ideally as close as possible to 30° either side of south - ensures maximum passive solar gain as well as optimised use of natural daylight. Sunpath analysis is invaluable in assessing the effects of building orientation and massing on capturing daylight and any overshadowing. the detailed layout and internal floorplan of a building can be designed to optimise on solar gain and maximise use of natural daylight, while avoiding overly monotonous layouts that may conflict with the grain of the adjacent built form. Equally, the form and density adopted in building design can enhance energy efficiency - row housing generally experiences less heat loss than individual detached houses, as well as making more efficient use of building materials.



Building orientation and internal layout (Allan Swan, Bain Swan Architects)

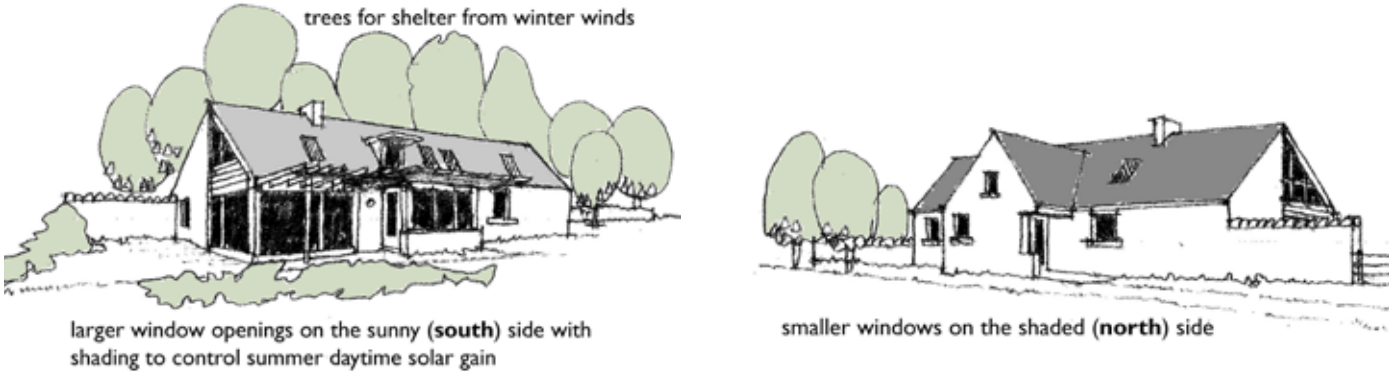
Energy statement
Scottish Borders Council seeks an energy statement to be provided for development whose total floorspace is equal to or greater than 500sqm. This should set out clearly how the building has been designed and will be constructed to minimise energy needs and maximise energy efficiency, as well as detailing any provision made for renewable energy. See Supplementary Planning Guidance 18: Renewable Energy (June 2007), for more details.

4.3 Placemaking & design principles
Local area: existing/proposed

Aspect and shelter
The creation and retention of trees and hedgerows to provide shelter from prevailing winds helps to reduce demand for heating within buildings and enhances the microclimate within outdoor spaces. Careful consideration of the orientation of a site's aspect and proposed vertical elements, using sun path analysis, ensures that shading from trees and buildings is minimised while shelter is maximised.

Handling water
In order to minimise run off, especially following periods of intensive rain, surfaces of the spaces between buildings within the development should be as porous as possible. Thus the use of greens, trees, semi porous paved surfaces and the use of balancing ponds and Sustainable Urban Drainage Systems (SUDS) should be integrated into the design at an early stage. Water harvesting from roofs should be integrated into buildings for grey water use or irrigation. The use of green roofs, where the roof is planted with an appropriate light-weight grass mix (such as sedum), can help to reduce heating and cooling loads on a building as well as minimising rainwater runoff.

Recycling materials
The minimisation of waste, from both the construction and use of a building, should be a major consideration of any new development. Storage of material for recycling requires space of sufficient volume which is accessible for collection and the provision of this should be considered early in the design process. Onsite composting and recycling should also be provided where feasible and any layout or design should take this into account.



Working with aspect and shelter (Allan Swan, Bain Swan Architects)

House at Heriot using well established tree shelter

Surface water storage and soakaway

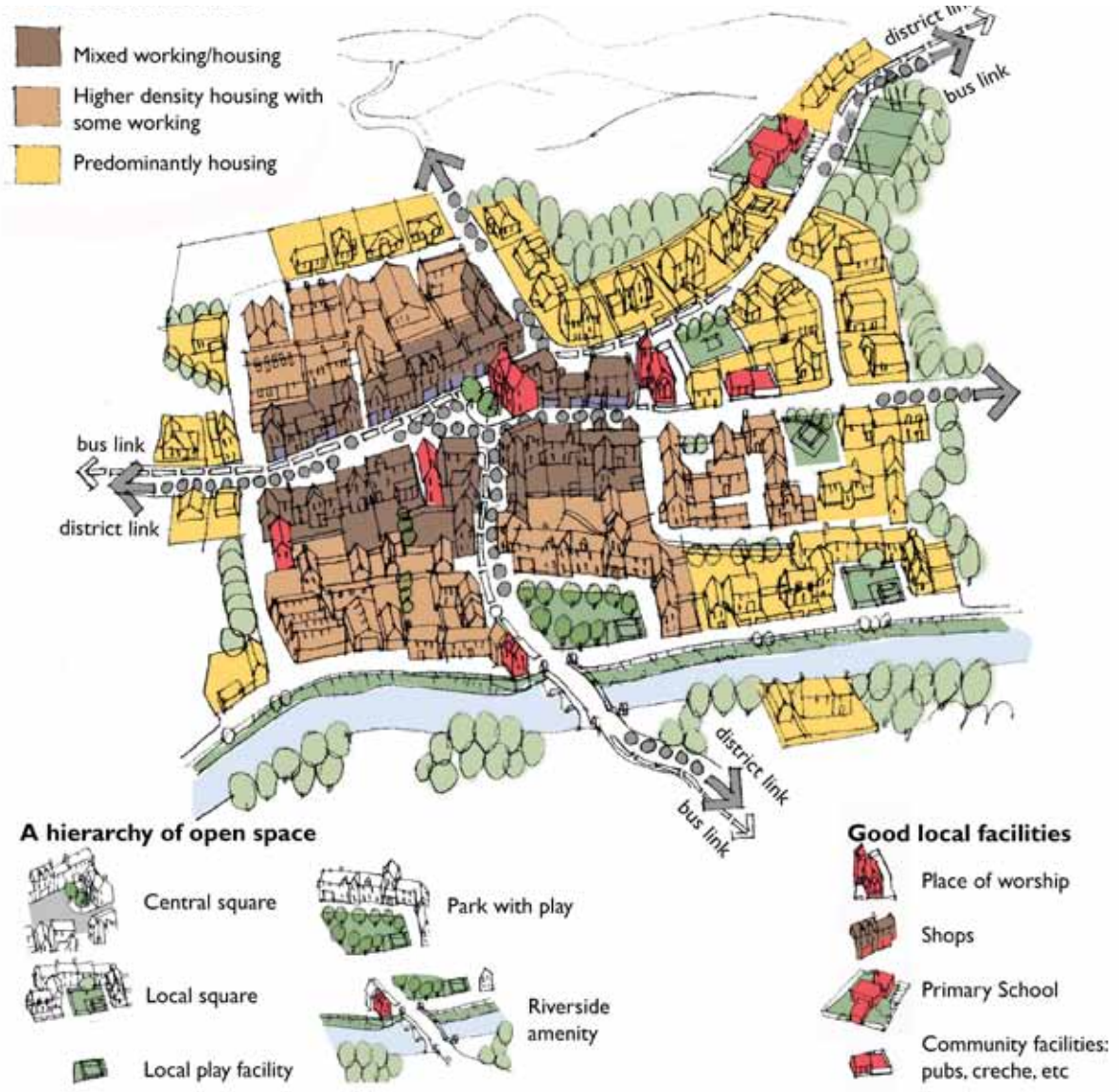
Sustainable development: a summary
- ✔ New development must strive to 'design out' energy demands wherever possible, through optimum use of materials in design and insulation of buildings
- ✔ Use microclimatic analysis to orientate buildings and external spaces to utilise natural daylight for heating/lighting and the provision of shelter from prevailing winds
- ✔ Integrate drainage considerations into the design from the outset: surface water runoff and attenuation must not be an afterthought and must be handled sustainably
- ✔ Consider the use of porous surfaces, attenuation ponds and 'green roofs' where appropriate to your scheme
- ✔ All new development is required to provide an energy statement appraising renewable energy options and identifying the most efficient means of providing/reducing energy requirements

4.3 Placemaking & design principles
Local area: existing/proposed

DENSITY AND USE

Objective: creates a usable place with strong sense of local identity that is adaptable to future needs

In order to be sustainable, development should seek to provide a range and density of housing appropriate to the needs of communities as a whole. In doing so, new development can form walkable, vibrant neighbourhoods able to support local facilities while reducing car use. Already integral to the character of historic Borders settlements, high density, mixed-use development is not a new concept, While historically a response to the functional needs of early communities, the role of density and mixing of uses is central to sustainable placemaking today



Components of a sustainable neighbourhood, comprising a range of density and uses (Allan Swan, Bain Swan Architects)

4.3 Placemaking & design principles
Local area: existing/proposed

Density

Typically, housing densities in new development in the Scottish Borders is between 15 and 30 dwellings per hectare (dph). By considering densities around and upwards of 30dph where appropriate, new development can achieve numerous benefits:

Benefits of higher density living	
Social	• Enhanced social interaction within neighbourhood • Passive surveillance opportunities: improved sense of security • Reduced walking distances to local facilities • Community diversity: opportunities for integrating a mix of housing tenures • Enhanced sense of place: richer variety in spaces • Protecting the Borders character: reflecting existing urban forms
Economic	• Increased viability of local businesses: critical mass of population within catchment • Attractive, vibrant places that attract new investment and visitors • More efficient use of infrastructure • Enhanced economic viability of development (higher no. units)
Environment	• Reduced dependency on car travel • More efficient use of land and infrastructure • Increased energy efficiency • Enhanced opportunities for public open space

Higher density housing can provide a strong sense of place, particularly when used in relation to the local context or as an expression of a key node or focal point. Higher density housing can help to sustain local services: by grouping people closely together round local facilities, the catchment population for those services is maximised, thus enhancing the long term viability and walkable distances. Density of housing should be reflective of its location, and the traditional urban forms within towns and villages have a gradation of densities from urban centre to edge of centre to urban periphery and the wider rural landscape. The diagram below illustrates this general principle in the context of the Scottish Borders.

Higher density is not always appropriate: where local context suggests a lower density response, such as edge of settlement development, the principles of placemaking still apply (see diagram below). When higher density building forms are used, the buildings should be planned accordingly to ensure that the internal layout provides appropriate soundproofing.

Example of higher density housing: strong building line with pend access maintaining a frontage to the street at Ayton

Indicative plan and section showing the gradual decrease in density from urban core to rural landscape

4.3 Placemaking & design principles
Local area: existing/proposed

Large new development must avoid creating monotonous, homogenous layouts, ensuring a clear concept is delivered that distinguishes neighbourhoods through a range of densities, built form and layout. Higher density does not mean simply placing detached homes closer together – it requires careful consideration of housetypes, building groups, and the provision of appropriately proportioned space between buildings.

Mixed use

In the context of small towns throughout the Borders, one of the biggest challenges for new housing-led development is to create sustainable opportunities for other uses that can serve the wider community. As well as being integral to the character of a place, a mix of uses that includes housing, local shops, community facilities, community open spaces and employment is beneficial to the social, economic and environmental wellbeing of the community. The proximity of existing facilities and opportunities for provision of a new range of appropriate uses must be identified: this can inform the location of higher densities around key focal points. Opportunities for future integration of other uses in development should always be explored and accommodated wherever possible.

Mixed tenure

Mixed tenure housing further enhances the social cohesion of urban and rural communities, by providing accommodation for all, whether owner-occupied, rented or under shared ownership. In order to fully enhance social cohesion, the variety of tenure incorporated should always be evenly distributed across a community, and designed so as to be visually integrated into the urban realm.

Mixed use in Selkirk with flats above shops

Well integrated affordable housing, Newstead

Converted steading at Morebattle

Adaptable development

In order to be truly sustainable, places have to be able to adapt to future changes in aspects such as household size and composition, lifestyle changes and movement patterns (Urban Design Compendium, 2000). Designing a place that will be enduring requires a degree of flexibility within the building design and the overall physical framework. Flexibility to future changes of use should be considered, incorporated in appropriate locations creating opportunities for clusters of complementary uses, such as local shops/workspace/ businesses to form a part of the neighbourhood.

Density & Use: a summary

- ✔ Consider the most appropriate density to the location: use dense building forms to shape spaces and highlight key frontages to the street
- ✔ Avoid the creation of 'gap teeth' housing where detached homes are simply placed closer together: density needs to be considered from the outset to get the best housetype and appropriate layout
- ✔ Consider opportunities for creating a mix of uses: whether a key frontage or small courtyard there may be appropriate scope for a corner shop/studio workspace in hew housing development – if not now, then plan for future flexibility
- ✔ Strive to ensure a cohesive a mix of tenure in providing affordable housing: avoid the creation of social segregation
- ✔ Consider the lifetime use of a building or neighbourhood: buildings should be able to adapt to changes in lifestyle, mobility or use

4.3 Placemaking & design principles
Local area: existing/proposed

OPEN SPACE

Objective: makes effective use of open space and creates meaningful spaces within the public and private domain

Traditional settlements in the Borders are characterised by intricate arrangements of routes and spaces. Our experience of these spatial sequences is often what most defines our perception of a place, over and above our appreciation of individual buildings. It is therefore essential to consider the spaces between buildings as of equal importance to the buildings themselves – the character and identity of a neighbourhood or area is far greater than the sum of its parts. Planning for the spaces between buildings requires the same level of consideration as that of building design - each space should have a specific function. Layouts should be designed with open space as integral to the overall arrangement, avoiding the creation of "left over" space between roads and buildings that is unlikely to be maintained. Open spaces must be sited and orientated to form attractive, sunny usable areas that are well-contained from prevailing winds. Supplementary Planning Guidance on Green Space provides the strategic context for new development.

