



ADOPTED DESIGN GUIDE

Supplementary Planning Document

SOUTH DOWNS LOCAL PLAN
JULY 2022

SOUTH DOWNS
NATIONAL PARK



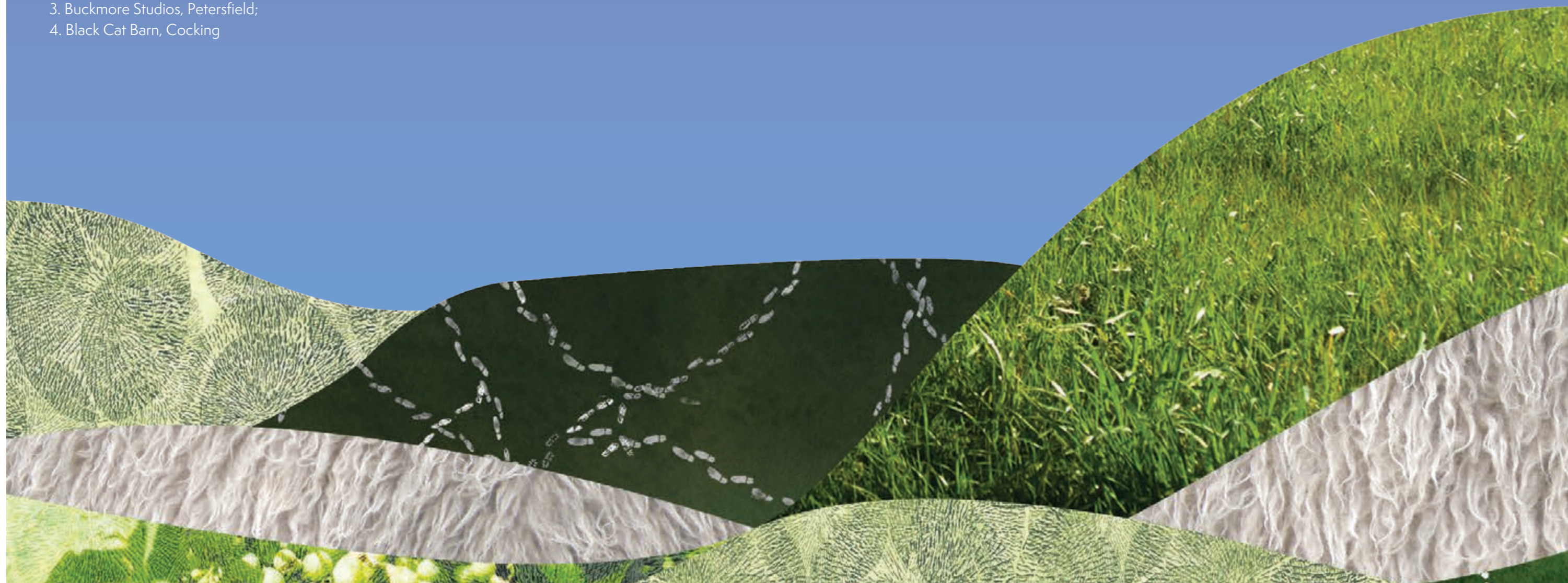
THE DESIGN GUIDE
Supplementary Planning Document

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Cover photographs; left to right:

1. Timberyard Lane new housing, Lewes;
2. Follers Manor Gardens, Alfriston;
3. Buckmore Studios, Petersfield;
4. Black Cat Barn, Cocking



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PART A: INTRODUCTION

PREFACE

To be allowed to develop at all in the National Park is a privilege. Part of what makes the National Park such a special place is the variety of significant landscapes (including townscapes), from the western downs on the edge of Winchester to the iconic coast at the Seven Sisters and everything in between, including historic villages and market towns. This document stresses that new development must respect and build on the National Park's diverse, distinctive landscapes and townscapes; celebrate the unique sense of place found in them.

Development proposals considered to be mediocre or poor will not be acceptable. New development should be an opportunity to enhance the beauty, wildlife and cultural heritage of the South Downs National Park for future generations as well as to achieve great place making.

Planning should generate net gains for the quality of our built and natural environments. Simply achieving 'no harm' is not acceptable in the National Park where the statutory purpose is to conserve and enhance the essential character of the landscape (which includes the built environment and the cultural heritage of the area).

Planning must also work to combat climate change, to help reverse the decline of nature and to enhance our health and well-being. Applicants will be expected to consult the adopted Sustainable Construction SPD in parallel with this document.

In order to do all of this, we need to set out clear expectations. This is what this document does. It sets out a clear process and what our expectations are. Much of the guidance remains relevant even where small scale development does not need planning permission, as the cumulative impacts of small changes can become significant over time.

This Design Guide Supplementary Planning Document was adopted by the National Park Authority in xxxxx and contains guidance on how the Authority expects new development to adhere to high standards of design quality. This document takes account of the generic

guidance in the National Design Guide and the National Model Design Code.

We thank everyone who has helped create this Design Guide and commend it to all those with an interest in the South Downs National Park.



Ian Phillips
Chair of South Downs National Park Authority
(July 2021 – July 2022)



Vanessa Rowlands
Chair of South Downs National Park Authority



Heather Baker
Chair of Planning Committee

HOW TO USE THIS GUIDE

A.1 This document is an adopted Supplementary Planning Document (SPD), which is a material consideration in the determination of planning applications. It builds on Local Plan design policies, should be read in conjunction with the sustainable construction SPD and provides guidance to applicants on a range of design issues relevant to new development. Much of the guidance remains relevant even where small scale development does not need planning permission as the cumulative impacts of small changes can become significant over time.

See [SDNPA guide](#) on permitted development.

NAVIGATION


A.2 The structure of this document:

- **Part A** is the Introduction
- **Part B** sets out the **Design Process** the National Park ordinarily expects development schemes to take from inception to completion.
- **Part C** sets out the **Design Principles** expected to guide development proposals in the National Park. For each issue in Part C, numbered points within blue boxes distil key design principles. These Key Design Principles are collated in Appendix A.

A.3 While this document can be printed out in either this A3 or the A4 version, the online version contains numerous links in orange font to other parts of the document to ease navigation, [like this](#). Links to other documents and websites are in green font [like this](#).

A.4 Technical terms are explained in the [Glossary](#) and are indicated with an orange G like this⁶.

Scope of guidance

A.5 This document is relevant to both residential and non-residential development in the National Park and will influence SDNPA responses to consultations on developments just outside the National Park boundary. Design guidance relevant to householder developments and single dwellings in Part C can be found by following the use of this graphic .

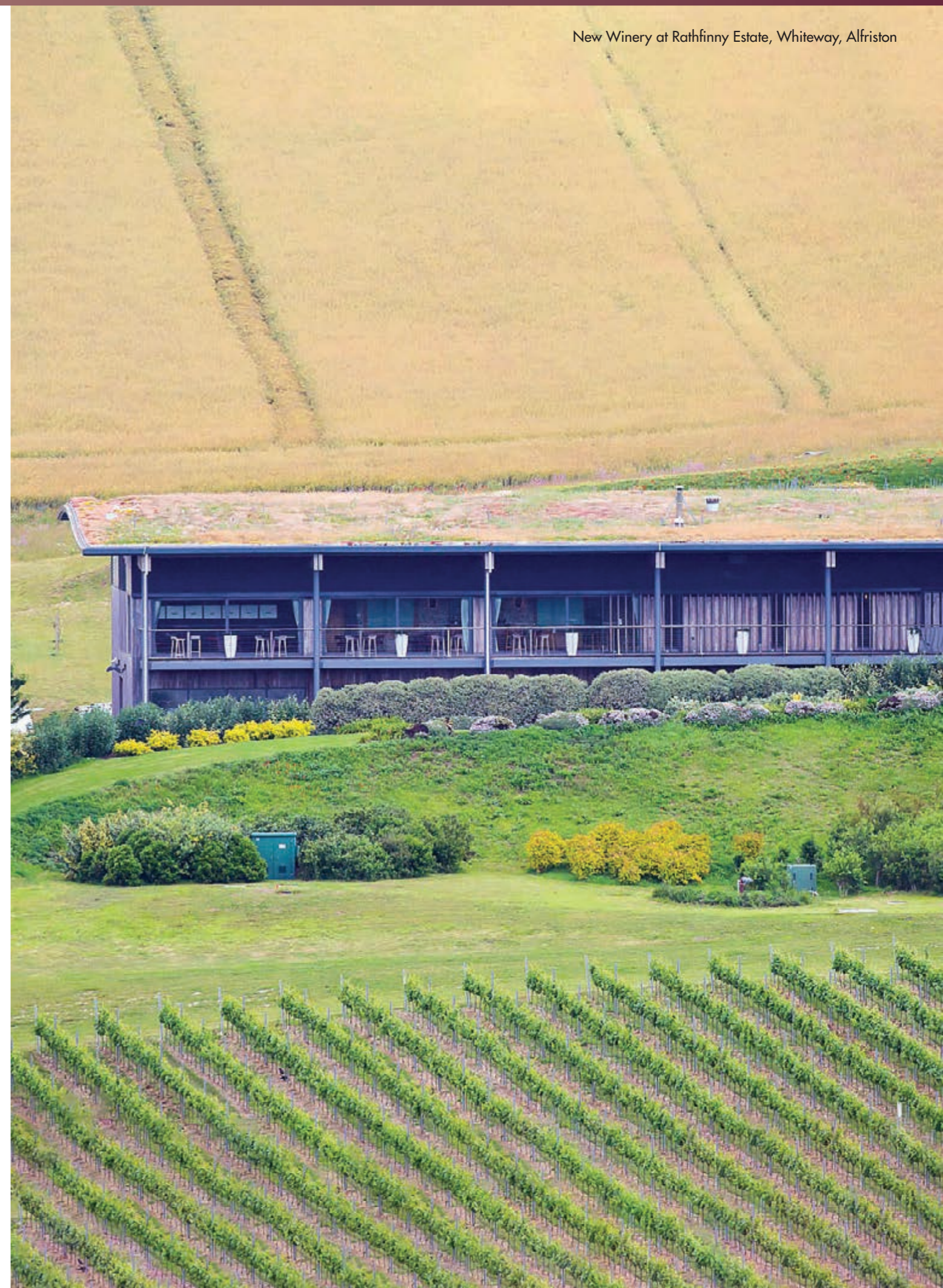
Area specific guidance

A.6 This document does not provide guidance on what is appropriate in design terms for specific areas or places within the National Park. Part of the inherent quality of the National Park is its range.

Illustrations

A.7 The document contains photos and sketches selected to illustrate specific design guidance. They should not be used to endorse non-specific elements contained in the context of such illustrations.

New Winery at Rathfinny Estate, Whiteway, Alfriston



GOOD DESIGN IN THE SOUTH DOWNS

NATIONAL PARK PURPOSES AND DUTY

A.8 The 2010 **Government Vision for the National Parks**, emphasises the statutory National Park Purposes and Duty (Figure 1) and the 1995 Environment Act requires all relevant authorities to have regard of them. The Purposes and Duty need to be uppermost in the minds of applicants and designers when considering proposals for new development. Where there is an irreconcilable conflict between them, case law requires greater weight be applied to Purpose 1.

A.9 Assessments of design quality will be made with reference to the National Parks' Purposes and Duty and Purpose 1 in particular. Applicants should demonstrate how they will conserve and enhance natural beauty, wildlife and cultural heritage.

Purpose 1: To conserve and enhance the natural beauty, wildlife and cultural heritage of the area.

Purpose 2: To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.

Duty: To seek to foster the social and economic wellbeing of the local communities within the National Park.

Figure 1: The National Parks' Purposes and Duty.

NATIONAL GUIDANCE

A.10 The **National Planning Policy Framework** says that achieving high quality places and buildings is fundamental to the planning and development process and that development that is not well designed should be refused, especially where it fails to reflect local design policies. The 2021 update also emphasises that development within the setting of National Parks should be located and designed to avoid adverse impacts.

A.11 The 2019 **National Design Guide** sets out broad principles for design quality, which are distilled in 10 characteristics shown in Figure 2.

A.12 The 2021 **National Model Design Code** will be available to help guide the production of design codes for new development in an area (such as for a village design statement) or for a large development site in the National Park.

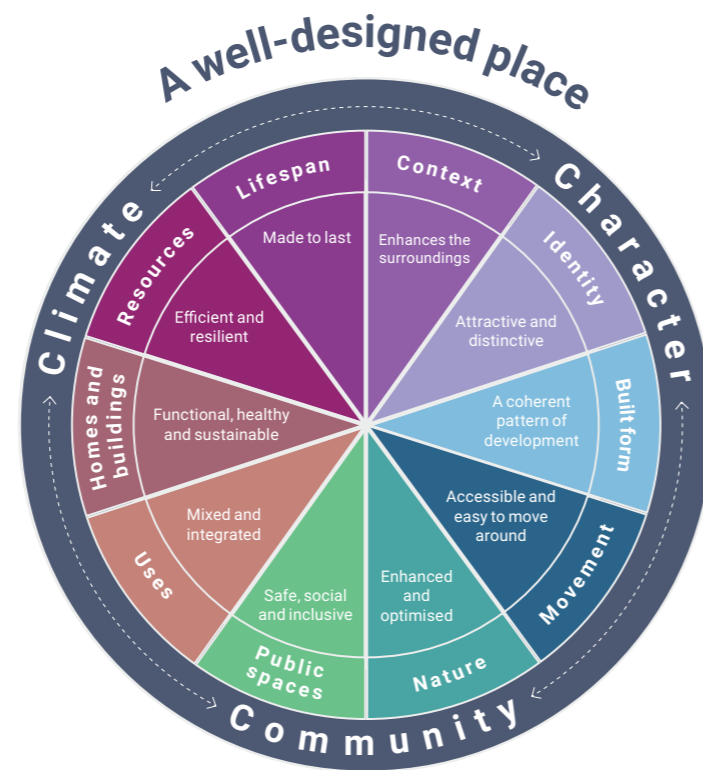


Figure 2: The National Design Guide 10 design characteristics.

SOUTH DOWNS LOCAL PLAN

A.13 The **Local Plan**, which sets out strategic, development management and site-specific policies for the National Park, requires a 'landscape-led' approach to design for development in the National Park due to its intrinsic landscape quality.

The unique character of the many diverse places within the National Park must always be the starting point for good design. All applicants should demonstrate that they understand what this consists of for their site. Several policies in the Local Plan touch on design quality, and while the Local Plan should be read as a whole, Policy **SD5** is the main design policy.

Design quality is not just about what a development scheme looks like, important though that is. It is a much wider concept that includes making places that work well for people and wildlife, which are robust and adaptable, while responding to existing local character and identity.

To achieve good design in the National Park the applicant will need to demonstrate an understanding of the site and its context, and that consideration has been given, in a logical way, to how the development can respect and respond positively to that context. This logical approach to design is explained further in this document.

SOUTH DOWNS NATIONAL PARK DESIGN PRIORITIES

A.14 Preservation and enhancement of the National Park's built heritage is critically important to the Authority, and will always be a prime consideration in the design of any development that might affect it. This means that the design of any new development in the National Park will be expected to demonstrate that it is responding to existing local character and identity, and that the heritage, local history and culture of the area are being valued.

A.15 Even more importance is attached to preserving and enhancing the character and appearance of those areas that have been designated as Conservation Areas. Specific guidance on this can be found in **C.3 Development in Conservation Areas**.

A.16 Equally, the Authority sees the connected themes of conserving and enhancing biodiversity; enhancing and linking green infrastructure; and bringing people closer to nature as a significant design priority for all types of new development. See in particular **Section C.1.1 Landscape Strategy** and **Chapter C.9 Green Infrastructure**

A.17 The Authority is also very committed to new development meeting high sustainable development standards, both mitigating and adapting to predicted climate change. (see **C.14.4 Environmentally Sustainable Design** and the **Sustainable Construction SPD**).

STRATEGIC POLICY SD5: DESIGN

1. Development proposals will only be permitted where they adopt a landscape led approach and respect the local character, through sensitive and high quality design that makes a positive contribution to the overall character and appearance of the area. The following design principles should be adopted as appropriate:

- Integrate with, respect and sympathetically complement the landscape character by ensuring development proposals are demonstrably informed by an assessment of the landscape context;
- Achieve effective and high quality routes for people and wildlife, taking opportunities to connect GI;
- Contribute to local distinctiveness and sense of place through its relationship to adjoining buildings, spaces and landscape features, including historic settlement pattern;
- Create high-quality, clearly defined public and private spaces within the public realm;
- Incorporate hard and soft landscape treatment which takes opportunities to connect to the wider landscape, enhances GI, and is consistent with local character;
- Utilise architectural design which is appropriate and sympathetic to its setting in terms of height, massing, density, roof form, materials, night and day visibility, elevational and, where relevant, vernacular detailing;
- Provide high quality, secure, accessible, and where possible, integrated storage for general and recycling waste, heating fuel, and transport related equipment;

- h) Provide high quality outdoor amenity space appropriate to the needs of its occupiers or users;
- i) Ensure development proposals are durable, sustainable and adaptable over time, and provide sufficient internal space to meet the needs of a range of users;
- j) Give regard to improving safety and perceptions of safety, and be inclusive and accessible for all; and
- k) Have regard to avoiding harmful impact upon, or from, any surrounding uses and amenities.

DEFINITION OF LANDSCAPE

'An area perceived by people whose character is the result of the action and interaction of natural and/or human factors.' (European Landscape Convention)

A.18 Landscape is much wider in scope than simply the green elements. It consists of everything including buildings and townscape in settlements, which comes together to produce the distinctive sense of place the South Downs National Park was designated to conserve and enhance.

DEFINITION OF LANDSCAPE-LED APPROACH TO DESIGN

Design, which is strongly informed by understanding the essential character of the site and its context (the landscape), creates development which speaks of its location, responds to local character and fits well into its environment. It needs to conserve and enhance the natural beauty, wildlife and cultural heritage of the area and create sustainable and successful places for people.



Figure 3: A selection of some of the short-listed schemes in the 2019 SDNPA Design Awards.

OTHER IMPORTANT DESIGN GUIDANCE

SDNPA PARTNERSHIP MANAGEMENT PLAN

A.19 The 2020-2025 **SDNPA Partnership Management Plan** (PMP) sets out how the Authority and its many partners aim to maintain the **National Park's Special Qualities**. It has 10 key outcomes and 57 policies, many of which affect the design aspirations for new development and well-designed schemes can help contribute to meeting them. Two of the key themes in the PMP are Climate Change and Nature Recovery, which have informed the guidance in this document.

NEIGHBOURHOOD PLANS

A.20 Neighbourhood planning gives local communities the power to shape development in their area. **Neighbourhood Development Plans** (NDPs) can set out design criteria, local materials, etc., which are also to be considered when designing a development. They are a good source of local historic, landscape and community information that should influence designs. Applicants are strongly advised to check whether their site is covered by an NDP as these are part of the development plan along with the South Downs Local Plan. Over 50 NDPs are either adopted or are being prepared in the South Downs National Park, and these are all shown on the **designated neighbourhood areas map**.

OTHER LOCAL GUIDANCE

A.21 Applicants, developers and individual home builders need to be aware of other important local guidance that should inform their scheme designs and may influence how they are assessed by the planning authority.

A.22 **Conservation Area Appraisal and Management Plans** have been written for many of the Conservation Areas in the National Park and **Village Design Statements** (VDS) for many communities. If the VDS is an adopted Supplementary Planning Document it would sit alongside this document and it should not be assumed that the general design guidance here would automatically override the local guidance in the VDS. Applicants should check if parishes have produced local landscape character assessments to make use of local knowledge.

A.23 The SDNPA has produced guidance in the form of **Development Briefs** for specific allocation sites and **Technical Advice Notes** and **Supplementary Planning Documents** for specific issues.

A.24 Further information on all this guidance and other forms of design guidance that may be relevant to applicants can be found in **Appendix B** of this document.

PART B: DESIGN PROCESS

LANDSCAPE-LED APPROACH TO DESIGN IN PRACTICE

B.1 In practice, the following is required:

- **Proportionality** – the amount and complexity of evidence required to describe the character of the site and its context will depend on the sensitivity of the site and the scale of the development.
- **Iteration** – reviewing and changing layouts/designs and revising them in response to new evidence or critical feedback to improve the design and gains from the site.

- **Consistency** – the design of the development should be driven by the analysis of the evidence about the site and this should be demonstrable.

And, for larger schemes in particular:

- **Multi-disciplinary teams** working together from the very start toward achieving a scheme 'vision' and using the evidence of the character of the site and its context to inform all design stages.

SMALL SCALE DEVELOPMENT

B.2 A single dwelling development (or other domestic-scale developments) should follow a logical design process. See also **Case Study 4** which shows how a landscape led approach can be applied to a farmstead conversion. The Authority strongly recommends applicants engage in **pre-application** discussions with officers, as this can save time and avoid abortive work.

1. Evidence Gathering

For a single house, an understanding of the site and its context is very important. This would include a brief character study of local buildings, streets, materials and native planting, the site levels, how the site drains, views of the plot from the public spaces, the history of the site and its context and road, track and path connections around the site.

The relevant **local plan**, **neighbourhood plan** and **village design statement** policies and design guidelines should also be collated, where available.

2. Analysis

The evidence is used to form a series of opportunities and constraints for the design of the house development.

Vision

What should the end result achieve and how will it meet the National Park's **Purposes and Duty**?

3. Landscape

The development needs to set out what it will achieve in terms of biodiversity net gain⁶, **Ecosystem Services** and **green infrastructure** and this helps determine where the building should sit on the plot.

4. Concepts

The design of the development should ideally explore different options with the pros and cons explained which can be part of the discussion with the planning authority. This is particularly important in the most sensitive locations.

5. Detail Design

Once the right concept design is agreed, this can be worked up into a more detailed set of designs.

6. Consultation and Engagement

The design may benefit from early consultation with the local community, e.g. the parish council and any other individuals or groups that may be affected by the development. Some development proposals may benefit from appearing before the SDNPA **Design Review Panel**.

LARGER SCALE DEVELOPMENT

B.3 Larger schemes may need to follow a process similar to that shown in Figure 4. Schemes of 10 units or more could be considered 'larger' developments although this partly depends on the context (10 units would normally be more significant in a village location than in a town centre, for instance) and in practice the principle of a proportional approach to the design process would apply as the size and complexity of the development increases. Some larger schemes will benefit from Planning Performance Agreements with the Authority which will include agreed expectations for the different stages of the design process. The following summarises the stages in Figure 4, but more detail on this is found in [Appendix C](#).

1. Evidence Gathering

The landscape evidence (including townscape) is required to demonstrate a thorough understanding of the site's context. A design that is fully landscape-led is unlikely to be possible without this, as the lack of understanding of local character is likely to result in a scheme that will not be rooted in its location and risks being 'anywhere' development. Applicants should gather all evidence for the site *and* its context (the 'landscape baseline'). For larger and more sensitive sites, the chosen study area should respond to evidence and best practice as found in [Guidelines for Landscape and Visual Impact Assessment 3](#). Local knowledge as found in [Neighbourhood Plans](#) and [Village Design Statements](#) should also be used.

2. Analysis

The evidence collated needs to be analysed to provide a set of development constraints and opportunities for the design of the scheme.

Vision

The applicant is encouraged to set out the vision for the development. This should include high level aspirations which equate to a best practice response to the [Design Policy SD5](#) and the [purposes and duty](#) of the National Park.

3. Landscape Strategy

The landscape strategy is a critical part of the design. It is a direct response to the analysis of the landscape evidence, local policies and the vision.

It must inform subsequent stages of the design process which need to refer back to the landscape strategy principles. The landscape strategy should, through the identification of opportunities and constraints, set out the landscape capacity for the site. The Authority strongly recommends applicants engage in [pre-application](#) discussions with officers, as this can save time and avoid abortive work.