Central open space forms a focal point in Swinton

New housing with central open space at Cardrona

Example of new development creating public open space that can serve the whole community (Simpson & Brown)

4.3 Placemaking & design principles
Local area: existing/proposed

Good example of well-proportioned private space with attractive boundaries that enhances the street scene (Lilliesleaf, Ayton)

Good examples of semi-private front gardens that enhance the street scene and provide definition of private from public. (St Boswells, Lilliesleaf))

Central public space well overlooked and framed by the buildings. (Peebles)

Private
Private spaces such as rear gardens should be appropriately sized, proportionate to the size and layout of the building. They should also be considered in relation to the wider area; if traditionally houses nearby have small linear gardens then an abrupt change in the rhythm of open space to built form will look out of context.

Semi-private
A clear distinction should be made between semi-private spaces, such as shared courtyard spaces and small front gardens, and adjacent public space. Traditionally these spaces were often transitional and served to provide a distinction between private internal space and public external spaces, often as a small (1.5-2m) planted or paved area to the front of the house. The boundary should be articulated as an attractive, long-lasting and clear edge that enhances the sense of enclosure within the street.

Public
The provision of centrally accessible and well overlooked public open space within a development can provide an important focal point and a recreational facility. The Borders has a distinct and largely intact heritage of village greens and squares, and new development can continue this distinctive legacy. Public open space should be centrally located, where people are likely to want to congregate, with facilities such as play equipment integrated into the overall design rather than as stand-alone elements. Pedestrian links should be integral in determining the location and layout of public open spaces.

4.3 Placemaking & design principles
Local area: existing/proposed

Trees and vegetation
The use of trees within the public realm can greatly enhance the quality of the microclimate as well as the recreational and visual amenity of a neighbourhood. Trees can enhance or define the character of an area, as a formal avenue or informal groupings within the street scene, or create landmarks or visual screening elements. It is essential to use trees of an appropriate specification in relation to their desired effect, from an early stage, and to ensure careful aftercare while they are established.

Maintenance
In planning for any public open space, the maintenance requirements must be an early consideration – successful space is dependent on successful management. Factoring arrangements for any non-adopted public space should be provided for, and appropriate arrangements for long-term management of these spaces should be made. Consideration of access for maintenance and species selection is also vital

Open space: a summary
- ✔ In large housing developments, incorporate appropriately scaled, meaningful public spaces that are overlooked by buildings
- ✔ Ensure the provision of appropriately scaled private garden spaces proportionate to the built context and household size
- ✔ Ensure both private gardens and semi-private spaces such as front threshold spaces are clearly and attractively defined by quality boundary treatments that relate to the building line.

Hedging can provide integration into the wider landscape, near Peel

Avenue planting enhances quality of the road/street, Melrose

Established trees create an attractive setting for housing while new planting further enhances the setting, Peel

4.3 Placemaking & design principles
Local area: existing/proposed

Development and the local area: what to look for

To summarise, a design statement should demonstrate clear understanding of:

- ❑ Siting of development
- ❑ Layout and legibility
- ❑ Sustainable development
- ❑ Density and use
- ❑ Open space

New development should respond to the character of existing building(s)/ neighbourhood within the local area ✔

Development should be sited sensitively and with careful consideration of orientation and microclimate, overall composition of massing and roofline, key landscape features and existing access networks that can anchor new buildings in their context ✔

Due consideration must be given to treatment of site boundaries, designed to ensure visual integration with the surrounding landscape/urban context. This requires the use of high quality materials and landscape planting of sufficient maturity and scale ✔

The townscape/landscape context of any new development must be considered from the outset to ensure the final design responds to key views, e.g. approach views/oblique views from adjacent streets and rights of way ✔

It is vital to demonstrate that new development is as resource-efficient as is practicable with a layout that 'designs out' energy needs. Opportunities for renewable energy sources should be explored at the outset, and an energy statement provided ✔

New development should utilise all opportunities for increasing density and potential for current/future mixing of uses, in order to create sustainable places to live that relate to the existing built character of Borders towns, villages and rural buildings ✔

A strong hierarchy of usable public, semi-public and private spaces that are well-defined should be incorporated as appropriate to all new development. Public open space should be located where it is readily overlooked to encourage passive surveillance ✔

New development must be designed to provide a clear sense of character and identity, founded upon streets and places that are defined by buildings before or alongside the road layout ✔

4.4 Placemaking & design principles
Proposed buildings

'..urban planning, contemporary architecture and preservation of the historic urban landscape should avoid all forms of pseudo-historical design, as they constitute a denial of both the historic and the contemporary alike. One historical view should not supplant another, as history must remain readable, while continuity of culture through quality interventions is the ultimate goal'
UNESCO Vienna Memorandum, 2005

DESIGN APPROACH

The Borders has a wealth of vernacular buildings and inspirational architecture that is a product of its diverse historic and landscape context. From the pantile cottages on the coast to the large mill buildings of central Borders and the Burgh towns throughout, there are contextual cues that should form the basis for any design response in order to ensure the unique character is retained and enhanced. In understanding the context, new buildings can respond to this in an appropriate manner.

Contemparary new build in Eyemouth

'Traditional' vs. 'contemporary'

New housing design is often influenced by the latest architectural fashion or fad to varying degrees. This veers between the contemporary and traditional, and both are not without their challenges. 'Contemporary' forms without a firm design intent or contextual understanding can often be ill-fitted to their surroundings. Equally, attempts to reproduce historic styles with modern materials can result in a weak interpretation of the original character. All new housing should therefore seek to be clear and honest in its aspiration – the concept for any new design should be made clear from the outset. Regardless of the approach adopted, new housing development should always respect the most positive defining characteristics of the local area.

Traditional Steading at Morebattle

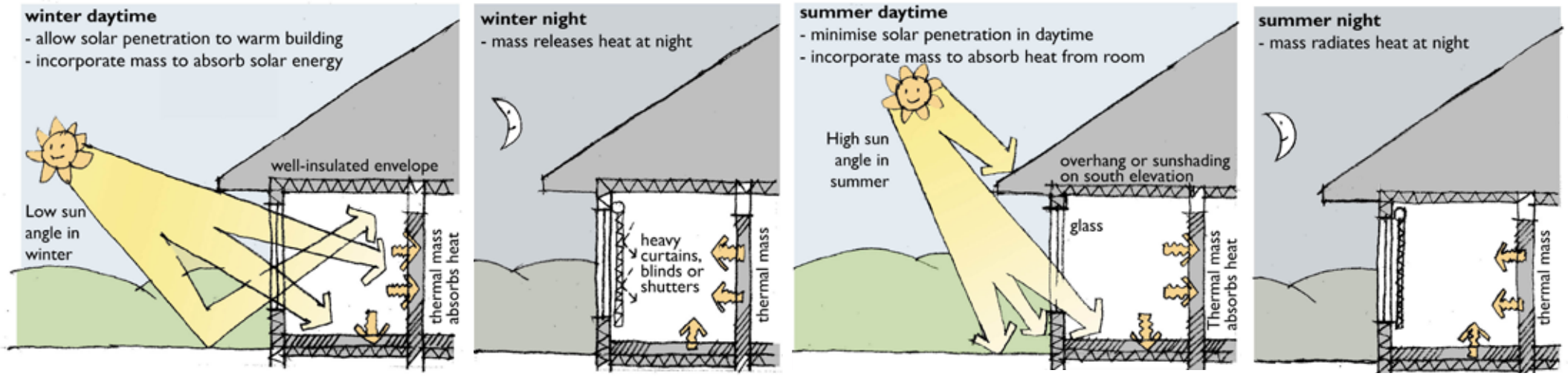
4.4 Placemaking & design principles
Proposed buildings

ENERGY EFFICIENT DESIGN
Objective: maximises energy efficiency whilst minimising use of unsustainable resources within buildings

Designing out energy needs
As a baseline objective, in order to be most efficient the energy requirements of a building for heating, cooling, and lighting should be minimised. Scottish Borders Council Supplementary Planning Guidance 18: Renewable Energy (June 2007) sets out in detail the methods of achieving this. The most direct and cost-effective route to achieving this is through maximising insulation and draught proofing and reducing energy demand through solar gain and careful consideration of microclimate.

Building form
- Relatively shallow floorplans facilitate good levels of daylight-penetration within the building, thus minimising the need for daytime artificial lighting, and enhancing natural ventilation.
- The orientation of rooms should relate to aspect and the building orientation, with bedrooms on the north side and living accommodation on the south side to receive maximum sunlight.
- Window openings should make the most of opportunities to maximise natural daylight and solar gain in the winter whilst allowing for appropriate shading in the summer (using features such as brise-soleil).
- The building profile should be designed to ensure that natural convection currents can ensure optimal internal conditions.
- An adaptable floorplan, which allows for future flexibility and rationalisation of the internal space, will also enhance the lifetime sustainability of a development.

Building materials
The building envelope makes a significant contribution to energy efficiency:
- Structural elements - such as walls or floors - that use heavyweight materials (such as earth, stone or clay) which contain a high thermal mass are very effective, as these regulate internal temperatures by absorbing heat during the day, storing and releasing it during the night.



Designing to maximise benefits of solar gain, thus reducing energy demands for heating/cooling (Allan Swan, Bain Swan Architects)

4.4 Placemaking & design principles
Proposed buildings

- Lighter weight materials such as timber allow for more rapid heating and cooling of buildings, which is more responsive to external temperature variation.
- Building design that incorporates elements of both heavyweight and lightweight construction - in response to the microclimate and needs of the end-user - can achieve the best possible balance of passive solar design when combined within a well-designed, energy efficient building form.
- Where there are large areas of glass, appropriate detailing is essential to reduce the need for supplementary heating and shading. The building materials and structure should always be selected for minimum embodied energy and maximum lifespan.

Designing with sustainable resources

Wherever possible, locally produced materials should be utilised, e.g. timber components, locally quarried material or straw bale walling, which have less distance to travel and therefore demonstrate low embodied energy, the energy that is used in the 'whole lifecycle' of a material and its production, manufacture and transportation. Where existing buildings and structures on site are not able to be reused, the raw materials should wherever possible be retained and reused. The materials used for the external paved surfaces should be considered within the context of their embodied energy, durability and maintenance regime.

Designing for renewable energy sources

The use of renewable energy is covered in detail in Supplementary Planning Guidance 18: Renewable Energy (June 2007), which sets out the basis upon which Scottish Borders Council approach opportunities for renewable energy. As part of the Scottish Borders Woodland Strategy, opportunities for renewable energy from Biomass/CHP are also being promoted as a way of expanding the market for local resources.

House at Ayton utilising solar energy

Timber house, Greenlaw: winner of Scottish Borders Sustainable Design Award 2009 (Icosis Architects)

Recently built Denholm Primary School, following sustainable design principles.

4.4 Placemaking & design principles
Proposed buildings

RELATING TO THE SITE
Objective: creates a building or buildings that reflects a detailed understanding of the nature and characteristics of a site.

The careful siting of buildings within their individual plots is integral to both contextual and site-sensitive design. The siting and scale of proposed buildings should be proportionate to the plot size and relate to the nature of the site as identified in the site analysis.

Landform
Where topography presents a constraint, this represents both a challenge and an opportunity for innovative building design. The creation of a development platform should be in harmony with the site as much as is practicable relative to the landform, avoiding excessive under-building and the creation of excessive cutting and filling - instead consider split-level housing, building with the slope or utilising terraced garden space.

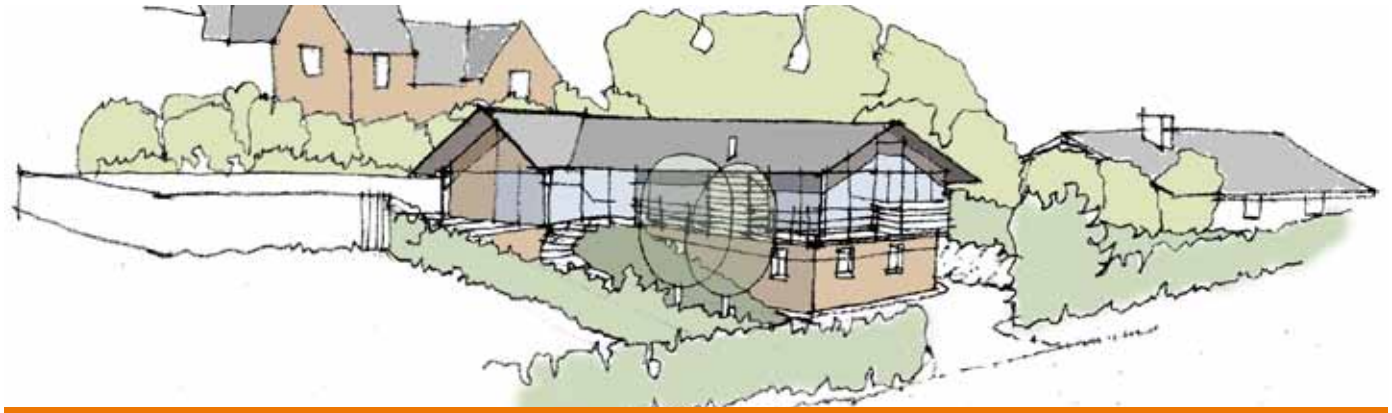
Site features
How the site is enclosed, the nature of adjacent land uses and existing on-site features all form a 'baseline' for designing a new site layout. Features within the site, such as existing built elements, tree planting and attractive boundaries should be considered within the design process. The retention and setting of valuable features, and the reuse of any demolished structural materials should inform the final siting and building design.

Site arrangement
The buildings and open spaces within an individual plot should be arranged to create functional spaces with a clear transition from public to private space. Buildings should be oriented to strongly address the site frontage, relating to adjacent properties and the street onto which they front in the urban context. The site layout should provide sufficient garden space relevant to the size of the house and should relate the function of external spaces to internal spaces, with a clear visual relationship between living rooms and both the street frontage and garden space.