4. Concepts

The landscape strategy and the Vision for the site should lead to different ideas or concepts for how the development could be arranged on the site. At this stage, the applicant should try out different options and assess them against each other in terms of pros and cons with reference to the Design Policy [SD5](#); the relevant Design Principles set out in Part 3 of this document; the high level aspirations of the Vision; and their consistency with the Landscape Strategy.

5. Sketch Design

Once the best concept design has been chosen and ideally been subject to pre-application discussion, the proposals can be worked up into sketch design details.

6. Masterplan

Masterplans, more appropriate for the largest development schemes, set out the arrangement of buildings, streets and access as well as incorporating the landscape strategy.

7. Detail Design

All development proposals will ultimately result in detail design drawings and specifications that set out exactly how the development should be built. This will be in the form of plans, elevations and sections and, in sensitive landscapes, possibly three dimensional, virtual or real models.

8. Management Plans

Management Plans should be drawn up to show that the ongoing maintenance and future custodianship of the developments are well considered and adequately resourced.

9. Consultation and Engagement

From an early stage and continuing as the design is worked up, the applicant should engage with planning officers and relevant stakeholders in the interests of achieving the best design solution and minimising the likelihood of obstacles to the smooth passage of any planning application. In more sensitive cases, the draft vision should be shared with the local community to encourage useful feedback.

Proposals on more sensitive sites may need to go before the SDNPA [Design Review Panel](#) so that they might review them and offer advice.

10. Design Review

Design Review of proposals and finished schemes inform the design process for both current and future schemes.

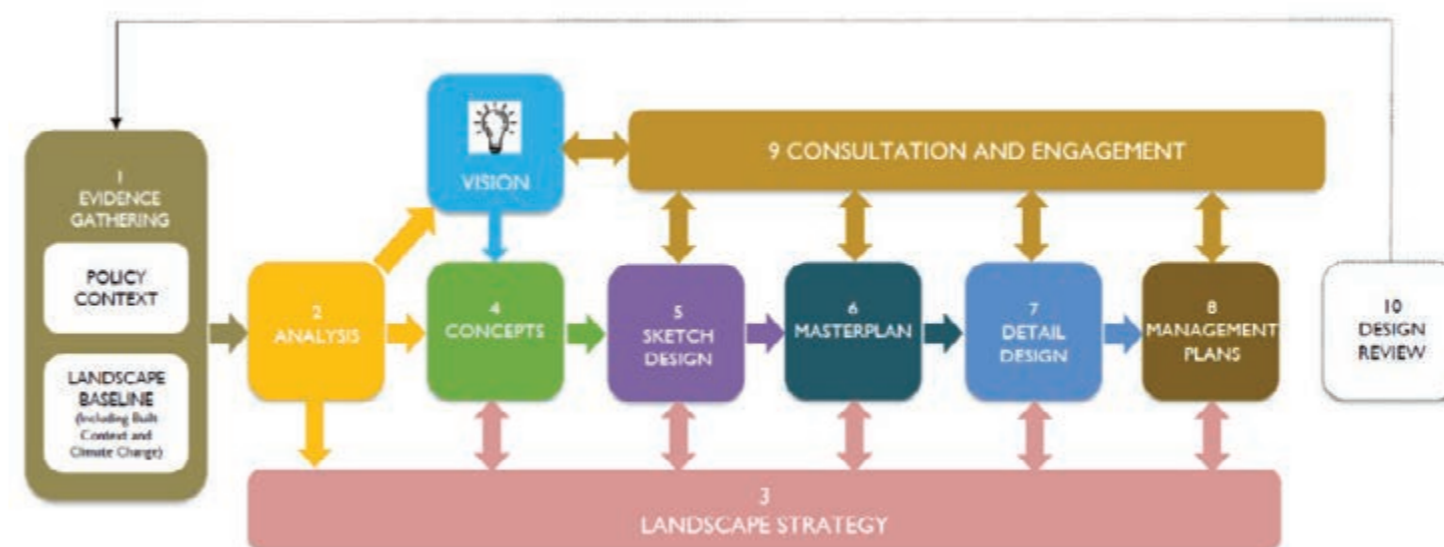


Figure 4 The suggested Landscape-led design process for larger scale development.

Figure 5: An illustration indicating the process of Design Stages 1-5 for a medium sized residential development, showing how each stage forms a milestone in the design narrative and builds on the previous stage.



PART C: DESIGN GUIDANCE

C.1 LAYOUT

C.1.0.1 The design of the layout of a new development is a synthesis of many factors, opportunities and constraints, many of which are addressed in this chapter. In the National Park the landscape strategy is a key driver for how the layout should evolve. Layout should be directly informed by the local landscape context. **Access** to and through the site and the **orientation** of buildings all impact on the layout. In larger development the build

density, **street hierarchy** and the application of the good practice of **perimeter blocks** and **active fronts** all influence the layout further. The particular issue of how development addresses the **countryside edge** also affects layout. The critical impact of **car parking** on layout is covered separately in **C.8.1**.

C.1.1 LANDSCAPE STRATEGY

KEY DESIGN PRINCIPLES

- The landscape strategy should help determine the capacity of the site and hence the appropriate developable area for the development.
- All layout or landscape plans for multiple unit or large building developments should have accurate contour plans and information about surface water flows.
- Single dwelling proposals should have levels on the site and contours for the site context clearly shown on relevant plans

C.1.1.1 The landscape strategy stage is a key part of the design process, which has a crucial impact on the layout of the design proposal. This applies even to the smallest single building development schemes. The landscape strategy is needed at the start of the design process and this will help inform the developable area.

C.1.1.2 The following elements should all be influencing the scheme's site layout:

- **Geology and soils**
e.g. geology and soils have an indirect impact on layout through their fundamental influence on topography, hydrology and ecology.
- **Topography**
e.g. 'hidden village' character of some villages, or, need to avoid developing higher ground due to unacceptable visual impacts.
- **Water**
e.g. development may need to avoid high flood risk

areas and, sustainable drainage strategy may dictate layout of roads and open space.

- **History and built heritage**
e.g. respecting the course of ancient routes, views of historic buildings, restoring characteristic field patterns, avoiding any negative impacts on scheduled and listed historical assets. The early involvement of Authority conservation officers and/or Historic England should be sought.
 - **Ecology**
e.g. conserving important biodiversity assets, or, enhancing existing assets, or, connecting to those beyond the site.
 - **Movement networks: routes and nodes**
e.g. the likely access points into the site and connection points for both people and wildlife beyond the site boundaries.
See **C.1.2 Access and Permeability**.
 - **Settlement pattern and edges**
i.e. what works for the site and is characteristic of the area, including settlement edges and buffers to countryside.
 - **Perceptual Qualities**
e.g. key views, vistas and gateways to settlements all influence overall layout and, retaining and enhancing landscape character, e.g. experience of hedgerows, watercourses.
- C.1.1.3** Environmental health issues such as noise and contaminated land and existing services such as overground cables or underground pipes, can also affect the landscape strategy and site layout.

See also [Local Plan](#) policy SD4: Landscape Character and SD45: Green Infrastructure.

LANDSCAPE-LED HINT

Old Malling Farm housing development, Lewes



Respond to important views from the site to help retain local identity

The landscape strategy ensures that the layout of open space between buildings will retain key views of St Peter's Church, Hamsey.

C.1.2 ACCESS AND PERMEABILITY

KEY DESIGN PRINCIPLES

- Opportunities for enhancing movement networks for people and wildlife should be maximised following identified desire lines and landscape character.
- Access should prioritise provision for non-motorised user movement over access for vehicles; and the ease of access for people with pushchairs, wheelchairs and disabilities etc. should also be considered.
- Opportunities for improving access to public transport should be taken where possible.
- The character and treatment of all vehicular access points and roads should aim to reduce adverse impacts on the landscape and avoid highway dominated character.
- Access roads and routes should be in accordance with the guidance document [Roads in the South Downs](#).
- The location of access routes through the site should ensure that there is space within the developable areas for viable development blocks.
- Where possible, larger residential developments should have more than one vehicular access to avoid large cul-de-sacs and to improve permeability.
- Good permeability needs to be balanced with the need for security and crime prevention.
- Permeability should take account of the need for the quality of routes and for natural surveillance.
- The routes and the amenity of existing public rights of way should be protected or enhanced.

Access

C.1.2.1 The design of the access to the site and development within it, fulfils a practical function as well as contributing an important part of the development's character.

Existing routes of public rights of way should be protected or enhanced, should be integrated into the circulation plan and layout of developments and only in justified circumstances will a diversion be acceptable. The amenity, character and recreational value of such routes also needs to be respected.

Permeability

C.1.2.2 Permeability describes how well connected a site is for people and wildlife both across the site itself and to the wider area. (see also [C.9 Green Infrastructure](#)). Larger sites should seek to avoid development becoming an obstacle to identified desire lines⁶.

C.1.2.3 Vehicular permeability on larger sites is important to prevent inherently inefficient cul-de-sacs that cause longer driving distances and wasteful turning areas for cars and service vehicles and so alternative vehicular access points and direct routes are supported as a general principle.

C.1.2.4 Non-motorised routes usually need to be more direct than vehicular routes. Where possible, people should be given the opportunity to use direct and attractive routes on foot or by bicycle, e-bicycle and scooter, responding to natural desire lines and as an alternative to using the car for journeys below 5km. For cycling, see [DfT Guidance on Cycling Infrastructure](#).

C.1.2.5 Routes may be permeable for non-motorised users but inaccessible to vehicles, with the exception of emergency or delivery vehicles, through the use of modal filters such as unlockable gates or demountable bollards.

C.1.2.6 The quality of routes is essential to ensure that they are well used. [Appendix D](#) sets out how the quality of routes can be assessed under the headings:

Connected, Convenient, Comfortable, Convivial and Conspicuous.

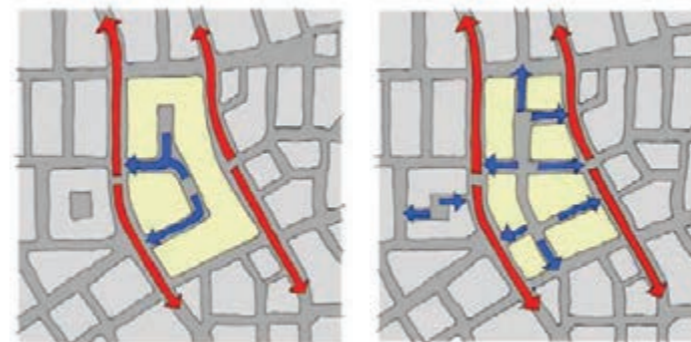


Figure 1.1: Poorly connected (a) and well connected (b) new street layout (red arrows for vehicular and blue for non-motorised traffic).

See also Local Plan policy [SD19: Transport and Accessibility](#) and [SD20: Walking, Cycling and Equestrian Routes](#).

C.1.3 ORIENTATION

KEY DESIGN PRINCIPLES

The orientation of buildings and streets should take account of:

- What is locally characteristic;
- Microclimate;
- The need for natural surveillance;
- Solar gain and collection;
- Key views and vistas;
- Topography and significant existing features.

C.1.3.1 The orientation of buildings and streets is influenced by several factors. New development should take account of what is locally characteristic such as buildings stepping up, or streets following contours and buildings parallel to or at angles to a road.

C.1.3.2 Wide fronted buildings facing onto the street, or repeated gabled ends of buildings, or a mix of both, may be local characteristics that a new development could usefully continue, to help its integration into a street or settlement.

C.1.3.3 Orientation can have beneficial effects on microclimate. The direction of prevailing winds in exposed areas may influence the orientation of buildings, minimising elevations that face the wind. This can be managed through good landscape design which can also assist with the energy efficiency of buildings, through e.g. shelter belts or providing summer shade to reduce overheating, or green roofs.