Views from building(s)
The views from within proposed buildings should be identified and are key to determining setbacks from adjacent buildings, orientation, positioning of public open spaces, privacy, and maximising site conditions. On sloping or elevated sites the key views from the site can help determine the site layout and internal layout of public rooms.

Building form working with the site features and landscape backdrop, Oban

Poor response to the site layout and landform (Allan Swan, Bain Swan Architects)



Positive, responsive approach to the site layout, working with the landform and creating a positive frontage (Allan Swan, Bain Swan Architects)

4.4 Placemaking & design principles
Proposed buildings

RELATING TO THE TOWNSCAPE
Objective: development fits well within wider townscape

New building(s) set within an existing street or building group should demonstrate a positive relationship to the overall built fabric, and appear as part of a 'family' of buildings.

Built context/roofscape
In considering an individual building, the wider streetscene and grouping of buildings in which it is situated should be considered holistically, particularly features such as;

- frontage - existing building line, setbacks, and storey heights
- boundary treatments within the wider area
- plot width/plan depth - existing building/plot proportions

Development in Kelso that relates to existing roofscape

Infill development must respond to the existing rhythm of built frontage, roofline and storey heights (Allan Swan, Bain Swan Architects)

The relationship of the building to the street is vital to the overall quality of the public realm - every building that is publicly visible has a part to play. Even during the detailed design process, it must be demonstrated that the proposed relationship of the building to its wider setting has been considered, particularly in the visual amenity of the townscape or landscape setting. The resolution of detailed design issues can be helped greatly by revisiting an area-wide context appraisal of the built character to identify local patterns of building line, setbacks and plot proportions.

Roofscape
The roofscape of the street or group into which development is proposed should be considered as one overall composition, and the rhythm and variation created by roof pitch, storey heights, chimneys, materials and colour, within the settlement or street should be studied to inform the final building design.

Views
The visual axis of the street, and how the building elements relate to this must be understood at the building design stage. Depending on the location (mid-terrace, corner sites, on main streets or small lanes) the building will be visible in a different way and will have a different role to play. Equally, the view towards the neighbourhood or settlement, including the roofline, building colour and overall massing, should be considered integrally to the design process.

Frontage
The frontage design within the streetscene should be considered holistically. Boundary treatments must be considered (and illustrated) integrally to elevational views, and features such as hedges and walling should be incorporated wherever clear delineation between public and private is desired.

4.4 Placemaking & design principles
Proposed building

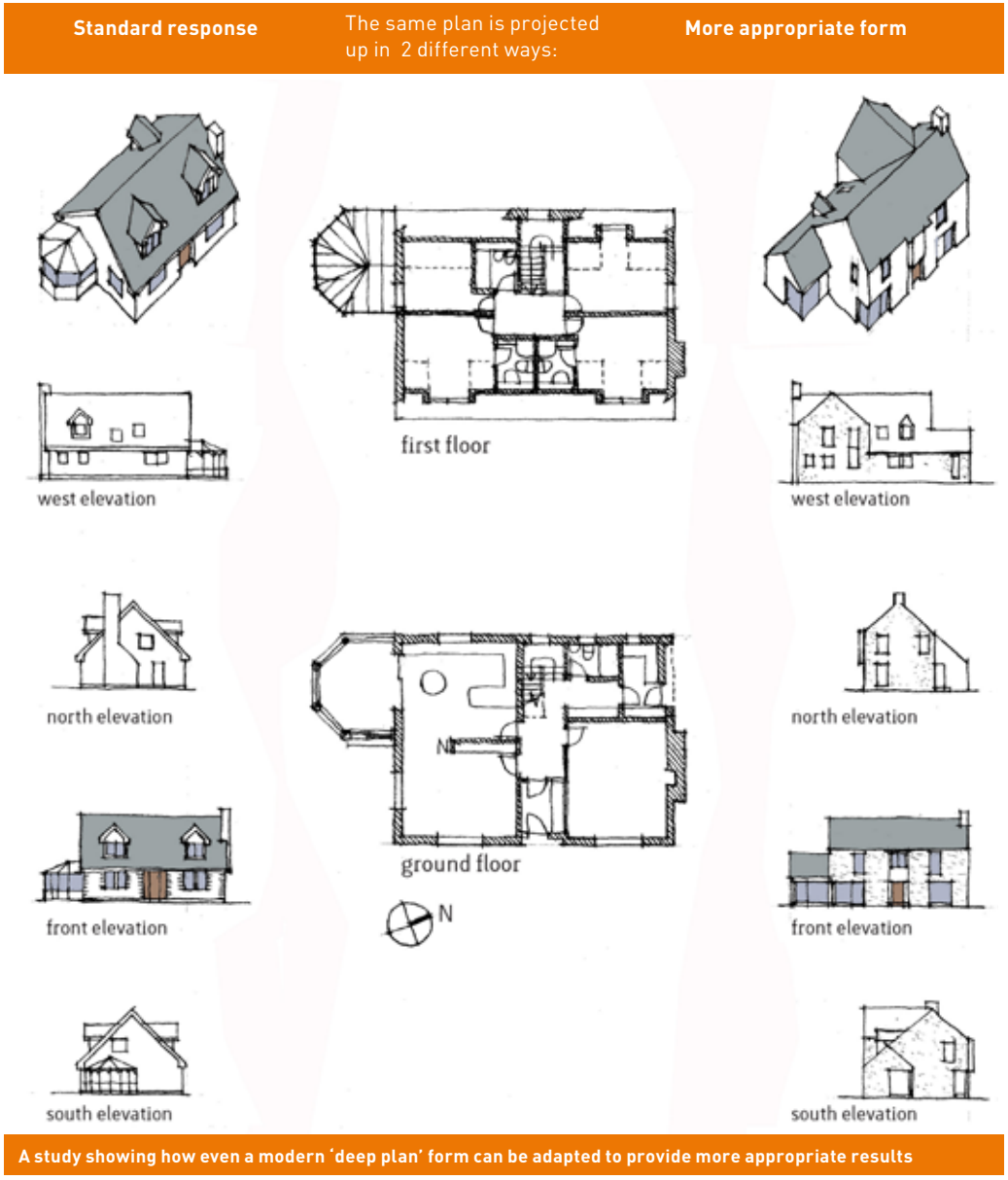
SCALE , MASSING AND FORM
Objective: creates a balanced whole with a clear design concept

The principles of scale, massing, form and proportion are very important aspects of development. Some new houses can look out of place and inappropriate, even though they use materials and architectural features based on traditional buildings within the area. Often the reason for this is because their basic form and size is out of keeping with their location. Although it would not be appropriate to copy the design of traditional buildings, it is important to have an understanding of their scale, massing and form, in order for new development to complement them.

Form/ Massing
New buildings should be simple in form, relating to traditional building forms in the area. Simple vernacular rural dwellings were generally single storey structures with a rectilinear plan, usually no more that one room deep, with a gable end or hipped roof. Over the years, this form evolved as ancillary buildings and extensions were added to the side or rear, creating forms such as 'L' shaped, 'T' shaped or 'U' shaped, and additional storeys were added.

Plan proportions: frontage width versus plan depth
Buildings traditionally were designed with a proportionate balance between plan depth and frontage width. By considering the proportion of frontage width to plan depth in terms of overall balance and what is found in the local context (alongside other factors of detailing and finishes), new housing design can contribute to an overall sense of place and the wider character of the Scottish Borders rather than the standardised mass-produced suburban housing that lacks this relationship.

Traditionally, gable widths did not exceed about 6 metres. This in turn created a typical roof pitch and balanced proportion of walling to roofing in elevational views. Modern housing can appear bulky and 'out of scale', lacking this balance of plan depth to roof mass, resulting in visually dominant roofs. New housing design should seek to achieve a balanced proportion between plan depth, roof pitch and frontage width, both in urban and rural contexts: a narrow plan form with a plan depth of 6 metres can often give a harmonious form. This should relate to context and also present opportunities to work with the landform. If more accommodation is required, larger buildings can be designed to read



A study showing how even a modern 'deep plan' form can be adapted to provide more appropriate results

as smaller elements in terms of massing to give a more human scale rather than one bulky building mass.

Roof pitch

The proportionate balance of roof massing to the building envelope is critical to the overall sense of proportion. Traditionally buildings in the Scottish Borders were designed with a gabled or hipped roof pitch of 40-45 degrees, due to the constraints of building materials and techniques. Together with the traditional building proportions this has produced the characteristic form of many Borders buildings. Modern buildings can work with such proportions in the local context, either as a direct reflection or a contemporary interpretation of the traditional form. In a development of more than one dwelling, the collective group of roof forms should be considered, and the overall visual composition and rhythm of the roofline designed as a whole.

Scale

The building size should be relative to its site and surrounding buildings. Larger houses need more space around them; and would sit uncomfortably located directly next to a traditional single or storey and a half storey cottage.

Appropriate roof pitch applied to recent housing in Kelso, also using well-proportioned gable windows to provide overlooking (Smith Scott Mullan Architexts)

Recent modern development that has re-interpreted traditional massing and plan depth (top: the Drum, Bo'ness [Malcolm Fraser]

Lauder [Farningham McCreadie])

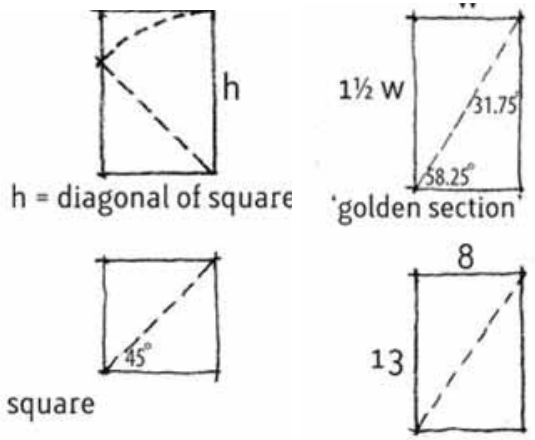
4.4 Placemaking & design principles
Proposed building

PROPORTION
Objective: Create a sense of unity within the building where the individual elements work in harmony with each other

Proportion is a fundamental element in architecture. It refers to the relationship of one part of a building to the other parts, and to the building as a whole. In order to create good design, the proportion of individual elements in relation to each other must work in harmony. This means that the building envelope, window/door openings, eaves height and roof ridgeline should all work in balance with each other. For example if the window openings appear too small or with insufficient space between that and the eaves height, the building will look out of balance. Equally if the roof ridgeline is set too high or low in relation to the building height/eaves height, the building may look 'top-heavy'.

Rules of proportion
Getting the proportions 'right' can greatly enhance the success of a building design, creating a sense of unity and order. Whether symmetrical or assymetrical, the overall composition of building design should seek to create balance and proportion:

The 'golden ratio' creates harmony and proportion, based on one third to two thirds of a whole giving balance. The 'golden spiral' provides a harmonious geometry founded on the golden ratio formula. This ratio has produced the classic proportions of architecture from Roman and Greek times, through to modernist design of the 20th century.



The golden ratio

Elevational design centred on a vertical axis around which the other elements are balanced creates a natural balance and sense of connectedness to the whole. The proportions used should relate to the building structure, and the materials used - for example, the structural proportions and maximum span or depth of a stone lintel is very different than a steel lintel because of different structural properties. Integral to getting the proportion 'right', good design should be simple and honest about the materials used.

Well-proportioned elevation: new housing at Swinton (Oliver Chapman)

Building elements working together in proportion (Perthshire) (Malcolm Fraser Architects)

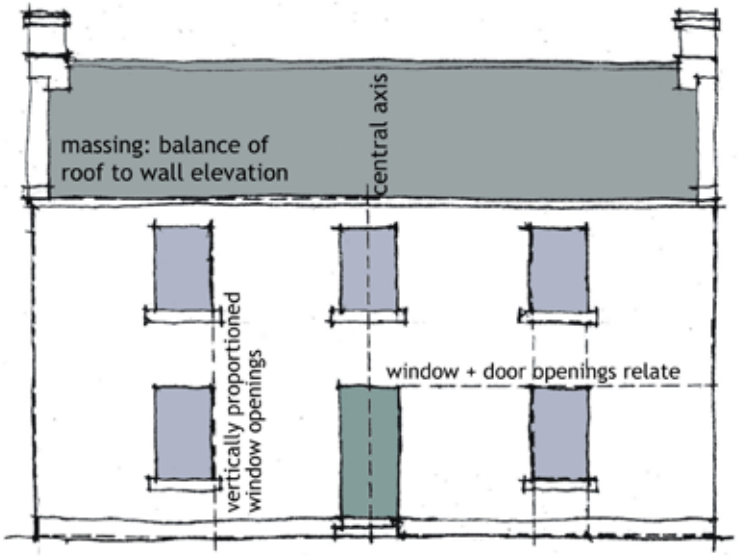
4.4 Placemaking & design principles
Proposed building

Proportion in the Scottish Borders
Traditional houses maintained a balance of proportions between the walls and openings (door and windows) across a range of factors:

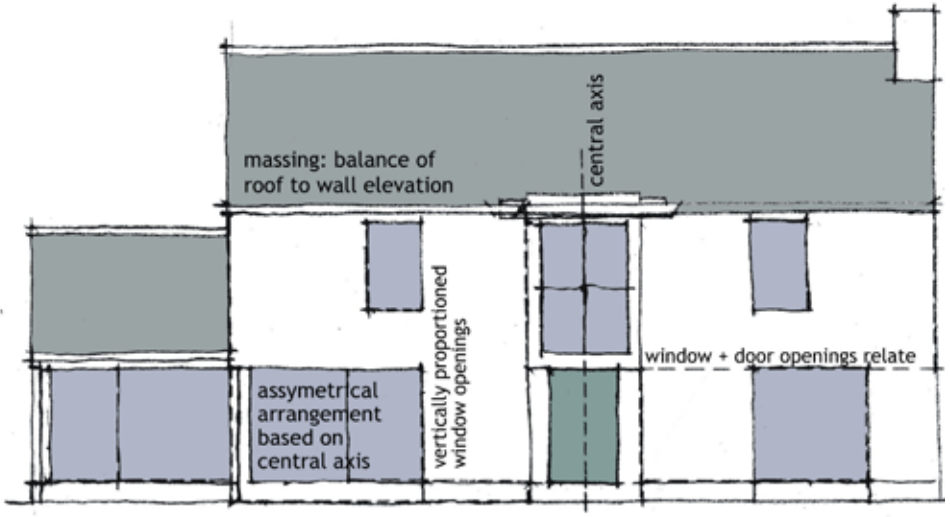
Height of the building relative to its openings, with vertical emphasis to the windows (horizontal windows can be too dominating on the elevation)
High solid to void relationship (i.e. greater wall surface area to windows and door opening area)
A simple arrangement of features on the elevation

It is essential to get the proportion right in new development, providing the right balance between wall and windows. Eaves should be as low as possible, and with two-storey buildings, the distance between the ground and first floor windows should be minimised.

Traditionally the buildings throughout the Scottish Borders have been characterised by simple forms and proportion. These simple relationships underpin the character and sense of place of the Borders built character, and where development is within an existing built area, new buildings should respond to existing building lines, eaves heights and lintol heights. By relating to existing features new buildings can relate positively to their surroundings.



Typical 18th/19th century frontage



Use of similar proportions to produce a well-balanced contemporary elevation

Harmonious proportion in housing design

4.4 Placemaking & design principles
Proposed building

MATERIALS & COLOUR
Objective: utilises an appropriate palette and quality of materials and colour tones when viewed within the wider context

Alongside the standardised house-types of recent years, the inappropriate use of colour and materials in new building in the Scottish Borders has eroded the subtle interplay of buildings in their landscape. In order to reflect the local character, the use of colour and materials should (unless in specific circumstances) be sensitive to the indigenous materials and hues of the surrounding landscape. While traditional materials may not be directly viable, the use of stone detailing, individual walls, or as a boundary treatment can greatly assist in anchoring a new design into the urban or rural context. Any materials that are available on site, like former stone structures, should be reused wherever possible. New design should avoid excessive and arbitrary changes in material – a change in material should have a clear rationale and/or reflect a change in structural function.

Materials
Throughout the Scottish Borders, local building materials give each area a unique character. In order to reinforce this character, it is essential to first identify the local materials palette that exists then establish how proposed development can reflect this in the design. Materials used in new developments should be of a high quality, sustainable and ideally from local sources. Consider either incorporating adjacent traditional materials, or carefully considered material choices as suggested below:

Use of Timber
The use of timber in buildings within the Scottish Borders can provide numerous benefits, particularly if it is sourced locally. Timber as an external finish can provide a high quality, natural finish provided it is sensitively designed and detailed. Timber used in such a way can work well when used either on its own or alongside other materials such as stone or render. Scottish Borders Council have produced Supplementary Planning Guidance on The Use of Timber in Sustainable Construction, currently in draft format, that provides more detailed guidance.

Colour
The choice of colour makes all the difference to the impact of a house on the rural landscape. The most important principal is to use colours which blend in with local traditions and surrounding buildings. Contrasting use of a strong colour, e.g. for the door or a particular element on the façade provides visual interest and can greatly enhance a simple design. Contrasting colour can also be used, for example, on render surrounds to windows and doors. The use of a strong colour for external joinery on a small development can be used to unify the development. Coloured finishes should be considered in the context of the building's wider setting - the impact of inappropriate colours can be far-reaching as part of the wider Borders visual character.

Preferred material choices:

Roof
- ✔ Reclaimed slate, colour: blue/grey
- ✔ Artificial slate (fibre cement), colour: grey
- ✔ Plain concrete tiles with a flat profile, colour: grey
- ✔ High quality metal sheeting (eg zinc, lead)
- ✔ Corrugated metal roofing (to match traditional corrugated iron roofing)
- ✔ Timber shingles/ boarding
- ✔ Turf/Thatch

Walls
- ✔ Traditional wet dash render
- ✔ Lime based render
- ✔ Polymer render
- ✔ Natural local stone
- ✔ Drystone walling
- ✔ Timber cladding (horizontal or vertical timber boarding)
- ✔ Corrugated metal cladding

Doors/ Windows
- ✔ Timber framed windows

Inappropriate Material Choices:
- ✘ Roof Red pantiles (except in specific areas, for example to compliment the traditional pantiles of Berwickshire)
- ✘ Interlocking concrete tiles
- ✘ Walls Dry dash render
- ✘ Facing brick
- ✘ Artificial stone as a cladding material

4.4 Placemaking & design principles
Proposed building

Traditional materials

Materials for dwellings were traditionally sourced from the local area, unless the resources were not freely available locally or the dwelling owner was wealthy enough to pay for imported goods. The following provides an introduction to the types of materials that have been traditionally used in the Borders, that have helped characterise the local identity of the towns and villages.

Slate is probably the most common roofing material in the Scottish Borders evident today. The majority of it originally came from North Wales, however slate now comes from much further afield, including China and Spain which have their own embodied energy. The quality and colour of the slate is influential to the roofscape within towns and blue/purple Welsh slate is generally the dominant material in town centres.

Traditional slate roof

Pantiles are generally seen only in and around Berwickshire, more closely associated with the east coast settlements. These are traditionally clay tiles shaped as an S where the downturn hooks into the upturn of the neighbouring tile. These are sometimes known as "Flemish tiles" as they are believed to have originated from the ballasts of Dutch merchant boats.

Pantiles , Eyemouth

Thatch was historically the main roofing material, yet there are now very few examples of thatched roofs. The term is now used to describe those made from reeds, straw and rushes. Thatch gradually went out of use in many parts of Scotland due to the associated fire hazards. There are examples of thatched roofs at Yetholm and Denholm but most Borders settlements no longer retain this feature.

Thatch, Denholm

4.4 Placemaking & design principles
Proposed building

Sandstone is used prolifically throughout the Borders with local quarries supplying a wealth of colours and textures: vivid reds and yellows and cream coloured buildings are evident in settlements such as Melrose, St Boswells and Jedburgh, in the Central Borders, and in Greenlaw and Coldstream, in Berwickshire.

Sandstone, St Boswells

Whinstone or greywacke is a hard, dark grey rock quarried locally in the Scottish Borders. As a hard rock, it demands a skilled stone mason to build with it. Buildings were therefore often harled until mechanical cutting arrived in the 19th century. In more eastern areas, greywacke was often overlain with red or yellow sandstone as it was more easily worked. Windows, doorways and quoins were frequently sandstone. There are a variety of different colours produced by greywacke including dark grey, green and blue.

Whinstone

Harling is a rough form of render made up of aggregate and binding material such as sand and lime. Traditionally it was dashed or hurled on to the masonry wall leaving a rough finish, arguably to protect stone work from severe weather conditions, particularly when the wall cores were clay or mortar bound whinstone rubble. The coating also produces a decorative textured finish that is distinctive and can be colourful.

Harling, Ancrum

Ashlar is a term used to describe any type of dressed stonework. The stone blocks have squared sides and corners and are laid regularly with fine joints. The stone face is generally smooth and can sometimes have decorative treatment.

Ashlar, Galashiels

4.4 Placemaking & design principles
Proposed building

DETAILS
Objective: Incorporates finishes and details that are of quality and integrity within the Scottish Borders context

Getting issues such as scale, massing, form and proportion right at the outset, means the detail can fall more easily into place. New buildings should avoid overly complex or fussy detailing that detracts from the overall appearance. As well as reflecting the local vernacular, simple forms are economically efficient, thus allowing for incorporation of appropriately high quality materials or detailing that will enhance the overall quality of finish and durability.

The careful consideration of contextual detailing and finishes can help anchor new development into the Borders context. Even where standard housetypes are proposed, the external finish and detailing can be simply and effectively adapted to better reflect the local area. Features such as soffits, barge boards, guttering and chimneys can all make a significant difference and care should be taken to ensure that these do not simply follow 'standard' housetype detailing that does not contribute to the distinctiveness of the local area.

What to Avoid:
- ✘ Unnecessary details
- ✘ Artificial decorative features which are not related to the context and locally appropriate tradition e.g. artificial stone features such as quoins and door surrounds
- ✘ Heavy verge/ eaves details
- ✘ Over large dormers
- ✘ Heavy detailing at porches
- ✘ Dummy columns at entrance porches

Windows/Dormer windows
The location and proportioning of openings in the facades is as important as the relationship between walls and roof. The proportion of window openings to wall should be dictated by a number of factors. Window design in new development should always be aimed at balancing solar gain/natural light against energy efficiency. In areas where the built character is defined by nearby/adjacent historic buildings or conservation areas, new development should harmonise with the existing heritage. Traditionally window openings were in proportion to the wall area and other building elements, with a vertical emphasis. When using contemporary sized windows, the traditional relationship between walls and windows should be maintained, so that large areas of glazing are counterbalanced by large areas of wall. The range of opening sizes should be kept to a minimum and the shape of openings simple. Window division should be simple, either exactly symmetrically or in proportion. Simpler patterned windows can more easily accommodate double glazing. The colour of windows is important and, although white is commonly used today, other colours can be. An "estate" colour can be created for an external joinery to help characterise a new development. Modern materials such as aluminium can also be used, depending on circumstances.

There are a variety of different dormer windows traditionally used in the Scottish Borders. These range from simple wall head dormers with slate roofs to "catslide" dormers and more complex or ornate dormers. Dormer windows should always align with the ground floor elevation, relating to ground floor windows and doors. Normally, double width dormers should be avoided. The bulk of dormers can be visually reduced by the colour: for instance, painting the external joinery a dull grey to match the slate roof.

What to Avoid:
- x Horizontal emphasis on windows
- x Low solid to void relationship between openings and wall
- x Inappropriate window division of unequal proportions
- x Mock traditional window design
- x Stick-on astragals
- x Box dormers
- x Double width dormers
- x Wider dormers than windows/openings in the floor below
- x Dormers width rise above the main ridge

New Development at Skirling

4.4 Placemaking & design principles
Proposed building

Doors and Porches

Doors should be of simple design, in timber, either vertically boarded or panelled, with or without small areas of glazing. The provision of letter boxes, door bells and appropriate level access should be considered as part of the door design. Larger door openings, such as patio doors or "French" windows are usually best kept as simple as possible and certainly multi-paned doors should generally be avoided.

Traditionally open or closed porches have been used and provide shelter to a doorway. The use of porches or canopies on new developments can provide shelter to a doorway, also variety to the streetscape and provide storage. The scale and form of porches should reflect local style and the size should be kept as small as possible.

What to Avoid:

- ✘ White PVC as a material
- ✘ Cluttered or over decorated doors
- ✘ Large porches with heavy detailing

Roofs

The thickness of modern roofs are becoming increasingly deeper due to increasing levels of insulation. In order to avoid thick clumpy details at the edges of roofs, considerable care must be taken when detailing verges and eaves. Many new buildings are constructed with a roof that oversails the walls, resulting in heavy eaves and verge details. The junction between the wall and the roof in traditional buildings was historically kept very simple with a very slight overhang of slate covering the wall head. Box verges and eaves should be avoided and traditional methods should be respected. Fascia boards are best avoided if possible but if used should be painted to match the general wall colouring.

The use of rooflights provided additional internal light in traditional buildings. Care is needed to ensure the appropriate size and location on new development. Vertical proportion is better and there should be a clear relationship with the windows. A variety of "conservation" pattern rooflights are now available which replicate the proportions of traditional rooflights and can be particularly successful for developments in conservation areas.

What to Avoid:

- ✘ Box soffits, verges & eaves
- ✘ Fascia boards on closed eaves

Roof detail, Greenlaw (Icosis Architects)

Example of door design at Wynhead, Lauder (Farningham McCreadie)

Chimneys

Chimneys can be a very important design element of a house. They have the potential to add substance and presence to the appearance of a house. They should be located on the ridge of the house, with and flush with the face of the wall when located at the gables. Chimneys however, may not be suitable on some forms of new development, where a simple flue may be more appropriate. These should normally be positioned clear of the ridge.

What to Avoid:

✘ Chimney stacks which do not emerge on the ridge

New house near Stow

Other issues

There is a demand for modern developments to incorporate satellite dishes and TV aerials but these elements, especially if installed post completion of the scheme, can adversely impact on the overall appearance of the development. Early advice from specialist installers can assist in clarifying reception conditions and whether the external aerials are required. Satellite orientation is a fixed requirement but dishes should avoid being located on principal elevations.

Traditionally rainwater goods were made from cast iron or occasionally zinc. Modern materials are often used including UPVC and aluminium as well as cast iron. Rhones or gutters are best if understated and painted a dull colour and merge with the roof or can be painted to match a overhanging eaves detail. Moulded gutters can be used as an architectural device to add interest to a wall head. Care is needed in locating rainwater conductors or down pipes to avoid unnecessary clutter or destroying a symmetrical elevation. Conductors can be located on set backs or off main elevations.

What to Avoid:

✘ Satellite dishes and aerials on principal elevations
✘ Cluttered arrangement of conductors, especially on principal elevations
✘ Poorly positioned expansion/contraction joints

4.4 Placemaking & design principles
Proposed building

BUILDINGS : WHAT TO LOOK FOR

To summarise, a design statement should demonstrate clear understanding of:

- ❑ **Relating to the site**
- ❑ **Scale, massing and form**
- ❑ **Proportion**
- ❑ **Materials and colour**
- ❑ **Details**
- ❑ **Relating to the townscape**

New development must seek to achieve the following objectives:

New buildings are expected to 'design out' energy needs and utilise sustainable resources wherever possible ✔

The scale, massing and form should seek to create a sense of balance and proportion, based on a clear concept and design rationale ✔

New buildings should be designed to with a full understanding of the site characteristics ✔

New design should utilise materials and colour tones that relate to the wider context. ✔

The building design must relate to the wider built and visual context ✔

Development must ensure finishes and details are of a quality and integrity that reflects the Borders character. ✔

4.5 Placemaking & design principles
Summary

Design objectives

As a reference tool, the guidance set out in the previous pages is summarised below as a checklist table against which all new development can be assessed. This should form a point of reference through the design process and in producing a Design Statement. This is tied back to Policy G1 in the Local Plan in section 5.