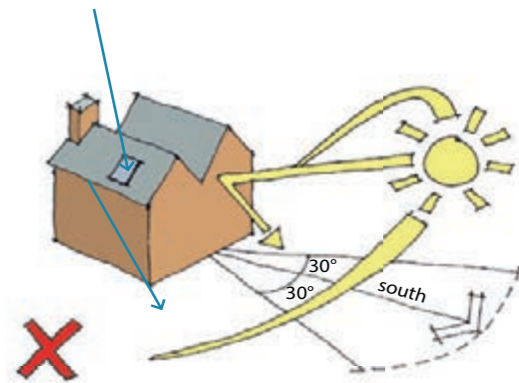
C.1.3.4 PV or solar water collection, or passive solar gain, may influence the orientation of buildings or roofs to help maximise solar collection, although in the most visually sensitive locations, PV may not be appropriate (see [C.14.4 Environmentally Sustainable Design](#)).

C.1.3.5 The need for natural surveillance of public realm areas and to protect private amenity, can also influence the orientation of buildings and streets. The orientation of buildings and streets, other routes and public realm may be influenced by the desire to preserve important views, create attractive vistas or make the most of existing landmark features.



Figure 1.2: Buildings in East Meon are often at angles to the road.

PV / solar water panel does not maximise movement of the sun throughout the day



PV / solar water panel facing 30 degrees of south maximises the movement of the sun

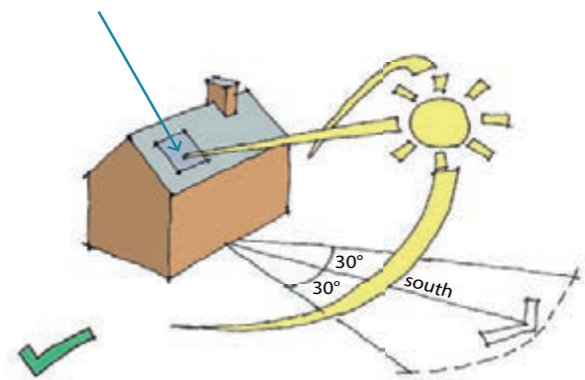


Figure 1.3: Solar collection can affect orientation of buildings or roof form.

LANDSCAPE-LED HINT

Interpret landscape evidence for orientation:

A residential part of Lewes



① Buildings face street & rise up hill, creating a rhythm of stepped rooflines

② Roads run across contours

These relationships can be applied in new developments in the area to contribute to local character

C.1.4 DENSITY

KEY DESIGN PRINCIPLES

Development density should aim for efficient use of land while also:

- a. Integrating new development by using a similar grain and density to that which is locally characteristic or is appropriate to the site's location;
- b. Considering scale, height, volume, site coverage and distance from and effect upon, adjacent buildings;
- c. Not being at the expense of: privacy, good internal space standards, sufficient private garden or communal open space and adequate access;
- d. Enhancing GI^G, providing multi-functional SuDS (where possible) and avoiding the loss of environmental quality or significant existing landscape features;
- e. Allowing for a transition to less intense development, where it borders the countryside and where that reflects the local character.

Gross and Net Densities

C.1.4.1 In practice, in the National Park, gross densities^G of development sites will be significantly lower than the net densities^G (both expressed in dwellings per hectare (dph)) of the developable areas^G given the landscape character and need for significant green infrastructure (GI).

This may not be the case in the most urban areas but even then, depending on the development type and the landscape sensitivity of the site, a significant area of the site may still need to be reserved for green infrastructure. (see Figures 1.4 and 1.5)

C.1.4.2 Higher density housing development, although often bringing social opportunities, creates its own design constraints, so development requires relevant design solutions, as, for example, the successful integration of car parking becomes more difficult.

C.1.4.3 It is important that the cumulative effects of higher densities, such as the potential for a car-dominated public realm, reduced private and communal amenity space, tighter urban grain and increased massing with reduced gaps between buildings, does not result in a scheme that is so intense that it is not characteristic of the site and its context.

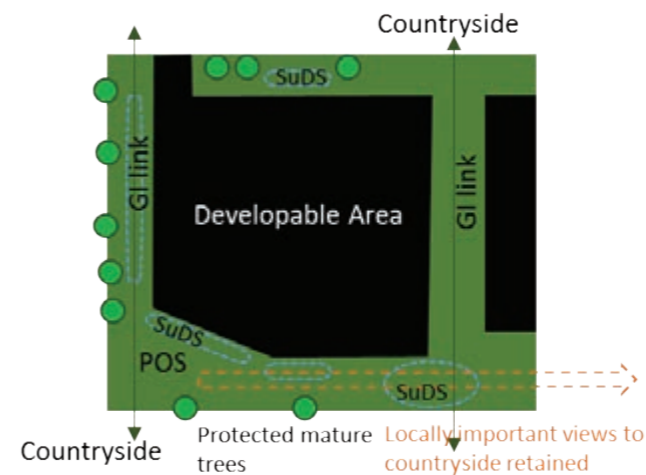


Figure 1.4: Edge of village site density illustration.

Developable area = 50%, GI = 50%
 Net density of developable area = 30dph
 Gross density of whole site = 15dph

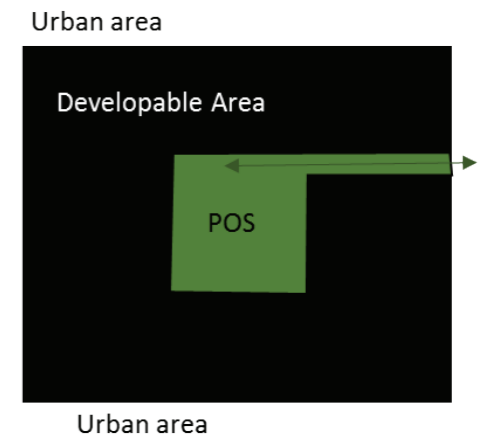
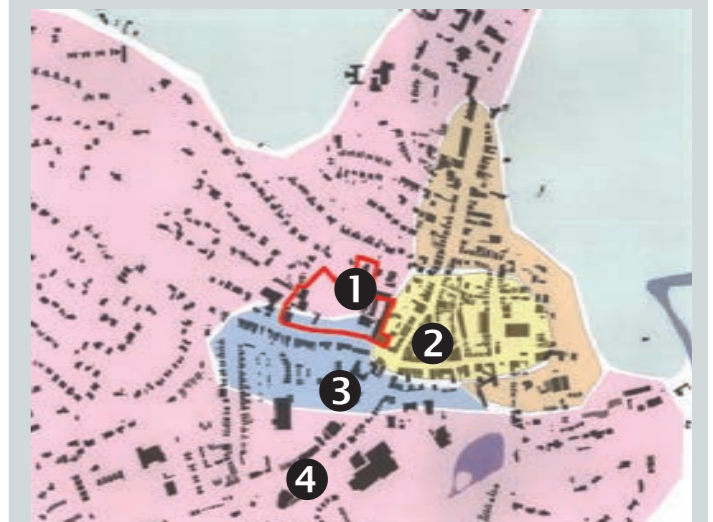


Figure 1.5: Urban infill density illustration.

Developable area = 85%, GI = 15%
 Net density of developable area = 40dph
 Gross density of whole site = 34dph

LANDSCAPE-LED HINT

Designed density should respond appropriately to area's characteristic density



- ① New development density (66dph) matches local context
- ② Town centre >80dph
- ③ 50-80dph
- ④ <50dph

C.1.5 LEGIBILITY AND STREET HIERARCHY

KEY DESIGN PRINCIPLES

Development should promote good legibility in the following ways:

- a. Clear route hierarchy;
- b. Strong and logical building layout and massing;
- c. Consistent choice of materials;
- d. Architecture reflecting building use and emphasising main entrances;
- e. Use local landmarks and key views;
- f. Retention of key distinctive features.

C.1.5.1 Legibility describes the ease with which visitors can orientate themselves and find their way around a site or an area. Routes in larger developments should be arranged into a hierarchy to help people make sense of where they are.

C.1.5.2 Strong and logical building layouts, such as **perimeter blocks** help make places legible as does the use of massing, clear architectural signalling of entrances, consistent use of materials, the retention and enhancement of existing features (such as mature trees, water features or buildings), use of topography, public open space and distinctive architecture and incorporation of attractive views.



Figure 1.6: The elements of a legible development showing a route hierarchy.

C.1.6 PERIMETER BLOCKS

KEY DESIGN PRINCIPLES

New developments should aim to respect existing or achieve new perimeter block layouts unless not feasible or not locally characteristic.

C.1.5.3 The classic layout for promoting good permeability and legibility is the perimeter block. Residential perimeter blocks make a clear distinction between private gardens behind the buildings (promoting good security and privacy) with public streets in front (as in Figures 1.9 and 10.7). Strong building lines help provide good passive surveillance and activity on the street side.

C.1.5.4 In more rural locations, an irregular block layout may provide a more appropriate 'organic' character.

C.1.5.5 Non-residential building in perimeter blocks should also have their public side with the main entrance(s) on the street side with servicing to the rear.



Figure 1.7: Regular perimeter blocks in Lewes.



Figure 1.8: Organic-shaped perimeter blocks in East Meon.

C.1.7 ACTIVE FRONTAGES

KEY DESIGN PRINCIPLES

- a. Active frontages and particularly ground floor elevations, should address streets and spaces.
- b. Buildings on corner plots should be active on both sides.
- c. Blank walls or elevations with only non-active room windows should not face the public realm if possible.
- d. Residential streets should have: frequent doors and windows from active rooms; bay windows; porches; front gardens (unless not locally characteristic).
- e. Animation can be enhanced with balconies in apartments and oriel windows above the ground floor projecting out into the street
- f. Non-residential development can enliven street elevations with: generous fenestration (unless this conflicts with dark night skies policy); entrances; pavement terraces; shop windows.

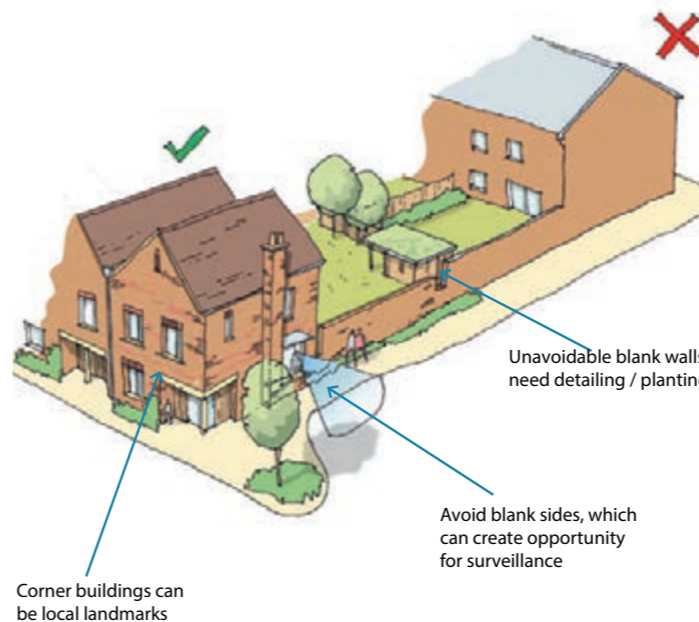


Figure 1.9: Corner buildings need to be active on both sides.

C.1.7.1 Non-residential active fronts at ground level can be created by locating main entrances, indoor reception areas (and shop windows), and outdoor meeting places near those entrance zones on the street. Where possible and appropriate, cafes and restaurants should explore the potential for extending out into public realm areas to help animate those spaces.



Figure 1.10 Non-residential active frontages.

C.1.8 THE COUNTRYSIDE/ SETTLEMENT EDGE

KEY DESIGN PRINCIPLES

- A new settlement edge should reflect the best locally characteristic examples of settlement edges with the countryside.
- Repeating unsympathetic twentieth century development settlement edge character should be avoided.
- New development should generally be set back from the countryside edge, allowing a GI buffer (unless this conflicts with local character).
- Where possible, new development should address the countryside directly and not turn its back onto it, unless this is not locally characteristic.
- Where new development cannot front onto countryside, low key rural character boundary treatments will be expected.
- Good quality development should not need to be screened from rural views but rather should aim to become an attractive part of the landscape.
- Screening may be required for unavoidable development that could cause visual harm both inside and outside the National Park.
- Green infrastructure links from the countryside into the new development and, where appropriate, across it, should be accommodated.
- New settlement edges need to look both ways, responding to the countryside while also knitting into the existing fabric of a settlement.