Factors of design	Considerations	Checklist criteria	
Wider area			
Landscape Character	- Landscape type - Landform - Natural Heritage	Creates development that acknowledges the local variation throughout the Scottish Borders Region	✔
Views	- Long distance views - Moving through the landscape	Relates positively to long, medium and short distance views from key locations (e.g. public footpaths, views from major roads)	✔
Settlement pattern	- Existing pattern of built development: Urban Rural	integrates well into pattern of settlements rural buildings	✔
Infrastructure + access	- Infrastructure - Access	Is appropriately scaled and sited to maximise use of existing roads/rail/ services opportunities	✔
Local Area			
Built character	- Urban structure - Built form - Built Heritage	Sits well within surrounding built form (architectural style, urban grain, etc)	✔
Siting of Development	- Landform - Microclimate - Views - Integration + access - Landscape structure - Settlement boundaries	Creates a place that fits within the landscape and built context	✔

4.5 Placemaking & design principles
Summary

Factors of design	Considerations	Checklist criteria	
Sustainable development	- Building orientation - Shelter - Sustainable resources - Water handling - Recycling	Is efficient as is practicably possible in the use of natural and man-made resources	✔
Density and Use	- Density - Mixed use - Mixed tenure - Adaptable development	Creates a usable place with strong sense of local identity that is adaptable to future needs	✔
Open space	- Private space - Semi-private space - Public - Trees + vegetation - Maintenance	Makes effective use of open space and creates meaningful spaces within the public and private domain	✔
Layout and Legibility	- Legibility - Streets - Parking - Frontage - Boundary treatment - Accessibility	Creates streets and places that are distinctive and legible with a clear sense of identity.	✔
Building Design			
Energy Efficient design	- Designing out energy needs - Designing with sustainable resources - Designing for renewable energy sources	Maximises energy efficiency whilst minimising use of unsustainable resources within buildings	✔

4.5 Placemaking & design principles
Summary

Factors of design	Considerations	Checklist criteria	
Relating to the site	- Site arrangement - Site features - Landform - Views from the building	Creates development that relates well to plot boundary/site frontage/site features/topography	✔
Relating to the townscape	- Built context/roofscape - Views - Frontage	Contributes positively to the overall townscape	✔
Scale, Massing + Form	-Form/ Massing -Roof pitch -Scale -Proportion	Creates a balanced whole with a clear design concept	✔
Materials	- Materials - Colour	Utilises an appropriate palette and quality of materials and colour tones when viewed within the wider context	✔
Details	-Windows/ Doors -Doors -Roofs -Chimneys	Incorporates finishes and details that are of quality and integrity within the Scottish Borders context	✔

5.0 Design Action Points

5.1 Design action points
Introduction

Based on the objectives set out in section 3, the following sheets provide a checklist of considerations in relation to specific development types as defined by size and location:

Local Development:

Single house: in the urban or rural context
Building Group: up to 10 houses in the countryside
Urban infill: up to 10 houses in a town or village
10-49 houses on or near the settlement edge

Major Development:

50 or more houses on or near the settlement edge

These are intended as a guide, setting out a suggested process and a series of checkpoints which should be considered as part of the planning and design process. The information should also form a guide as to what to include in your design statement.

The sheets are designed so that they can be printed off as double-sided 'worksheets' as a basis from which to start.

KEY

✔ Major consideration

Key consideration

The following table provides a quick point of reference outlining the key guidance sections that relate to the advice contained within each worksheet:

Development type **Placemaking and design factors**		Single house: in the urban or rural context	Building Group: up to 10 houses in the countryside	Urban infill: up to 10 houses in a town or village	10-49 houses on or near the settlement edge	50 or more houses on or near the settlement edge
Wider area						
Landscape character	-Landscape type -Landform -Natural Heritage				✔	✔
Views	-Long distance views -Moving through the landscape	✔	✔	✔	✔	✔
Settlement pattern	-Existing pattern of built development: Urban Rural			✔	✔	✔
Infrastructure and access	-Infrastructure -Access	✔	✔	✔	✔	✔
Local area						
Built character	-Urban structure -Built form -Built Heritage		✔	✔	✔	✔

5.1 Design action points
Introduction

Development type / Design considerations		Single house: in the urban or rural context	Building Group: up to 10 houses in the countryside	Urban infill: up to 10 houses in a town or village	10-49 houses on or near the settlement edge	50 or more houses on or near the settlement edge
Siting of Development	- Landform - Microclimate - Views - Integration + access - Landscape structure - Settlement boundaries	✔	✔	✔	✔	✔
Sustainable development	-Building orientation -Shelter -Sustainable resources -Water handling -Recycling	✔	✔	✔	✔	✔
Density and Use	-Density -Mixed use -Mixed tenure -Adaptable development			✔	✔	✔
Open space	-Private space -Semi-private space -Public -Trees + vegetation -Maintenance			✔	✔	✔
Layout and Legibility	-Legibility -Streets -Parking -Frontage -Boundary treatment -Accessibility			✔	✔	✔

KEY

✔ Major consideration

Key consideration

5.1 Design action points

Development type / Design considerations		Single house: in the urban or rural context	Building Group: up to 10 houses in the countryside	Urban infill: up to 10 houses in a town or village	10-49 houses on or near the settlement edge	50 or more houses on or near the settlement edge
Building Design						
Energy Efficient design	-Designing out energy needs -Designing with sustainable resources -Designing for renewable energy sources	✔	✔	✔	✔	✔
Buildings relating to the townscape	Built context/roofscape -Views -Frontage			✔	✔	✔
Buildings relating to the site	-Site arrangement -Site features -Landform -Views from the building	✔	✔	✔	✔	✔
Scale, Massing + Form	-Proportion -Building envelope: frontage width/plan depth -Roof pitch	✔	✔	✔	✔	✔
Materials	-Materials -Colour	✔	✔	✔	✔	✔
Detailing	-Windows -Doors -Chimneys	✔	✔	✔	✔	✔

KEY

✔ Major consideration

Key consideration

5.2 Design action points

Single house in urban or rural context

Development of a single house in the countryside has obvious sensitivities relating to the rural landscape and potential visual prominence. Development of a single house within a settlement carries similar challenges in relating to the urban context and the need to be responsive to the surrounding built form. In both cases, an understanding of the context is essential.

Action Points

1.Refer to local policy

- ☐ Policy G1: Quality Standards for New Development (Scottish Borders Local Plan 2008)
- ☐ SPG: New Housing in the Borders Countryside
- ☐ SPG: Renewable Energy
- ☐ SPG: the use of Timber in sustainable construction

2. At the outset – get to know the local area

- ☐ **Study the local character:** the local building style & landscape character or the townscape character
- ☐ **Identify from where the building will be visible:** to help shape the design
- ☐ **Consider the neighbouring buildings:** the new building will be expected to relate to existing urban form
- ☐ **Analyse the localised microclimate:** orientation, shelter and natural drainage are key considerations

In an established landscape setting, an opportunity to explore innovative forms materials presents itself

3. Demonstrate understanding of ...

the Wider area

- ☐ **Views within the wider context:** how the colour/ massing of building relates to the wider landscape
- ☐ **Appropriate access and infrastructure provision:** how the building and access will positively relate to existing road/street and infrastructure networks

Traditional forms and materials using contemporary detailing sit naturally within the rural landscape: note the use of roofspace

Working with the landform and landscape setting can create striking results in the right setting

Working in harmony: windows, roofline and wall elements combine to create an innovative response with strong traditional references

the Local area

- ☐ **Best local features of built character:** local and historical building style, urban form, local colours and materials and how new buildings can relate to this
- ☐ **Working with the landform:** in defining key directional views towards the site, and optimising the site layout to work with the levels
- ☐ **Microclimatic design:** the building and site layout will be expected to create optimum microclimate working with orientation and shelter for both indoor and outdoor space
- ☐ **Localised views:** site development to create positive relationship to views from main roads/focal points, considering rooflines and key frontages
- ☐ **The importance of good site planning:** ensure the plot is laid out using appropriate landscape planting and boundary materials to create attractive edges in surrounding landscape/townscape

Single house in urban or rural context

Building Design

- ☐ **Energy effficent living**: utilising optimum insulation/ thermal mass and daylight penetration (=solar gain), the building will be expected to 'design out' energy needs wherever possible
- ☐ **Using sustainable resources**: grey-water recycling, sustainable building materials and renewable energy sources are all key considerations in the building specification
- ☐ **Working with the site and surroundings**: consider reuse of any existing structures and consider carefully the site arrangement so that a positive civic frontage is created
- ☐ **Scale, massing and form**: relating to the context analysis, and with a clear, harmonious design rationale and sense of proportion (remember the golden ratio).
- ☐ **Roof and wall proportions**: use appropriate roof design: avoid overly bulky form or shallow roof pitch. The proportion of roof-to-wall in elevation must be in balance (refer to traditional proportions as a starting point)
- ☐ **Materials**: Use sustainable building materials and consider the materials and colour palette in context: avoid excessive use of white where it will be out of context or visually prominent
- ☐ **Windows**: consider window openings in relation to the wall elevation; create fenestration pattern that is based on proportion and a balanced whole; always consider traditional elements such as vertically proportioned openings; avoid PVC and inappropriately coloured window frames
- ☐ **Details**: avoid poor faux-traditional detailing; honest, simple forms are generally preferrable
- ☐ **Roof design**: avoid box soffits, verges, eaves and fascia boards on closed eaves

Infill development: relate to the adjacent built elevations (Allan Swan, Bain Swan Architects)

4. Illustrating the process

Planning applications for single dwellings in the urban or rural context are expected to demonstrate a clear design rationale based on an understanding of context. A design statement is an invaluable tool in communicating this and aids any dialogue with planning officers for explaining the approach taken to a proposed development. Clear, concise information that sets the proposal in context will help convey a better understanding of the design to planning officers and others. It is strongly advised to submit the following design information:

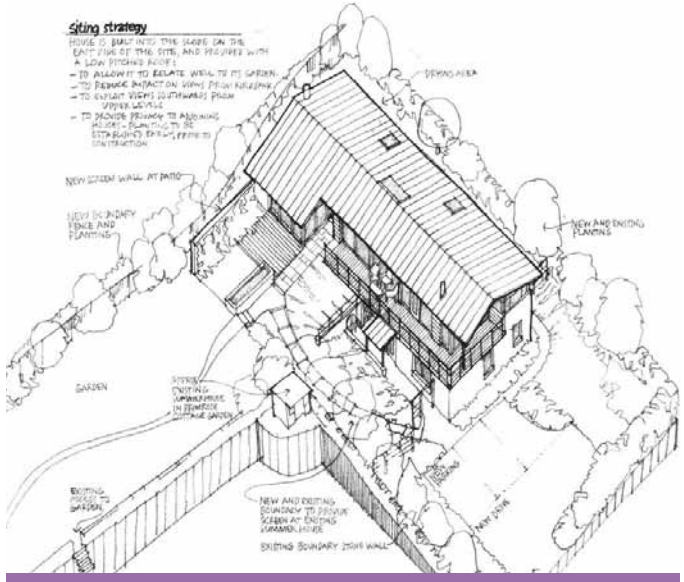
- ☐ **Design statement**
- ☐ **Energy statement**
- ☐ **Context studies:** demonstrate an understanding of context
- ☐ **Site photos:** highlight key views and how the design will respond to these
- ☐ **3D visualisation material:** sketches or computer generated visualisations showing the development in context

Further reading/reference

PAN 68: Design Statements

PAN 44: Fitting New Housing Development into the Landscape

See 'Sourcebook' section of SPG Placemaking & Design



Sketch illustrations are invaluable in conveying the design concept (Allan Swan, Bain Swan Architects)

A large floor area broken down into primary and secondary forms can create a more balanced form overall (Allan Swan, Bain Swan Architects)

5.3 Design action points

Building group: up to 10 houses in the countryside

Development of a building group in the countryside has obvious sensitivities due to the potential visual prominence and the need to integrate into the rural landscape. Careful consideration is required of the wider visual impact of development and the incorporation of an appropriate building style that relates to context and responds to the inward views.