C.1.8.1 More modern, mostly twentieth century, development often failed to create an appropriate settlement edge and this has created harmful impacts on the wildlife and beauty of the National Park and on the character and sense of place of the area (see *Figures 1.16, 1.17, 1.18*). These poor precedents of countryside edge settlement should not be repeated.

C.1.8.2 A key objective is to avoid a suburbanisation of the countryside edge with inappropriate 'anywhere' building types and layouts and an over intensification, exacerbated by car-domination viewed from the public realm.

C.1.8.3 As buildings have always been an integral part of the National Park landscape, the objective is not

to generally screen off new development but to make sure that it integrates well with both the countryside and the existing settlement. This can be assisted by the enhancement of green infrastructure links from the countryside and into the new development.

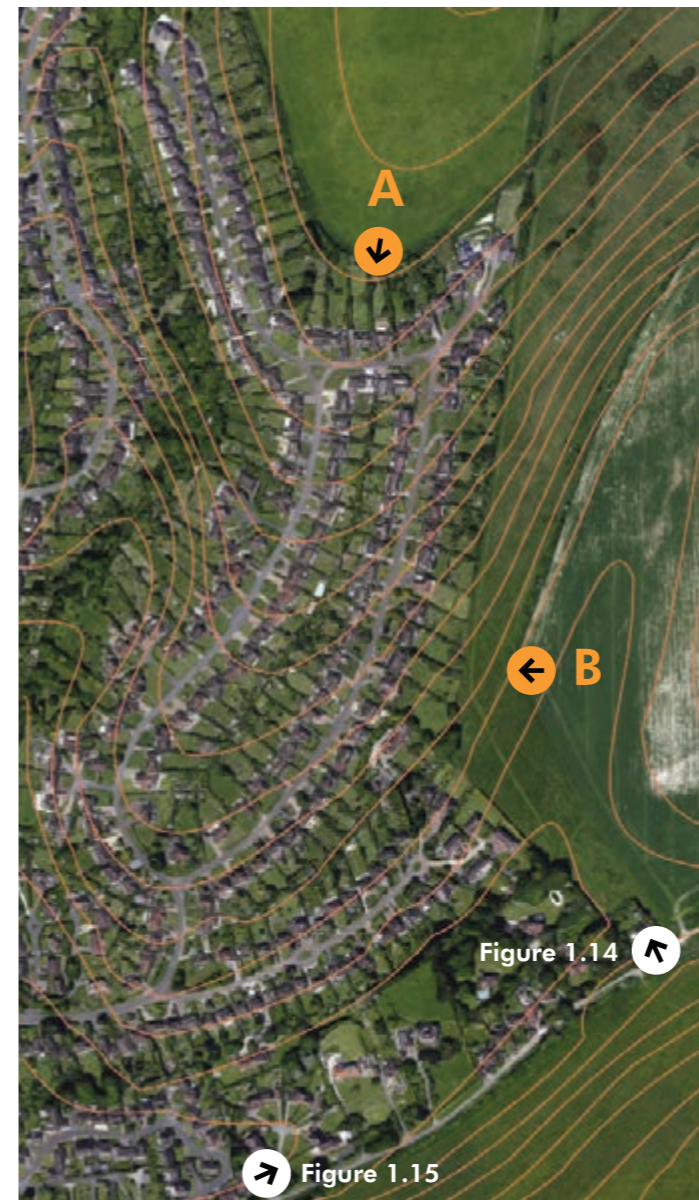


Figures 1.11 and 1.12: The loose, organic settlement edge and the incursions of wooded landscape into the settlement from the countryside, typical of the Western Weald, is demonstrated in Selborne.



Figure 1.12: Views from countryside of the backs of properties facing the high street.

C.1.8.4 The response to topography is often an important factor that can either help or hinder the successful integration of development on the countryside edge. The impact of the artificial geometry of buildings or other structures breaking the skyline should be minimised where the rolling downland landscape character exists and needs to be maintained. *Figure 1.14* shows how twentieth century development in Friston has led to the skyline being broken by roofs in a way that harms the downland landscape character.



Figures 1.13, 1.14 and 1.15: An example of a more abrupt relationship with the countryside edge at Friston, more typical of the eastern downland. Contrasting development responses to contours are shown at A (Michel Dene Road) and B (Summerdown Lane).



Figure 1.14: Long, well-vegetated rear gardens back onto the countryside on the eastern edge of Friston at Summerdown Lane.



Figure 1.15: Countryside edge development fronts onto Downs View Lane, which has appropriately simple rural character and follows the contours. This is a successful settlement edge.

C.1.8.5 Development should be guided by topography and contours, rather than creating boundaries that are unsympathetic. Mid twentieth century development at Summerdown Lane followed an arbitrary straight line which cut across the steep contours, exacerbating the abruptness of the settlement edge, albeit this has partly been mitigated by the inclusion of long back gardens affording opportunities for generous vegetation. Development at Michel Dene Road and Downs View Lane, in contrast, followed the contours, creating more successful settlement edges, more respectful of the downland landscape character.

C.1.8.6 *Figure 1.16* shows how this development fails to provide an appropriate transition to the countryside on the southern edge of Midhurst. Development up to three storeys in height, with uncharacteristic and unsympathetic materials (*Figure 1.17*), located right up to the boundary with minimal green infrastructure, vehicle parking located on the boundary and with blank flank ends (*Figure 1.18*) all contribute to an inappropriately over-intensive settlement edge.



Figure 1.17

Figure 1.18

Figure 1.16: Late twentieth century development on the southern edge of Midhurst.



Figure 1.17: Inappropriate building height, form and materials on countryside edge.



Figure 1.18: Development stops too abruptly, turns its back on the countryside and fails to provide an appropriate transition.



Figure 1.19: Rear gardens backing onto countryside often lead to garden waste dumping which harms biodiversity and can kill mature trees and/or lead to encroachment.

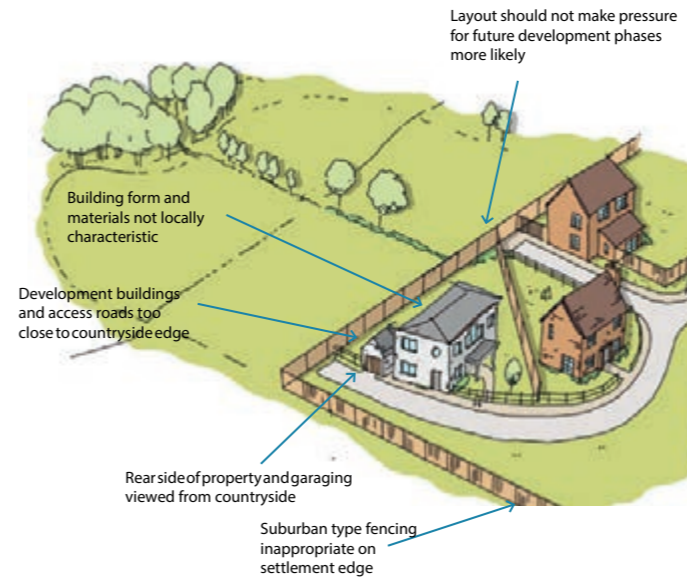


Figure 1.20: Poor countryside edge layout.

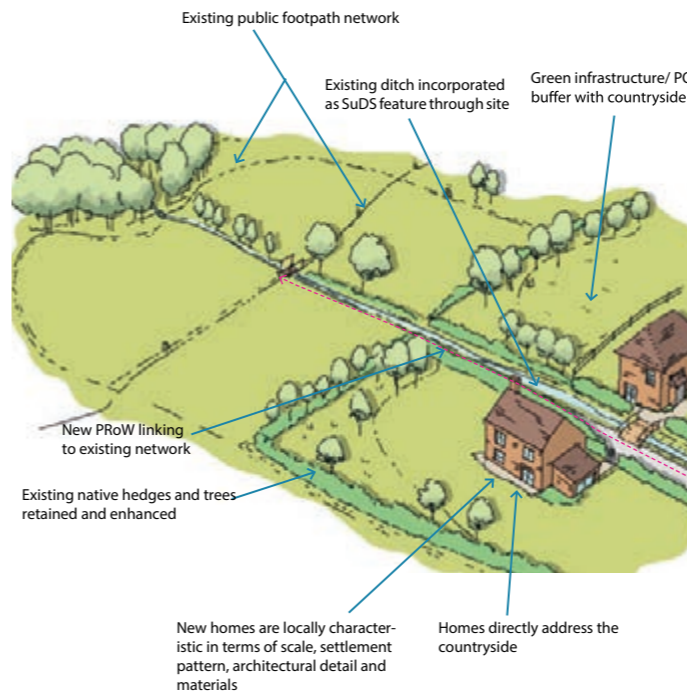


Figure 1.21: Example of good countryside edge principles.

See also [11.2 Edge of Countryside Boundaries](#).

LANDSCAPE-LED HINT

Some twentieth century developments fail to respond well to the countryside edge and do not follow a landscape-led approach to design.



- 1 Development has been allowed to run hard up against countryside boundary with no space for vegetative transition.
- 2 Unprepossessing building design fails to reference the best of local architecture and materials or enhance the beauty of the National Park.
- 3 Suburban character fences, back garden sheds and clutter create visual harm in this location.

C.2 CHARACTER

C.2.1 ENHANCING LOCAL CHARACTER

KEY DESIGN PRINCIPLES

- The character of a place should be identified and described. New development needs to conserve and enhance this character.
- The use of standard house types that take no account of local character, bad imitation of traditional design or simply replicating mediocre design in the locality will not be acceptable.

C.2.1.1 The **National Design Guide** indicates that two of the ten characteristics of good design are that it should respond to existing local character and identity, and value heritage, local history and culture.

C.2.1.2 The conservation and enhancement of the existing character of an area is an essential requirement for making an attractive and successful place. Applicants will need to demonstrate that they understand the site context and can describe its character. They should also be able to show how they have been influenced by the local building traditions, use of materials, etc., which characterise the part of the National Park in which their proposal is situated.

C.2.1.3 The **South Downs Landscape Character Assessment (LCA) 2020** for the whole National Park and **Local Landscape Character Assessments**, covering all parts of the National Park, provide invaluable local information on landscape character, which should be supplemented by an understanding of character at a finer grain on the scale of the site and the more immediate context.

C.2.1.4 More stringent restrictions on the type and nature of development in **Conservation Areas** are set out in section **C.3** and are also often contained in **Conservation Area Appraisals** prepared by the Authority. Some locally specific guidance such as **Village Design Statements** may be available and should be used to inform design in those areas.

C.2.1.5 Respecting character will not be achieved successfully with an excessive variety of architectural

styles within new development, as this results in a contrived approach. Character and identity will be best served where it is clear that the local heritage, history and culture are being responded to.

Character might be enhanced with either:

- new buildings which have a traditionally-inspired style or
- with high quality contemporary architecture which complements the existing character.

Equal care will be needed in designing spaces between buildings that are attractive, have a clear purpose, are distinctive, and complement and enhance the best of the existing character of the area.

C.2.1.6 The following figures show examples of the many different areas with positive characters in the National Park.



Figure 2.1: West Sussex farmstead, Sullington.



Figure 2.2: Open countryside with scattered settlements.



Figure 2.3: The Market Square, Petersfield.



Figure 2.4: Lewes town centre rising up the hill



Figure 2.5: Medieval town centre character in Midhurst.

C.2.1.7 Each site has its own character, which, with green field sites in particular, may largely consist of semi-natural landscape elements and features. New development should work with those elements and celebrate that character. *Figure 2.6* shows how the way that new development is designed can enhance local character, which in this case includes the topography of the site.

C.2.1.8 Where topography is a significant part of a site's character, the potential to use retaining walls integrated into buildings to settle structures into their landscape should be explored, in favour of insensitive levelling of land to create uncharacteristic plateaus.



Figure 2.6: New student residential units in West Dean step down the slope emphasising and enhancing this aspect of the site's character.