Action Points

1. Refer to local policy

- ☐ **Policy G1:** Quality Standards for New Development (Scottish Borders Local Plan 2008)
- ☐ **SPG:** New Housing in the Borders Countryside
- ☐ **SPG:** Renewable Energy
- ☐ **SPG:** the use of Timber in sustainable construction
- ☐ **SPG:** Placemaking & Design
- ☐ **SPG:** Designing out Crime in the Scottish Borders
- ☐ **SPG:** Affordable Housing
- ☐ **SPG:** Trees & Development

2. At the outset – get to know the local area

- ☐ **Study the local character:** the local building style & landscape character
- ☐ **Identify from where the development will be visible:** to help shape the design
- ☐ **Consider the neighbouring buildings:** the new building will be expected to relate to existing urban form
- ☐ **Analyse the localised microclimate:** orientation, shelter and natural drainage are key considerations from the outset

3. Demonstrate understanding of ...

the Wider area

- ☐ **Views within the wider context:** how the colour/massing of the buildings can relate to the wider landscape
- ☐ **Appropriate access and infrastructure provision:** how the buildings and access will positively relate to existing road/street and infrastructure networks

the Local area

- ☐ **Best local features of built character:** local/historical style, urban form, local colours and materials and how the new building group can relate to this
- ☐ **Working with the landform:** in defining key directional views towards the site, and optimising the site layout to work with the levels
- ☐ **Microclimatic design:** as a group the buildings will be expected to create optimum microclimate working with orientation and shelter for both indoor + outdoor space
- ☐ **Localised views:** development must create positive relationship to views from main roads/focal points, considering rooflines and key frontages

Boundary treatments and appropriate landscape planting are invaluable in anchoring housing within the countryside

Using high quality materials and primary and secondary forms

Local area (continued)

- ☐ **The importance of good site planning:** including appropriate landscape planting and site boundaries to create attractive edges in surrounding landscape; ensure gardens are appropriately scaled and usable (i.e not steep slopes/in total shade)
- ☐ **Sustainable resource use:** as a group, the buildings should work together to minimise energy demands (e.g. row housing minimises heat loss); consider opportunities for renewable energy
- ☐ **Use of density in defining a sense of place:** rural building groups are often close-knit; consider use of higher density development where appropriate and how buildings and boundary walls can shape spaces such as courtyards
- ☐ **Layout and open space:** create hierarchy of public, semi-private and private space with sensitively handled parking provision; avoid creation of overly engineered road access; consider shared surfacing in development of this scale
- ☐ **Frontage:** building groups will be expected to relate positively to the 'public' face of the site, e,g where visible from adjacent roads; ensure building frontage relates positively to entrance and arrival into the site
- ☐ **Boundary treatments:** use appropriate styles of high quality boundary treatment to rural context such as hedging, post and rail fencing and estate railing

Building group up to 10 houses in the countryside

Building Design

- ☐ **Energy effficent living**: utilising optimum insulation/thermal mass and daylight penetration (=solar gain), the buildings will be expected to 'design out' energy needs wherever possible
- ☐ **Using sustainable resources**: grey-water recycling, sustainable building materials and renewable energy sources are all key considerations
- ☐ **Working with the site and surroundings**: consider reuse of any existing structures and consider carefully the site arrangement so that a positive civic frontage is created
- ☐ **Scale, massing and form**: based on a clear, harmonious design rationale and sense of proportion (remember the golden ratio). Consider the group as a whole in the design
- ☐ **Roof and wall proportions**: avoid overly bulky forms or shallow roof pitch. The proportion of roof-to-wall in elevation must be in balance (refer to traditional proportions as a starting point)
- ☐ **Materials**: Consider local stone and slate for rural building groups, used in conjunction with sustainable materials such as timber. Consider the materials and colour palette in context: avoid excessive use of white where out of context or visually prominent.
- ☐ **Windows**: sufficient window openings in relation to wall elevations; consider traditional proportions such as vertically proportioned openings; avoid PVC and inappropriately coloured window frames
- ☐ **Details**: avoid arbitrary faux-traditional detailing; honest, simple forms are generally preferrable

row housing combined with detached can provide a contextual cluster of buildings that frame a central courtyard space (Allan Swan, Bain Swan Architects)

Sketch illustrations should show the context and how the landscape design frames outdoor spaces (Allan Swan, Bain Swan Architects)

4. Illustrating the process

Planning applications for building groups in the countryside are expected to demonstrate a sensitive approach to the rural landscape. A design statement is an invaluable tool in communicating this and aids any dialogue with planning officers for explaining the approach taken to a proposed development. Clear, concise information setting the proposal in context is vital in a planning application. It is strongly advised to submit the following design information:

- ☐ **Design statement**
- ☐ **Energy statement**
- ☐ **Context studies:** demonstrate an understanding of context
- ☐ **Site photos:** highlight key views and how the design will respond to these
- ☐ **3D visualisation material:** sketches or computer generated visualisations showing the development in context

Further reading/reference

PAN 68: Design Statements
PAN 44: Fitting New Housing Development into the Landscape
See 'Source Book' section of SPG Placemaking & Design

Distinctive rural row housing of the Scottish Borders forms an interesting precedent, Foulden

Using traditional forms set within an open landscape can create a harmonious fit and serve to frame garden spaces

5.4 Design action points

Up to 10 houses within a town or village

Infill development (of more than one house) within towns and villages has the challenge of integrating into an established built context with its own history, character and form. Any new additions to the urban context should be responsive to this context, and careful consideration is required of the relationship between the new development and its immediate context.

Action Points

1. Refer to local policy

Policy G1: Quality Standards for New Development (Scottish Borders Local Plan 2008)

- ☐ **SPG:** Renewable Energy
- ☐ **SPG:** the use of Timber in sustainable construction
- ☐ **SPG:** Placemaking & Design
- ☐ **SPG:** Designing out Crime in the Scottish Borders
- ☐ **SPG:** Affordable Housing
- ☐ **SPG:** Trees & Development

2. At the outset – get to know the local area

- ☐ **Study the local character:** the local townscape and settlement pattern: check for heritage designations
- ☐ **Identify key frontages and views towards the site:** to help shape the design
- ☐ **Consider the neighbouring buildings**: the new building will be expected to relate to existing urban form
- ☐ **Analyse the localised microclimate**: orientation, shelter and natural drainage are key considerations from the

3. Demonstrate understanding of ...

the Wider area

- ☐ **Views within the wider context:** how the colour/massing of the buildings and roofscape will appear when viewed from afar
- ☐ **Appropriate access and infrastructure provision:** how the buildings and access will positively relate to existing road/street and infrastructure networks
- ☐ **Settlement pattern:** the street patterns and urban forms that positively define local character

the Local area

- ☐ **Best local features of built character:** local/historical building style, urban form, local colours and materials and how the new building group can relate to this
- ☐ **Working with the landform:** in defining key directional views towards the site, and optimising the site layout to work with the levels
- ☐ **Microclimatic design:** as a group the buildings will be expected to create optimum microclimate working with orientation and shelter for both indoor + outdoor space
- ☐ **Localised views:** development must create positive relationship to views along nearby streets, considering rooflines and key frontages

High density infill using a local materials palette creates an interesting response in Coldingham, Berwickshire (Brian Swan Architects)

New infill can successfully contrast and complement adjacent buildings, using a similar rhythm of windows and roofline

Local area (continued)

- ☐ **The importance of good site planning:** including appropriate landscape planting and attractive site boundaries; ensure gardens are appropriately scaled and usable (i.e not steep slopes/in total shade)
- ☐ **Sustainable resource use:** as a group, the buildings should work together to minimise energy demands (e.g. row housing minimises heat loss); consider opportunities for renewable energy
- ☐ **Use of density in defining a sense of place:** consider the context: urban core or on the fringes? On key approaches or secondary routes? The density of development is expected to relate to the urban context and create a sense of place.
- ☐ **Layout and open space:** create hierarchy of public, semi-private and private space; avoid creation of overly engineered road access; consider shared surfacing in development of this scale
- ☐ **Frontage:** building groups will be expected to create a positive, attractive frontage with overlooking where possible; building frontage should define key entrance and arrival points to the site
- ☐ **Boundary treatments:** use appropriate styles of high quality boundary treatment to help frame spaces, define public and private spaces, and contain car parking
- ☐ **Integrated parking:** design the parking layout integral to the sequence of streets and spaces e.g. grouped in attractive courtyards (consider use of pends), or carefully designed into the streetscene

Up to 10 houses within a town or village

Building Design

- ☐ **Energy effficent living**: utilising optimum insulation/ thermal mass and daylight penetration (=solar gain), the buildings will be expected to 'design out' energy needs wherever possible
- ☐ **Using sustainable resources**: grey-water recycling, sustainable building materials and renewable energy sources are all key considerations
- ☐ **Relate to the townscape**: revisit the townscape analysis in the building design; identify local roofscape, colours and building lines and how new development will relate to this
- ☐ **Scale, massing and form**: based on a clear, harmonious design rationale and sense of proportion (remember the golden ratio). Consider the group as a whole in the design
- ☐ **Roof and wall proportions**: avoid overly bulky forms or shallow roof pitch. The proportion of roof-to-wall in elevation must be in balance (refer to traditional proportions as a starting point)
- ☐ **Materials**: consider historic materials palette, used in conjunction with sustainable materials such as timber. Consider the materials and colour in context: avoid excessive use of white where out of context or visually prominent
- ☐ **Windows**: consider window openings in relation to wall elevations; consider traditional vertically proportioned openings; avoid PVC and inappropriately coloured window frames
- ☐ **Details**: seek to use honest, simple details

Traditional forms shaping a permeable courtyard, Lauder

The simplest of forms can create a successful design

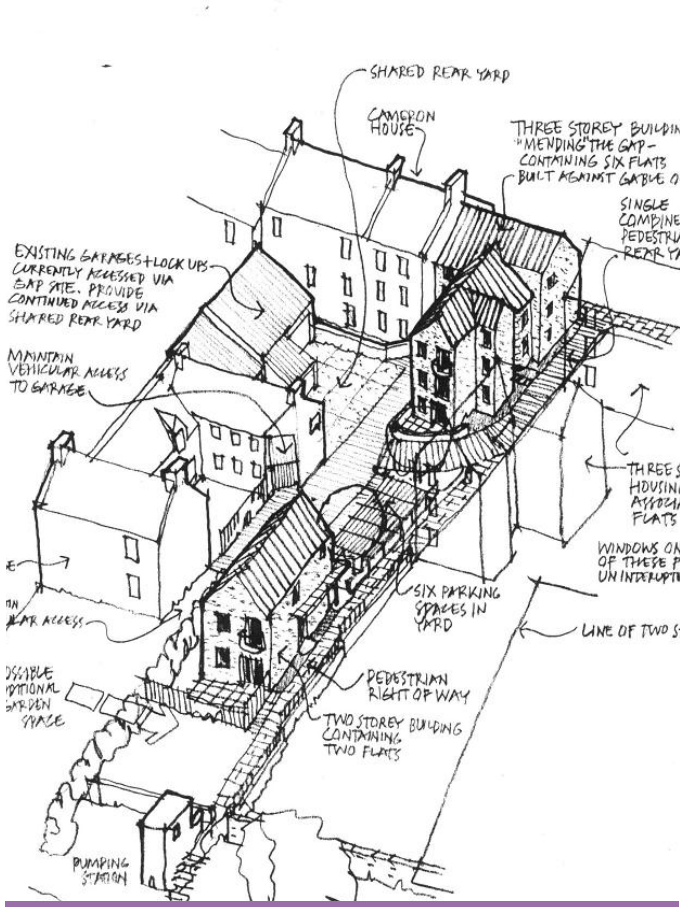
4. Illustrating the process

Planning applications for infill development of up to 10 houses are expected to demonstrate a responsive approach to the townscape context. A design statement is an invaluable tool in communicating this and aids any dialogue with planning officers for explaining the approach taken to a proposed development. Clear, concise information setting the proposal in context is vital in a planning application. It is strongly advised to submit the following design information:

- ☐ **Design statement**
- ☐ **Energy statement**
- ☐ **Context studies:** demonstrate an understanding of context
- ☐ **Site photos:** highlight key views and how the design will respond to these
- ☐ **3D visualisation material:** sketches or computer generated visualisations showing the development in context

Further reading/reference

PAN 68: Design Statements
PAN 67: Housing Quality
Introduction to Residential Layout, Mike Biddulph
See Sourcebook Section of SPG Placemaking & Design



Sketch illustrations showing both contextual analysis + design response are invaluable in understanding the design approach (Allan Swan, Bain Swan Architects)

5.5 Design action points

10-49 houses on or near settlement edge

Development of 10 to 49 houses represents a significant addition to the built environment: often this type of development is associated with the edges of a town or village: as such it is integral to the transition between urban and rural and is expected to make this transition sensitively. Such development can have significant impact on people's perception of a place by altering the local character and generating new movement networks and open spaces.

Action Points

1. Refer to local policy

- ☐ **Policy G1:** Quality Standards for New Development (Scottish Borders Local Plan 2008)
- ☐ **SPG:** Renewable Energy
- ☐ **SPG:** the use of Timber in sustainable construction
- ☐ **SPG:** Placemaking & Design
- ☐ **SPG:** Designing out Crime in the Scottish Borders
- ☐ **SPG:** Affordable Housing
- ☐ **SPG:** Trees & Development

2. At the outset – get to know the local area

- ☐ **Study the local character:** the local townscape, settlement pattern and surrounding landscape character Identify key views towards the site: to help shape the design
- ☐ **Analyse the localised microclimate:** orientation, shelter and natural drainage are key considerations from the outset
- ☐ **Analyse the site:** carry out a SWOT analysis identifying key defining factors that will shape the development, access and infrastructure provision

3. Demonstrate understanding of ...

the Wider area

- ☐ **Landform and views within the wider context:** how the site sits within the wider landscape context and visually sensitive settlement edges/viewpoints
- ☐ **Settlement pattern:** the street patterns and urban forms that positively define local character
- ☐ **Appropriate access and infrastructure provision:** how the buildings and streets will positively relate to existing road/street and infrastructure networks

Buildings and secondary elements such as garages and boundary treatments should work together (Malcolm Fraser)

the Local area

- ☐ **Best local features of built character**: local/historical building style, urban form, local colours and materials and how the new development can relate to this
- ☐ **Working with the landform:** in defining key directional views towards and from the site, and optimising the site layout to work with the levels
- ☐ **Microclimatic design:** the buildings + streets are expected to create optimum microclimate working with orientation and shelter for both indoor + outdoor space
- ☐ **Localised views:** development must create positive relationship to approaching views, from outwith the settlement and along nearby streets, considering rooflines and key frontages
- ☐ **The importance of good site planning:** including appropriate landscape design integral to the design, attractive site boundaries as public 'face' of the development and a logical sequence of streets and spaces.

Local area continued

- ☐ **Sustainable resource use:** the buildings should work together to minimise energy demands (e.g. row housing minimises heat loss); renewable energy for development of this scale should be fully considered
- ☐ **Use of density in defining a sense of place:** create spaces shaped by buildings: consider main arrival points into the site/settlement, followed by secondary spaces - organise building density accordingly. Consider higher density around key points/frontages + ensure secondary elements such as walling and planting help to define spaces.
- ☐ **Layout and legibilty:** a logical sequence of streets and spaces, design building groupings first, fitting in streets after: avoid overly engineered road access; consider reduction in the dominance of carriageways by utilising shared surfaces
- ☐ **Streets:** should be framed by buildings with integrated traffic calming, avoiding excessive use of road humps/traffic signage – use of building lines, walling/hedging, narrowed streets, parked cars and shared surfacing can all encourage reduced traffic speeds and help create places

Using buildings to shape spaces and contain the streetscene: create permeable development with through routes (Farningham McCreadie)

10-49 houses on or near settlement edge

Traditional roof pitch and gables with windows create a positive feature in the streetscene

Local area continued.