LANDSCAPE-LED MINI-CASE STUDY

The architecture of the new Fridays housing scheme in East Dean has been influenced by the following aspects of local building character:



Existing E Dean character

- ❶ roof pitch
- ❷ materials
- ❸ scale & form



New development

- ❶ window style and timber frames
- ❷ exposed rafter feet
- ❸ front doors & canopies
- ❹ locally characteristic boundary structures

C.2.2 RESTORING POSITIVE CHARACTER**KEY DESIGN PRINCIPLES**

- a. Opportunities for new development to enhance character should be taken.
- b. Understanding of the landscape character (including townscape) of the site and beyond, needs to be demonstrated. The character of the development should be clearly informed by this.
- c. In larger developments the design should avoid inappropriate repetition and the feeling of 'an anywhere place'.

C.2.2.1 Where the immediate surroundings of development sites exhibit very little existing positive character, (often, for instance, where there has been loosely controlled twentieth century development) the emphasis will be on producing new high quality and distinctive places and restoring positive character.

C.2.2.2 A site cannot have 'no character'. There will still be aspects of the site character (such as its topography or its history) and the best of the local character beyond the immediate vicinity, which can be used to inspire and create positive development.

C.2.2.3 Where there is no immediate positive built form, inspiration should be taken from the nearest positive examples, depending on what is most appropriate to the site in question, using character studies such as

- villages in the near vicinity
- other settlements in the same landscapes, e.g. another spring-line village or another chalk valley settlement
- from the best of town street development

Larger developments

C.2.2.4 In larger developments, some repetition may be appropriate, (such as where a traditionally inspired terrace of similar houses is being deliberately produced as one coherent whole) as well as providing some design consistency across a development. Some variety, in built form, layout, style and materials may be necessary and distinct 'character areas' may be appropriate. These must be rooted in the different site characteristics, such as existing positive development, topography, views out, natural features etc.

C.2.2.5 The design should avoid both excessive repetition, which leads to monotony, and too much variety that can be discordant and appear arbitrary.

Nor should it create the feeling of a scheme that has not responded well to its context, where development fails to enhance local character or provide a series of attractive places. The result of these negative approaches is an 'anywhere' development which feels like an alien add-on to a village or town.

LANDSCAPE-LED MINI-CASE STUDY

The new Dundee House older persons' housing scheme in Midhurst is landscape led. The net effect is a development that enhances the character of this part of the town.



Site in 2019

Prominent site. Poor immediate character: petrol station, supermarket car park, 20th century houses and police station



Sketch of development 2020

- ❶ Used traditional built form and styles found in Midhurst (Victorian & Georgian)
- ❷ Urban grain and streetscape repaired
- ❸ Midhurst materials
- ❹ Simple boundary treatments reflect local character

C.3 DEVELOPMENT IN CONSERVATION AREAS

KEY DESIGN PRINCIPLES

Development proposals should:

- preserve** or **enhance** the character and appearance of the conservation area.
- avoid massing or building height which is overly dominating for the site and its context.
- relate or respond positively to the built heritage predominating in the Conservation Area, so that the new development can properly be seen as preserving or enhancing the character and appearance which led to the area's designation.
- respond to key views into, through and out of the Conservation Area.
- reference the building traditions of the settlement and, where appropriate, fit sympathetically into the existing streetscape.
- avoid the use of uPVC windows, fascia cladding or other assertively synthetic materials, even if attempts are made to emulate traditional details.
- if traditional materials are proposed, observe local craft traditions and avoid, short-cuts, such as flint-block construction.
- where possible, remove buildings or structures whose aesthetic appearance are harmful to the overall character and appearance for whose protection the area was designated.
- minimise the negative impacts on heritage assets, including conservation areas, listed buildings, historic parks or gardens or scheduled monuments and their setting.

C.3.0.1 The **National Design Guide** indicates that the first three (out of 10) characteristics of good design are that it should: (i) understand and relate well to its site, its local and wider context; (ii) value heritage, local history and culture; and (iii) respond to existing local character and identity. Under the **National Planning Policy Framework (NPPF)**, conservation areas are designated heritage assets and their conservation is to be given great weight in planning decisions.

C.3.0.2 There are 167 Conservation Areas in the South Downs National Park, ranging in size from substantial parts of towns like Lewes, Petersfield, Petworth and Midhurst, through to many rural villages and settlements, right down to a Victorian water pumping station in the Meon Valley. Each one is special in its own way and their design needs will also vary accordingly.

C.3.0.3 Under the Planning (Listed Buildings and Conservation Areas) Act 1990, conservation areas are designated to recognise and protect the special interest and character to be found and enjoyed within them. Their purpose is to celebrate these characteristics and ensure that they are '**preserved or enhanced**'.

C.3.0.4 The broad guidance in this document applies to all parts of the National Park, including conservation areas and areas within the setting of listed buildings and ancient monuments. As with development everywhere in the National Park, design will need to demonstrate a landscape-led approach.

Heritage Assessment

C.3.0.5 For any development in conservation areas, including works to existing buildings or structures, there will always be particular considerations relating to the need to **preserve** or **enhance** the Conservation Area's architectural or historic character and appearance. For this reason, all potential development in, closely adjacent to, or affecting the setting of a Conservation Area and similarly any proposed works to a listed building, historic parkland/garden or scheduled ancient monument, or affecting their setting, requires the applicant to undertake

a **heritage assessment**. See **SDNPA guidance** on Heritage Statements for writing these.

C.3.0.6 There is a natural and proper assumption that the overall character and appearance of a conservation area should not change very significantly over time.

C.3.0.7 However, few conservation areas are entirely consistent in character within their boundaries and some development or redevelopment opportunities may be found. It is worth checking if there is a recent **conservation area appraisal** for the settlement as these documents sometimes identify such opportunities, especially if they are prominent in important street scenes.

C.3.0.8 Whatever new work is proposed, it must respect its context and contribute to the character of the conservation area as defined when it was designated.

C.3.0.9 For significant schemes it is advisable to seek pre-application advice, specifically requesting the involvement of a SDNPA Conservation Officer.



Figure 3.3: A Grade 2 listed building refurbishment and a contemporary café extension enhance the Selborne CA at the Gilbert White Museum.

Further advice on conservation areas can be found on the **Historic England** website.

See also Local Plan Policy **SD15**. Conservation Areas.



Figure 3.1: A successful preservation of the Fernhurst Conservaton Area character with a side extension on the right hand end of a terrace.



Figure 3.2: The Depot, an enhancement of the Lewes CA with a high quality contemporary scheme and a re-use of the existing depot building.

C.4 HOUSEHOLD EXTENSIONS

General Principles

C.4.0.1 Domestic extensions must be designed to respect the size and character of the house and the existing character and appearance of the street and the wider area. The scale, massing, siting, fenestration and materials of any proposal are therefore key considerations. Some extensions, such as porches and conservatories, may not need planning permission (see **SDNPA guide** to permitted development) but should still follow the landscape-led approach to design by responding to context and the local character.

A poorly designed proposal can have a great impact on the occupiers of adjacent or nearby properties and the landscape.

C.4.0.2 The following guidelines indicate the issues which the Authority will take into account when deciding whether to grant planning permission.

C.4.0.3 Whether the extension is at the front, rear or side, it should be designed to be:

- subservient in mass, bulk and form to the existing property
- sympathetic to its surrounding and adjacent properties
- visually integrated with the existing building
- designed to minimise impact on neighbouring amenities (overlooking, overbearing, privacy)

C.4.0.4 An extension which significantly alters the shape or character of a house is not usually advisable, the aim of the design should be to allow the house to maintain its original appearance and predominance over an extension. In other words, the extension should be subordinate to the main house.

C.4.0.5 A number of areas have produced **Village Design Statements** which provide local guidance on extensions.

C.4.0.6 As with all design in the National Park, household extensions (and conversions and refurbishments) will be expected to follow a landscape-led approach based on the landscape evidence (which includes townscape and materials) albeit in a proportionate manner. Householder applications also need to respond to the Ecosystems Services policy SD2 which is detailed in the **Ecosystems Services Technical Advice Note for Household**ers.

C.4.1 ROOF EXTENSIONS TO EXISTING RESIDENTIAL BUILDINGS



KEY DESIGN PRINCIPLES

- a. Dormers may not always be appropriate facing the street where this is not already locally characteristic.
- b. A dormer should not dominate the roof, but should complement the existing features of the house, and roof in particular, in terms of proportion, form, size, position and detailing.
- c. Dormers should normally line up with the existing windows, and be kept away from the ridge and edges of the roof in order to provide a visual frame.
- d. Roof windows should not protrude significantly from the roof profile and should be evenly spaced. They should not dominate the roof.
- e. The Dark Night Skies policy may make roof windows difficult to accept in certain locations but if acceptable, mitigation measures in line with the **Dark Night Skies TAN** will be expected.

C.4.1.1 Changes to the shape of a roof need to be carefully considered. In the case of semi-detached properties or streets with an attractive and very uniform roof design, significant alterations to the roof are generally unacceptable.

C.4.1.2 Dormer windows can be difficult to incorporate into a roof without adversely affecting the appearance of the dwelling and the street, particularly if too large. Eyebrow dormers or mansard roof dormers may be more acceptable. Where dormers or roof windows facing the street are already locally characteristic, it is more likely to be acceptable than where they are not.

C.4.1.3 Where extra headroom is not required, roof windows or skylights offer a simple, economic method of lighting the roof space. Roof windows that protrude significantly above the roof plane are generally discouraged as they look clumsy and their size, number and positioning needs to fit well with the roof and the rest of the building.

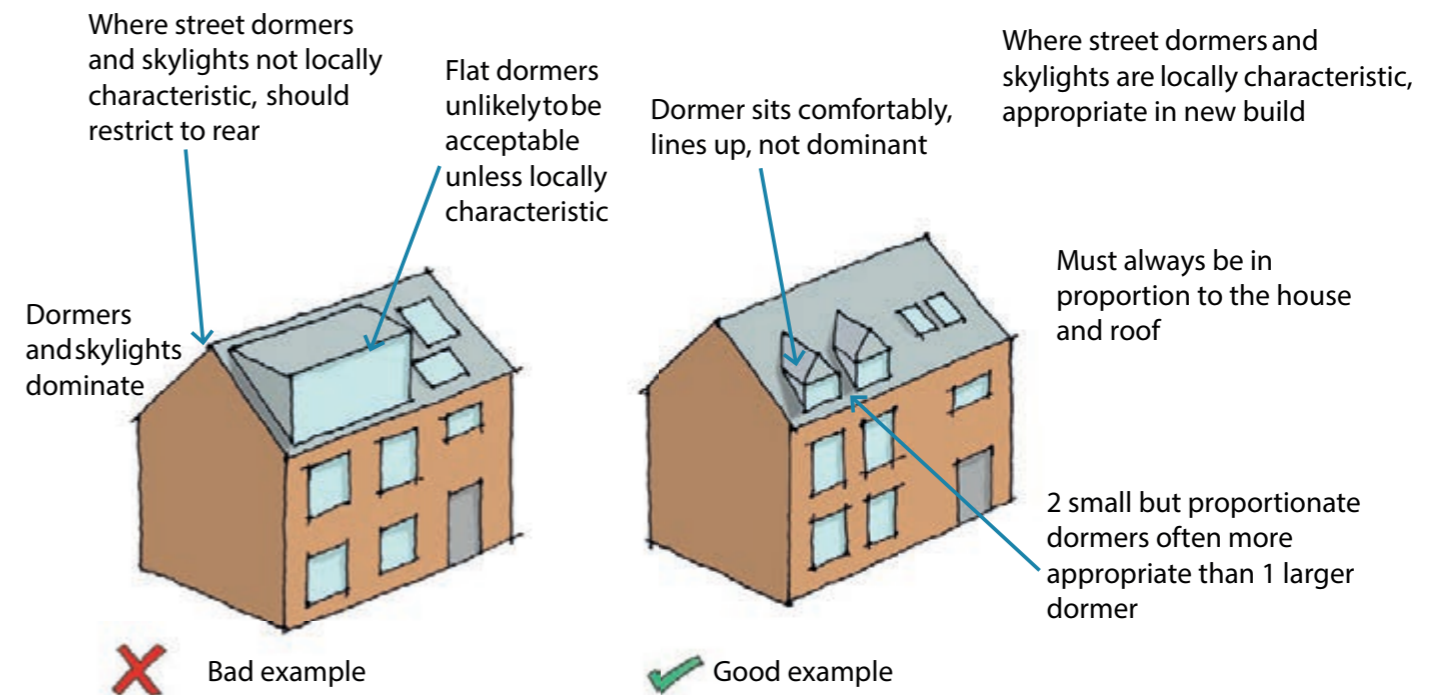


Figure 4.1: Design principles for dormers and skylights.