- ☐ **Frontage:** buildings will be expected to relate positively to the public realm, e,g frontage to internal and adjacent streets with overlooking where possible; ensure building frontage relates positively to entrance and arrival into the site
- ☐ **Boundary treatments:** use appropriate styles of high quality boundary treatment to help frame spaces, define public and private spaces, and contain car parking
- ☐ **Integrated parking:** design the parking layout integral to the sequence of streets and spaces e.g. grouped in attractive courtyards (consider use of pends), or carefully designed into the streetscene
- ☐ **Open space:** create hierarchy of public, semi-private and private space, ensuring gardens are appropriately scaled and usable (i.e not steep slopes/in total shade); avoid amenity 'left over' space: create meaningful, functional open spaces that are well overlooked and central to the neighbourhood character

Building Design

- ☐ **Energy effficent living**: utilising optimum insulation/ thermal mass and daylight penetration (=solar gain), the buildings will be expected to 'design out' energy needs wherever possible
- ☐ **Using sustainable resources**: grey-water recycling, sustainable building materials and renewable energy sources are all key considerations
- ☐ **Relate to the townscape**: revisit the townscape analysis in the building design; identify local roofscape, colours and building lines and how new development will relate to this
- ☐ **Scale, massing and form**: based on a clear, harmonious design rationale and sense of proportion (remember the golden ratio). Consider building groups as a whole in the individual design
- ☐ **Roof and wall proportions**: avoid overly bulky forms or shallow roof pitch. The proportion of roof-to-wall in elevation must be in balance (refer to traditional proportions as a starting point)
- ☐ **Materials**: Consider historic materials palette, used in conjunction with sustainable materials such as timber. Consider the materials and colour in context: avoid excessive use of white where out of context or visually prominent
- ☐ **Windows**: sufficient window openings in relation to wall elevations; consider traditional proportions such as vertically proportioned openings; avoid PVC and inappropriately coloured window frames
- ☐ **Details**: avoid arbitrary faux-traditional detailing; honest, simple forms are generally preferrable

4. Illustrating the process

Planning applications for local development of 10-49 houses are expected to demonstrate a responsive approach to the townscape and landscape context. A design statement is an invaluable tool in communicating this and aids any dialogue with planning officers for explaining the approach taken to a proposed development. Clear, concise information setting the proposal in context is vital in a planning application. It is strongly advised to submit the following design information:

- ☐ **Design statement**
- ☐ **Energy statement**
- ☐ **Context studies:** demonstrate an understanding of context
- ☐ **Site photos:** highlight key views and how the design will respond to these
- ☐ **3D visualisation material:** sketches or computer generated visualisations showing the development in

Further reading/reference

PAN 68: Design Statements
PAN 67: Housing Quality
Introduction to Residential Layout, Mike Biddulph
Sustainable construction: ref
PAN 76: Designing Streets
PAN 83: Masterplanning
Manual for Streets
See 'Sourcebook' section of SPG Placemaking & Design

5.6 Design action points

50 or more houses on or near settlement edge

Development of more than 50 houses represents a significant addition to the built environment. Often this scale of development is associated with the edges of a town or village and is integral to the transition between urban and rural: as such it is expected to make this transition sensitively. Such development has significant impact on people's perception of a place by altering the local character and generating new movement networks and open spaces.

Action Points

1. Refer to local policy

- ☐ **Policy G1:** Quality Standards for New Development (Scottish Borders Local Plan 2008)
- ☐ **SPG:** Renewable Energy
- ☐ **SPG:** the use of Timber in sustainable construction
- ☐ **SPG:** Placemaking & Design
- ☐ **SPG:** Designing out Crime in the Scottish Borders
- ☐ **SPG:** Affordable Housing
- ☐ **SPG:** Trees & Development

2. At the outset – get to know the local area

- ☐ **Study the local character:** the local townscape, settlement pattern and surrounding landscape character (check for any local built or natural heritage designations)
- ☐ **Identify key views towards the site:** to help shape the design
- ☐ **Analyse the localised microclimate**: orientation, shelter and natural drainage are key considerations from the outset
- ☐ **Analyse the site**: carry out a SWOT analysis identifying key defining factors that will shape the natural capacity of the site for development, its access and infrastructure provision

3. Demonstrate understanding of ...

the Wider area

- ☐ **Landform and views within the wider context**: how the site sits within the wider landscape context and visually sensitive edges, skylines and viewpoints
- ☐ **Settlement pattern**: the street patterns and urban forms that positively define local character
- ☐ **Appropriate access and infrastructure provision**: how new buildings and streets can positively relate to existing road/street and infrastructure networks

A central green combined with community facilities + well overlooked, creates a defining feature in new housing

the Local area

- ☐ **Best local features of built character**: local/historical building style, urban form, local colours and materials and how the new development can relate to this
- ☐ **Working with the landform:** in defining key directional views towards and from the site, and optimising the site layout to work with the levels
- ☐ **Microclimatic design:** the buildings + streets are expected to create optimum microclimate working with orientation and shelter for both indoor + outdoor space
- ☐ **Localised views:** development must create positive relationship to approaching views, from outwith the settlement and along nearby streets, considering rooflines and key frontages

Local area (continued)

- ☐ **The importance of good site planning:** including appropriate landscape design integral to the design, attractive site boundaries as public 'face' of the development and a logical sequence of streets and spaces. Development will be expected to create permeable through routes for cars and people wherever possible and appropriate
- ☐ **Sustainable resource use:** as a whole, the buildings should work together to minimise energy demands (e.g. row housing minimises heat loss); opportunities for renewable energy in development of this scale should be fully explored
- ☐ **Use of density in defining a sense of place:** create spaces shaped by buildings: consider main arrival points into the site/settlement, followed by secondary spaces - organise building density accordingly. Consider use of higher density around key points/frontages and ensure secondary elements such as walling and planting help to further define spaces.

Residential layout based on a clear concept creating a series of connecting streets and spaces (Malcolm Fraser)

50 or more houses on or near settlement edge

Buildings and secondary elements such as garages and boundary treatments should work together (Malcolm Fraser Architects)

- ☐ **Layout and legibilty:** incorporate a logical sequence of streets and spaces - design building arrangement first, fitting in streets after; avoiding creation of overly engineered road access; seek to reduce the dominance of road carriageways
- ☐ **Streets:** should be framed by buildings with integrated traffic calming, avoiding excessive use of road humps/traffic signage – use of building lines, walling/hedging, narrowed streets, parked cars and shared surfacing can all encourage reduced traffic speeds and help create a sense of place
- ☐ **Frontage:** buildings will be expected to relate positively to the public realm, e,g fronting onto streets with overlooking where possible and ensuring building frontage frame key entrance and arrival points throughout the layout
- ☐ **Boundary treatments:** use appropriate styles of high quality boundary treatment to help frame spaces, define public and private spaces, and contain car parking
- ☐ **Integrated parking:** design the parking layout integral to the sequence of streets and spaces e.g. grouped in attractive courtyards (consider use of pends), or carefully designed into the streetscene
- ☐ **Open space:** create hierarchy of public, semi-private and private space, ensuring gardens are appropriately scaled and usable (e.g. not steep slopes/in total shade); avoid amenity 'left over' space: create meaningful, functional open spaces that are well overlooked and central to the neighbourhood character

Building Design

- ☐ **Energy effficent living**: utilising optimum insulation/ thermal mass and daylight penetration (=solar gain), the buildings will be expected to 'design out' energy needs wherever possible
- ☐ **Using sustainable resources**: grey-water recycling, sustainable building materials and renewable energy sources are all key considerations
- ☐ **Relate to the townscape**: revisit the townscape analysis in the building design; identify local roofscape, colours and building lines and how new development will relate to this
- ☐ **Scale, massing and form**: based on a clear, harmonious design rationale and sense of proportion (remember the golden ratio).
- ☐ **Consider building groups as a whole in the individual design**
- ☐ **Roof and wall proportions**: avoid overly bulky forms or shallow roof pitch. The proportion of roof-to-wall in elevation must be in balance (refer to traditional proportions as a starting point)
- ☐ **Materials**: Consider historic materials palette, used in conjunction with sustainable materials such as timber. Consider the materials and colour in context: avoid excessive use of white where out of context or visually prominent
- ☐ **Windows**: sufficient window openings in relation to wall elevations; consider traditional proportions such as vertically proportioned openings; avoid PVC and inappropriately coloured window frames
- ☐ **Details**: avoid arbitrary faux-traditional detailing; honest, simple forms are generally preferrable

Coherent building forms, working with the microclimate and each other to optimise solar gain and shape space (Bain Swan Architects)

4. Illustrating the process

Planning applications for major development of 50 or more houses are required to submit a design statement, demonstrating a responsive approach to the townscape and landscape context. Clear, concise information setting the proposal in context and demonstrating design quality is vital in a planning application of this scale, and regardless of whether it is an outline or detailed planning application, it is strongly advised to submit the following design information:

- ☐ **Design statement**
- ☐ **Energy statement**
- ☐ **Context studies:** demonstrate an understanding of context
- ☐ **Site photos:** highlight key views and how the design will respond to these
- ☐ **3D visualisation material:** sketches or computer generated visualisations showing the development in context

Further reading/reference

PAN 68: Design Statements
PAN 67: Housing Quality
Introduction to Residential Layout, Mike Biddulph
Sustainable construction: ref
PAN 76: Designing Streets
PAN 83: Masterplanning
Manual for Streets

See 'Sourcebook' section of SPG Placemaking & Design

5.7 Design action points
Table of policy G1 Criteria & SPG requirements

Table of Policy G1 Criteria and SPG requirements	
Policy G1 criteria	**SPG requirements**
1. It is compatible with, and respects the character of the surrounding area, neighbouring uses, and neighbouring built form.	**Landscape Character:** Demonstrate understanding of context.
	Settlement pattern: Demonstrate understanding of context.
	Built character: Demonstrate a wider appreciation of built context and heritage value of area has influenced the design.
	Relating to the townscape: Demonstrate fully how the building will fit into views within the wider townscape and how this has been handled in the design.
2. It can be satisfactorily accommodated within the site.	**Views:** Demonstrate design has responded to wider views.
	Siting of Development: Establish a clear rationale for the siting and design of new development relating to its site and surroundings as founding principle of design approach.
	Relating to the site: Demonstrate that the building design and plot layout(s) has been designed to fully relate to the site and surroundings.
4. It creates developments with a sense of place, designed in sympathy with Scottish Borders architectural styles; this need not exclude appropriate contemporary and/or innovative design.	**Detail:** Demonstrate the design rationale behind the finish and detailing of buildings.
5. In terms of layout, orientation, construction and energy supply, the developer has demonstrated that appropriate measures have been taken to maximise the efficient use of energy and resources, including the use of renewable energy and resources and the incorporation of sustainable construction techniques in accordance with supplementary planning guidance referred to in Appendix D.	**Sustainable development:** Demonstrate in the layout that energy needs have been 'designed-out' wherever practicable, utilising microclimatic and site features and resource-efficient materials/energy sources.
	Energy Efficient design: Demonstrate that long-term energy efficiency has guided the design of the building(s).
7. It provides open space that wherever possible, links to existing open spaces and that it is in accordance with current Council standards pending preparation of an up-to-date open space strategy and local standards. In some cases a developer contribution to wider neighbourhood or settlement provision may be appropriate, supported by appropriate arrangements for maintenance.	**Open space:** Demonstrate how open spaces within new development are sited and designed as integral to the scheme as quality places not left over space. Demonstrate how open space and landscape structures contribute to overall sense of place.
8. It provides appropriate boundary treatments to ensure attractive edges to the development that will help integration with its surroundings.	**Layout and legibility:** Demonstrate that proposed layout incorporates streets that are places in their own right with a unique sense of place, defined by the buildings and enclosure of trees/boundary treatments. Demonstrate that the layout provides a well-connected, permeable sequence of spaces that avoid segregation of traffic and utilise passive traffic calming measures.
12. It is of a scale, massing, height and density appropriate to its surroundings and, where an extension or alteration, appropriate to the existing building.	**Density and Use:** Provide clarity on appropriate densities in relation to the local built character, site location, sustaining local communities. Provide exploration of alternative uses that may be incorporated for the future.
	Scale, Massing and Form: Demonstrate how the massing, form and proportion create a balanced whole that sits well within its context.
13. It is finished externally in materials, the colours and textures of which complement the highest quality of architecture in the locality and, where an extension or alteration, the existing building.	**Materials and colour:** Provide a clear rationale for the colour and use of materials within the building; ensure a balance between quality and cost is reached without compromising quality of finish.

6.0 Glossary and sourcebook

6.1 Glossary and sourcebook

Active frontage	Frontage (the building elevation that fronts onto a street) that is animated by some or all of the following creating an inviting and welcoming streetscene: • lively internal uses visible from the outside, or spilling onto the street. • frequent doors and windows, with few blank walls • narrow frontage buildings, giving vertical rhythm to the street scene • articulation of facades, with projections such as bays and porches • (Urban Design Compendium)
Brise-soleil	Literally translated as 'sun break', refers to a sun-shading device, typically comprised of louvres, that is designed as part of the outside of a building to shield the windows from excessive solar light and heat.
Building envelope	1 The physical outer layer of a building's fabric. 2 An outline of the massing of a proposed building.
Built form	Buildings and structures.
Concept plan	Plan of proposed development showing only the basic principles on which a development will be based
Concept statement	Summary text setting out the design objectives, based on the context appraisal outcomes, upon which a development proposal will be based.
Contextual cues	Positive elements within the setting of a site or area that form a starting point in considering new design in its context: these elements can form the basis in establishing a design vision or concept for a site.
Desire lines	The shortest, most direct route between facilities or places. Even when obstacles are in the way, people will still try to follow the desire lines in a plan as far as is practicable.
Embodied energy	The energy that is used in the production, manufacture and transportation of a product. An important factor when considering the environmental impact of a product within it's whole life-cycle.
Eyes on the street	A term referring to the presence of windows overlooking streets to make them feel supervised and safe, ideally when the windows are from residential or office accommodation.
Figure ground	A plan showing the relationship between built form (the 'figure') and space (the ground), by presenting the former in black and the latter as a white background, or vice versa.
Grade separation	Movement occupying different levels (e.g. a pedestrian pavement at higher level than the road adjacent). The opposite is movement being 'at grade'
Home zone	A small, highly traffic calmed residential area, often with road and pavement integrated into a single surface, where pedestrians and cyclists have priority over cars
In-curtilage parking	Parking within a building's site boundary, rather than on a public street or space
Landcover	Buildings, structures, surfaces and vegetation (including agricultural land uses)
Landform	The shape of the land. Landform can be described in terms such as elevation or shape
Landscape character	Means by which the landscaped is classified according to type area, based on particular combinations of landform and landcover, as outlined in the "Scottish Borders Landscape Assessment (SNH, 1998). Structure Plan Policy N9 seeks to maintain and enhance the integrity of the landscape character throughout the region.
Legibility	The quality of a place as being welcoming, understood easily by its users and easy for visitors to orientate themselves in.
Massing	The three-dimensional impact of buildings and their overall form
Material Consideration	This is a term used in Planning Law that describes an issue that must be considered when deciding the outcome of a planning application.
Microclimate	The local climate of a small area in which the weather is usually different from the areas around it

6.1 Glossary and sourcebook

Node	Focal points in the townscape or landscape such as important junctions of paths and roads, market squares, or clusters of community facilities e.g. shops/health centre/school etc that form key destinations that people may use to orientate themselves
Placemaking	Creating somewhere with a distinct identity
Passive solar gain	The effect of the sun's heat on the temperature of a building's fabric and ambient indoor temperatures, thus minimising heating requirements in winter.
Pend	An archway or passage, which can be suitable for vehicles, leading through to the back of a building or street
Permeability	The degree to which an area has a choice of routes through it; one of the central principles of urban design. This should be balanced against local context and the principles of crime prevention, which seek to limit escape routes for criminals.
Public realm	All outdoor space to which the public have access, including streets, squares and open spaces
Sense of place	A feeling of appreciation for the distinct character of a locality. This will depend on characteristics of the observer (such as their cultural background or system of values and beliefs) as well as those of the place. The latin term, 'Genius loci', meaning 'the spirit of the place' is a closely related term founded on the belief that a place has an inherent character and influence that transcends any imposed order.
Settlement pattern	The distinctive way in which the roads, fields, paths and buildings are laid out in a particular place
Streetscape	The appearance of a street: 'the hard and soft landscape of a place' (CABE 2001)
Streetscene	The enclosure of the street, combined with roadways, pavements, street furniture signage and other elements that together comprise the street environment
Sunpath analysis	Method of mapping the seasonal-and-hourly positional changes of the sun, used to ascertain the optimum building design to achieve passive solar heat gain, maximise use of natural daylight, provide appropriate summer shading and minimise overshadowing of adjacent properties/outdoor spaces
Swept path	The area of highway (wider than the vehicle itself) over which a vehicle passes as it turns a corner
SWOT analysis	A method of assessing an area or site in terms of its strengths, weaknesses, opportunities and threats.
Topography	1 A description or representation of artificial or natural features on or of the ground. 2 Mapping the shape of the land surface. From the Greek for 'place' and 'to describe'
Townscape	Urban form and its visual appearance; the appearance of streets, including the way the components of a street combine in a way that is distinctive to a particular locality.
Urban fabric	The physical, built form of an urban place
Urban grain	The pattern of the arrangement and size of buildings and their plots in a settlement; and the degree to which an area's pattern of streetblocks and street junctions is respectively small and frequent or large and infrequent
Urban structure	The framework of routes and spaces that connect locally and more widely, and the way developments, routes and open spaces relate to one another
Vernacular	The way in which ordinary buildings were built in a particular place before local styles, techniques and materials were superseded by imports.
Visual receptors	Points from which proposed development site is visible, which will therefore be visually affected by proposed development. Examples include: Trunk roads and motorways, A and B roads, Minor roads, Rights of way, Important viewpoints, Railways, Open space and recreation areas, Public buildings, Residential properties, Workplaces.

6.2 Glossary and sourcebook

The following publications and resources provide more information on the various aspects of placemaking and design contained within this guide. The following lists points of reference if you want to know more about:

THE BUILT CONTEXT OF THE SCOTTISH BORDERS

Borders and Berwick – an illustrated architectural guide to the Scottish Borders and Tweed Valley, Charles Alexander Strang, The Rutland Press (1994)
The Buildings of Scotland – Borders, Kitty Cruft, John Dunbar & Richard Fawcett, Yale University Press (2006)
The Story of Scotland's Towns, Robert J Naismith, Edinburgh (1989)
Buildings of the Scottish Countryside, Robert J Naismith, Gollancz (1985)

ACHIEVING DESIGN QUALITY

Designing Places (2001)
PAN 67: Housing Quality (2003)
Good Design: the fundamentals, CABE (2008)
Better Neighbourhoods: Making higher densities work, CABE (2005)
Building for Life: a national standard for well-designed homes in England and Wales, but with general guidance and information available http://www.buildingforlife.org/

SITE ANALYSIS AND DESIGN: TOOLS AND TECHNIQUES

Placecheck: a methodology for understanding the place and people within a community, sponsored by the RTPI, RIBA, RICS, Landscape Institute & Civic Trust amongst others http://www.placecheck.info/
Concise Townscape, Gordon Cullen, Architectural Press (1961)
Responsive Environments, Sue McGlynn, Graham Smith, Alan Alcock, Paul Murrain, Ian Bentley, Architectural Press (1985)
Image of the City, Kevin Lynch, The MIT Press (1960)

HOUSING IN THE COUNTRYSIDE

PAN 44: Fitting New Housing Development into the Landscape (1994)
Tomorrow's Architectural Heritage: **Landscape and Buildings in the Countryside**, J.M Fladmark, G.Y Mulvagh and B.M Evans, Mainstream Publishing (2001)
Cork Rural Design Guide, Cork County Council (2003)
New Development in Loch Lomond & the Trossachs National Park Draft Design Guidance, Loch Lomond & the Trossach National Park Authority
Sustainable Design Guide, Argyll & Bute Council (2006)

MASTERPLANNING NEW NEIGHBOURHOODS

PAN 83: Masterplanning (2008)
Introduction to Residential Layout, Mike Biddulph, Architectural Press (2006)
Urban Design Compendium, English Partnerships (2000) (http://www.urbandesigncompendium.co.uk/)
Creating Successful Masterplans – a guide for clients, CABE (2004)
Sustainable Urbanism – Urban Design with Nature, Douglas Farr, John Wiley & Sons (2008)
Designing North Lanarkshire – a strategic approach to design, North Lanarkshire Council
The Essex Design Guide, Essex County Council (2005)

DESIGNING STREETS

PAN 76: New Residential Streets (2005)
PAN 77: Designing Safer Places (2006)
PAN 78: Inclusive Design (2006)
Manual for Streets, Department for Transport (England and Wales) (2007)
Urban Design Compendium, English Partnerships (2000), http://www.urbandesigncompendium.co.uk/

6.2 Glossary and sourcebook

DESIGNING WITH SUSTAINABLE RESOURCES

PAN 61: Planning and Sustainable Urban Drainage Systems (2001)
New Timber Architecture in Scotland, Peter Wilson, Arcamedia (2007)
Sustainable Housing Design Guide for Scotland, Fionn Stevenson & Nick Williams, The Stationery Office (2000)
Sustainable construction, Sandy Halliday, Butterworth Heinemann (2008)
Code for Sustainable Homes – a step change in sustainable home building practice, Communities and Local Government (England) (2006)
Scottish Ecological Design Association Design Guides (2005-2008)

WRITING A DESIGN STATEMENT

PAN 68: Design Statements (2003)
Graphics for Urban Design, B. Meeda, N. Parkyn, D.S Walton, Institution of Civil Engineers (2007)
Design & Access Statements – how to read, write and use them, CABE (2006)

APPOINTING DESIGN PROFESSIONALS

Landscape Architects

The Landscape Institute is the chartered body for registered Landscape Architect professionals – refer to the Directory for individual members and registered practices
http://www.landscapeinstitute.org/directory/index.php

Architects

The Royal Incorporation of Architects in Scotland is the professional body for all chartered architects in Scotland and provides guidance and a directory on of chartered architects
http://www.rias.org.uk/directory/

The Royal Institute of British Architects (RIBA) is the professional body for chartered Architects and provides guidance and a directory of registered practitioners
http://www.architecture.com/UseAnArchitect/Home.aspx

Urban Designers

The Urban Design Group (UDG) is a non-chartered membership organisation responsible for the promotion of best practice in urban design at all levels. The Urban Design Directory lists practices who are members of the UDG.
http://www.udg.org.uk/?section_id=6

Building Conservation

The Institute of Historic Building Conservation (IHBC) is the professional body for building conservation practitioners and historic environment experts and provide access to a range of directories of relevant practitioners
http://www.ihbc.org.uk/spec_reg.htm

6.2 Glossary and sourcebook

KEY RESOURCES: WHERE TO GO FOR MORE INFORMATION

National Planning Policy
Planning Advice Notes (PANs) are available to download at:
http://www.scotland.gov.uk/Topics/Built-Environment/planning/publications/pans

Scottish Borders Council Structure Plan
http://www.scotborders.gov.uk/life/planningandbuilding/plansandresearch/2747html

Scottish Borders Council Local Plan Amendment (Finalised Plan 2009)
http://www.scotborders.gov.uk/life/planningandbuilding/plansresearch/26759.html

Scottish Borders Council have produced the following information that should be referred to in considering new development in the region.

Supplementary Planning Guidance
The following supplementary planning guidance is available to download from http://www.scotborders.gov.uk/life/planningandbuilding/plansandresearch/6003.html or by clicking on the links. These guides contain policies which complement Structure and Local Planning Policies.

Affordable Housing (approved March 2007)
Biodiversity (approved December 2005)
Contaminated Land Inspection Strategy (approved September 2001)
Developer Contributions (approved April 2007 - updated April 2009)
Designing out Crime in the Scottish Borders (approved August 2007)
New Housing in the Borders Countryside (approved December 2008)
Interim Housing Policy (approved June 2005)
Landscape and Development (approved March 2008)
Local Biodiversity Action Plan (launched June 2001)
Privacy and sunlight guide (approved July 2006)
Renewable Energy (approved March 2007)
Replacement Windows (approved August 2008)
Scottish Borders Woodland Strategy (approved November 2005)
Trees and Development (approved March 2008)
Use of Timber in Sustainable Construction (approved May 2009)

Consultation Draft SPG Documents
Provision for Play Areas
Green Space
Gardens & Designed Landscapes
Countryside Around Towns

Planning briefs for specific sites
The list of planning briefs available for specific sites that have been allocated within the Local Plan is available at http://www.scotborders.gov.uk/life/planningandbuilding/plansandresearch/7464.html

Core Path Plan
Following the Land Reform Act (2003), Scottish Borders Council have now produced a Core Path Plan which identifies the network of paths and rights of way throughout the region. This can be accessed at:
http://www.scotborders.gov.uk/life/environment/outdooraccess/20159.html

SEPA
The Scottish Environment Protection Agency (SEPA) is responsible for the protection of the environment in Scotland, dealing with issues relating to pollution, sewerage and waste disposal. The SEPA website is a good source of information on topics including SUDS (Sustainable Urban Drainage Systems) and flooding
http://www.sepa.org.uk/

SNH
Scottish Natural Heritage (SNH) is responsible for the protection and sustainable management of the natural environment and are a statutory consultee on certain planning applications such as those in or affecting specially designated sites.
http://www.snh.org.uk/

Historic Scotland
Historic Scotland are responsible for the safeguarding of the historic environment, including built heritage policy and designations (e.g. conservation areas, listed buildings and protected gardens and designed landscapes).
http://www.historic-scotland.gov.uk/

6.2 Glossary and sourcebook

CABE – Commission for Architecture and the Built Environment
publish research and guidance on all aspects of creating places
http://www.cabe.org.uk/#2

Sustainable Housing Design Guide for Scotland – online version available
http://www.archive2.official-documents.co.uk/document/deps/cs/shdg/index.html

Manual for Streets available to download at http://www.dft.gov.uk/pgr/sustainable/manforstreets/

Building for Life: a national standard for well-designed homes in England and Wales, but with general guidance and information available
http://www.buildingforlife.org/

Energy Saving Trust
The Energy Saving Trust is a public body which encourages more energy efficiency and the use of renewable energy. It provides comprehensive information and can provide funding.
http://www.energysavingtrust.org.uk/

The Canmore Database
The Royal Commission on the Ancient and Historical Monuments of Scotland maintain the Canmore Database with details of archaeological sites, ancient monuments and buildings in Scotland.
http://www.rcahms.gov.uk/

Produced by Scottish Borders Council

Main authors
Carol Cooke & Bea Nichol

Graphic Design and interactive navigation
Graphic Design Team @ Scottish Borders Council

Illustrations/sketches
All Allan Swan unless otherwise stated

Photography
With thanks to the following:

Gaia Architects
Icosis Architects
Lagan Homes
Malcolm Fraser Architects
Oliver Chapman Architects
Smith Scott Mullan Architects
Simpson & Brown Architects

With special thanks to
Bain Swan Architects

Scottish Borders COUNCIL

You can get this document on tape, in large print, and various other formats by contacting us at the address below. In addition, contact the address below for information on language translations, additional copies, or to arrange for an officer to meet with you to explain any areas of the publication that you would like clarified.

Planning and Economic Development |Council Headquarters
Newtown St Boswells | MELROSE | TD6 0SA
tel: 01835 825060 | email: ped@scotborders.gov.uk
www.scotborders.gov.uk