LANDSCAPE-LED HINT

Establish if street-facing dormers locally characteristic before proposing in new build



① Long tradition of dormers facing the street

In a hypothetical new development proposal in the same Lewes street, new dormers facing the street, following the same general proportions and detailing, are more likely to be appropriate, given that this is locally characteristic, than elsewhere where there is not this tradition.

C.4.2 FRONT, SIDE AND REAR EXTENSIONS TO EXISTING RESIDENTIAL BUILDINGS

KEY DESIGN PRINCIPLES

- a. Single or two storey side or rear extensions should be in scale and balance with the whole of the house.
- b. All extensions should comply with the **BRE Daylight and Sunlight best practice guidance** to avoid harming a neighbour's daylight and sunlight provision.
- c. Extensions should be subservient to the main building.
- d. Side extensions should normally be set back from the main building to retain its dominance; avoid a mismatch of new and old materials; and (for semi-detached houses) maintain the original main building symmetry.

Front Extensions

C.4.2.1 The design and appearance of the fronts of houses, and the distance between buildings and the street are important aspects in defining the character of residential areas.

Generally, only modest front extensions, which are in keeping with the character of the existing house, will be allowed, e.g. garage and porch extensions.



Figure 4.2 Garage extensions should not obscure the front ground floor elevation of the main building.



Figure 4.3: Porches and canopies should reflect the character of the original house.

Side Extensions

C.4.2.2 Side extensions should take account of the spaces between houses and whether this is an important feature through the street. Two-storey and first floor side extensions should normally be set back from a communal side boundary to ensure visual separation from adjacent dwellings and to prevent the creation of a 'terracing effect' where this would be contrary to the local character.

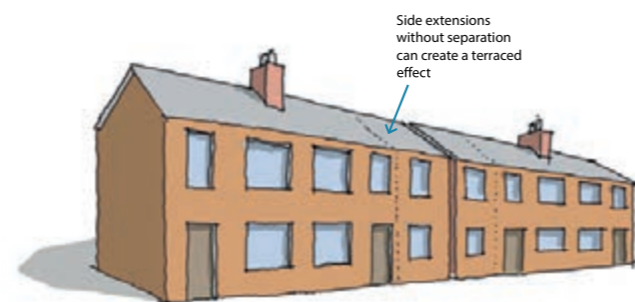


Figure 4.4: A series of side extensions without separation between neighbours can create an undesired terraced effect.

3.5
Side Extensions



Figure 4.5 Extension set back from neighbour to preserve the character of separated houses.



Figure 4.6: Extension should normally be set back from main house to retain latter's form and dominance and avoid mismatch of materials, except where appearance and symmetry can be improved.



Figure 4.7: A recent infill development in Hambleton between existing buildings uses matching materials while the setback helps preserve the character of separated houses.

C.4.2.3 Two storey extensions to corner properties will need to take into account the visual impact upon both related streets and the relationship with other buildings.



Figure 4.8: Keeping the ridge and eaves of an extension lower than the main building and maintaining the same roof pitch will help the original house maintain its dominance.

Rear Extensions

C.4.2.4 Extensions to the rear of a property can still affect the character of a property albeit this could be less obvious from the public realm. When extending a semi-detached or terraced property it is important to follow any established pattern of extension where it is a positive precedent. For example, in terraced houses the back addition is a very traditional form which, when paired with a similar extension on a neighbouring house can appear to be part of the original design. This type of extension can also increase the privacy to rear gardens.



Figure 4.9: Sympathetic rear extension.



Figure 4.10: Traditional paired outshot extension to rear of terraced houses.

C.4.2.5 New rear extensions will be considered in terms of their impact on the character and appearance of the existing dwelling and any impact on neighbouring amenity, landscape character and dark night skies.

Roofs

C.4.2.6 The appropriate design of the roof is vital to any extension and the Authority would normally expect a design which matches that of the main property or which could be successfully integrated without detracting from the overall appearance of the dwelling.

C.4.2.7 Extensions often have shallower pitches than the main roof. Flat roofed extensions at first floor level will normally be resisted and only be accepted on single-storey extensions where other options (e.g. pitched, ridge or semi pitched) have been discounted. Extensions to the roof should usually be set below the original roofline, and should avoid unbalancing the appearance of the building, which may be harmful to the visual quality of the area. Flat, green roofs may sometimes be acceptable, depending on context and main building style. See also **C.13.2 Roofs**.

Windows

C.4.2.8 Windows are a critical component in the design of any new development and should, wherever possible, be of complementary scale, style, materials and proportion to the originals. Lower status extensions to traditional buildings often have windows of smaller scale and more utilitarian design but will share a similar design approach. Replacing traditional windows in a historic building with uPVC double glazing will not normally be acceptable.

C.4.2.9 Windows which are close to and overlook neighbouring properties, including private garden areas are normally discouraged because of the loss of privacy. However, in some instances this may be overcome by obscure glazing and high level non-openable windows, as well as the internal layout of a proposal whereby such windows could be to bathrooms for example. See also **C.13.3 Windows**.

Daylight checking for extensions

C.4.2.10 On the window wall elevation an angle is drawn diagonally down at 45 degrees from the near top corner of the proposed extension. An angle of 45 degrees is then drawn back from the end of the extension toward the window wall. If the centre of the main window of the adjoining property lies on the extension of both these lines, then there is a risk that it will cause a noticeable reduction in daylight received by the window and in such cases a full daylight assessment will be needed.

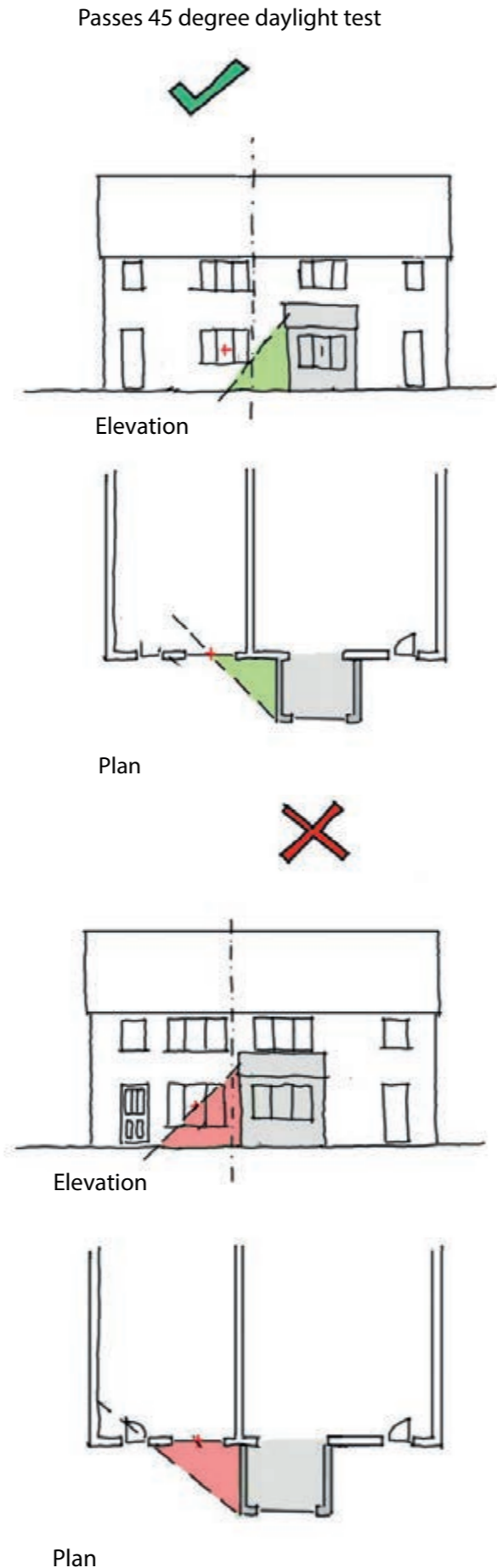


Figure 4.11: Daylight checking for rear extensions 45 degree test.

C.4.2.11 Guidance and tables are provided in the 2011 BRE report **Site Layout Planning for Daylight and Sunlight – a Guide to Good Practice**.

This guidance should be used if there is doubt about the acceptability of proposals with regard to daylighting after the tests described have been carried out.

Applicants should seek guidance on compliance with **Local Plan Policy SD30/SD31** and see the SDNPA **Extensions and Replacement Dwellings TAN**, as well as the **Ecosystem Services TAN for Householders**

LANDSCAPE-LED HINT

Character of rear of building should inform design of rear extensions



Rear extensions, Winchester

- 1 Stepped rooflines is a response to site topography reinforced by extensions.
- 2 Locally characteristic brick helps integrate the contemporary style better than neighbour's render.
- 3 Not seen from the street so more design freedom & contemporary style acceptable.

C.5 DEVELOPMENT TYPE

C.5.1 SINGLE DWELLINGS

KEY DESIGN PRINCIPLES

New dwellings should contribute positively to the local settlement pattern, then respond to its built context.

C.5.1.1 Most of the design principles set out in Part C of the document apply to single dwellings.

The following key design issues apply to single dwellings,

- orientation of buildings (see [C.1.3](#))
- character (see [C.2](#))
- natural surveillance (see [C.7.5](#))
- parking (see [C.8.1](#))
- services and ancillary structures (see [C.8.2](#))
- green and blue infrastructure (see [C.9](#))
- residential amenity (see [C.10](#))
- residential boundaries (see [C.11.1](#))
- materials (see [C.12](#))
- architectural detail (see [C.13](#))
- social and environmental sustainability (see [C.14](#))
- dark night skies (see [C.15](#))

C.5.1.2 How the new dwelling contributes to wider considerations of layout, such as respecting the perimeter block (see [C.1.6](#)) or helping to animate the street (see [C.1.7](#)) are also pertinent.

C.5.1.3 A new home needs to contribute positively to the settlement pattern and respond to its built context. Where a new home is part of an established settlement, it needs to be a positive addition with a landscape-led design approach and evidence driving the best design solution as well as showing that local character and history are being respected and responded to.

C.5.1.4 Where a new home is in a more isolated situation (perhaps a replacement rural dwelling) its relationship with the surrounding landscape will have a bigger influence on determining the most appropriate design solutions. In both cases the landscape-led approach to design will be expected as shown in [Small Scale Development](#).

C.5.1.5 Single dwelling applications also need to respond to the Ecosystems Services policy SD2 which is detailed in the [Ecosystems Services Technical Advice Note for Householders](#).

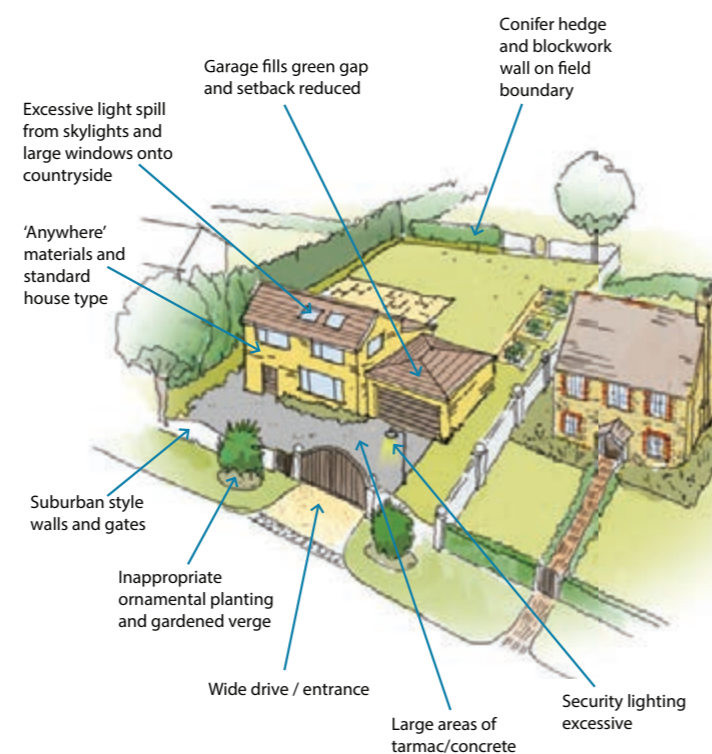


Figure 5.1: A poor example of a new house development, showing disregard for landscape context and local character.

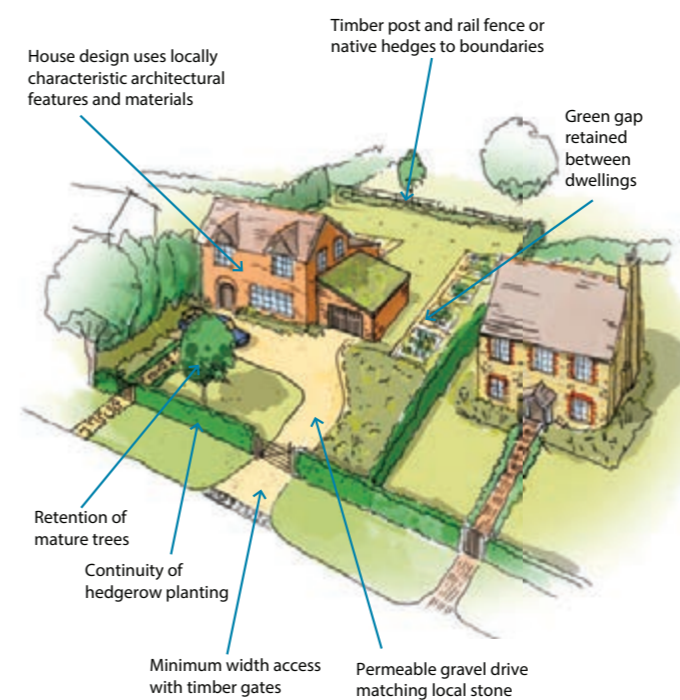


Figure 5.2: A good example of a new house development, following a landscape-led approach to design respecting landscape context and local character.

C.5.1.6 Case Study 4: Farmstead Conversion sets out how a small scale residential development has successfully followed the landscape-led design approach.

C.5.2 FARMSTEAD DEVELOPMENTS

KEY DESIGN PRINCIPLES

- a. A [Farmstead Assessment](#) should be undertaken to determine a site's sensitivity to change.
- b. The character of the farmstead (its spaces, routes and buildings) should be considered before deciding upon the most appropriate use.
- c. The development should strive to enhance the farmstead character.
- d. The proposed use should be compatible with public access and shared spaces where they exist.
- e. Over-domestication of historic farmsteads will not be supported.
- f. All new development using a farmstead typology should reflect the essential characteristics of traditional local farmsteads.
- g. The shared working character of spaces should be conserved and key open spaces should not be divided or uncharacteristically enclosed.
- h. Where possible, the visual impact of car parking should be minimised, and the design of parking and access areas should respect the farmstead character.

A Site's Capacity for Change

C.5.2.1 Changes to farm buildings, spaces or routes are often part of farm diversification schemes. The type of new use for a building can affect the whole farmstead. For example, expectations of domestic uses include private spaces, garaging etc. Not all historic farmsteads can tolerate the same amount or type of change. Allowing the farmstead's character to determine the appropriate use is the best way to conserve and enhance the existing landscape.

C.5.2.2 The Farmstead Assessment undertaken should follow Historic England's [Farmstead Assessment Framework](#). This complements the 'landscape-led approach' and should form part of design stages 1, 2 and 3 for [Small Scale Development in Part B](#). It helps guide sensitive changes within farmsteads. The farmstead should be understood within the context of the wider landscape and farming.

C.5.2.3 There is supporting guidance for both understanding and changing buildings, whole farmsteads and small settlements within the [Historic England Report Library](#). Applicants should use this evidence as part of the landscape-led approach to determine what a sensitive change might look like.

Routes: roads, tracks and paths

C.5.2.4 Changes to farmsteads should be designed to protect and enhance routes, access points and rights of way. Public rights of way (PROW) diversions can negatively affect landscape character and people's experiences.



Figure 5.3: An example of a PROW running through a farmstead near Lurgashall.

Buildings and Spaces

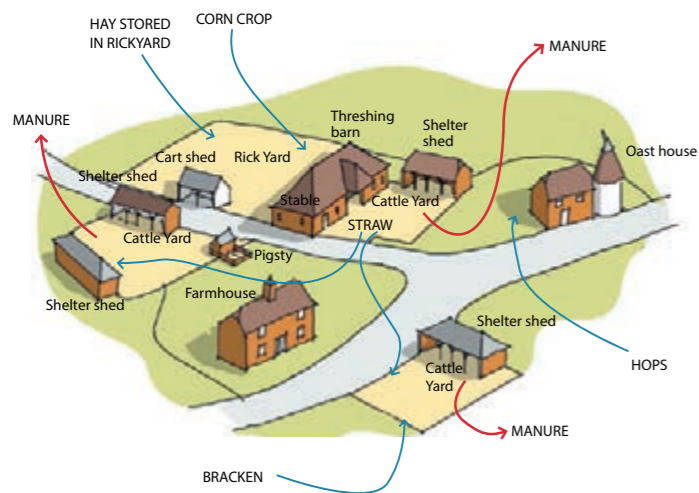


Figure 5.4: Farmstead schematic showing how historically, buildings and spaces between them related to farming function.

C.5.2.5 Some buildings may lend themselves to certain new uses better than others. So a careful understanding of character and original function is needed prior to taking decisions about change (See Figure 5.4).

C.5.2.6. For example, buildings for arable processing are very difficult to convert due to the lack of openings and creating new openings for windows and doors often undermine the building's character. Open sided shelter sheds, usually have large openings to one side, often facing a shared space. As a result, these may not suit a residential use, but could be re-used or adapted for other purposes.



Figure 5.5: Successful conversion of steel framed open cattle shed in Devon.

C.5.2.7 This means some changes or conversions could conflict with character and this would not be supported (See Historic England's **Adapting Traditional Farm Buildings**).

C.5.2.8 Yards and spaces tend to have a functional working character used for storage, animals and machinery. Therefore, new vegetation/trees within yards should be avoided unless the benefits outweigh the negative effects. Private spaces within yards, such as front gardens, should be avoided, as these also conflict with farmstead character.

Enclosure

C.5.2.9 Generally, working or shared spaces should not be enclosed to create private spaces. Any surface treatment should be simple, understated and functional.

C.5.2.10 Fencing, or enclosing rights of way, through or close to a farmstead negatively affects the quality of the user experience and should be avoided where possible. Seeking a use for the farmstead compatible with public access is therefore important. Adding suburban or domestic style gates or pillars to farm entrances should be avoided. Where enclosure patterns are characteristic, they should be agricultural in type as opposed to residential. For example, simple post and wire fences.

Buildings and Spaces

C.5.2.11 Historic farmsteads have been characterised (see **South East England Farmsteads Guidance**) and their plan type (the pattern of buildings, spaces and routes) strongly relate to landscape. Different landscapes provide different conditions leading to different farming practices (pastoral, arable, or mixed for example). Plan types usually relate to local conditions and farming practices.

Farmstead Typology for New Build Development.

C.5.2.12 A farmstead typology is not normally the appropriate approach for new residential development. An exception might be where buildings relate to significant land management uses and achieve an authentic response to local farm character. See also **Case Study 4: Farmstead Conversion**

LANDSCAPE-LED HINTS

Identify and retain essential yard character

A farmstead development into café & shop (Hauser & Wirth, Somerset)



- 1 Uncharacteristic features removable
- 2 Retain characteristic buildings & re-use openings
- 3 Use simple and robust surface materials
 - Minimum of design clutter
 - Avoid private divided spaces

C.5.3 NEW AGRICULTURAL BUILDINGS

KEY DESIGN PRINCIPLES

The design of New Agricultural Buildings should:

- a. Be of a scale necessary for the proposed function.
- b. Reduce visual impacts by careful siting, taking into account existing farm buildings, topography, views and existing vegetation.
- c. Integrate with the landscape by considering scale and form, including relative scale to neighbouring buildings; roof pitch; the cumulative impact of extensions, breaking up roofs and walls with servicing details and apertures.
- d. Integrate with the landscape by careful selection of materials and colours reflecting context and practical uses and favouring dark colours associated with built form.
- e. Re-use existing tracks and spaces serving them and minimise extent and visual impact of new access tracks.
- f. Use locally characteristic landscape elements to help integrate them into the landscape, while avoiding screen planting solely to hide new buildings.
- g. In historic farmsteads, be demonstrably informed by following the Historic England **Farmstead Assessment Framework** to ensure a landscape-led approach is taken.

Introduction

C.5.3.1 Some new developments on farms are classed as 'permitted development' and do not need planning permission. More details on this can be found in the SDNPA guidance *A Farmer's Guide to Agricultural Permitted Development Rights* in the **SDNPA Guide to Permitted Development**.

C.5.3.2 Whilst this document provides general design advice for a broad range of farm structures, it does not cover all potential types of farm building such as farm diversification schemes, agricultural workers' dwellings or waste management proposals. Specific advice about these should be sought from the Authority planning department using the **pre-application advice service**.

C.5.3.3 Traditional farm buildings would often have been built incrementally over time, extending or complementing existing clusters of farm buildings and using a limited palette of traditional materials, such as local stone

and brick, timber (for construction and cladding) and very often roofed in red clay tiles and more latterly in corrugated iron. These buildings read as natural family members in a farmstead, together with farm houses and workers' cottages and continue to form valuable elements in the landscape.

C.5.3.4 Figure 5.6 illustrates some good attributes which help integrate the farm buildings into the landscape well.

- Farm buildings sit together in a cluster in a fold in the landscape.
- The large buildings are close to but do not over dominate the historic farmhouse.
- There is a hierarchy of buildings of varying sizes which frame working spaces – both are characteristics of farmsteads.
- Roof forms vary in height and orientation, avoiding any excessively large and monolithic ridgelines.
- Central barn extension roof reduced in height, avoiding monolithic roof form.
- Barn in foreground very simple and recessive in appearance.
- Vegetation allowed to grow around buildings to help integrate them in the landscape.

C.5.3.5 Modern agricultural practices have led to a tendency for larger span buildings and the use of modern materials such as steel, aluminium, concrete and cement fibre. These buildings can be industrial in appearance and can therefore alter the character of the farm, and have a significant visual impact on both existing farmsteads and the wider countryside. These impacts can be exacerbated by poor siting (relative to existing buildings and topography) and inappropriate design and choice of materials and colours.



Figure 5.6: A good example of how a collection of agricultural buildings integrate well with the landscape (Saddlescombe Farm).

C.5.3.6 Figure 5.7 shows a new agricultural building which is less successful in integrating with its landscape. The reasons for this include:

- Building isolated, away from other farm buildings, with a new, highly visible, dedicated access road.
- Green colour is a poor choice as it is less recessive than colours such as brown, grey or natural timber and its unnatural shade jars with adjacent vegetation.
- Roof material/colour is too reflective drawing the eye of the observer.
- The building could have been better integrated with the adjacent mature vegetation and with the planting of some locally characteristic trees



Figure 5.7: An example of a new agricultural building in Somerset which fails to integrate well into the landscape (somersestlive.co.uk).

Siting

C.5.3.7 Subject to operational requirements, the impact of a new structure can generally be reduced by:

- locating it in close proximity to existing working buildings within an existing group.
- avoiding an isolated freestanding structure within open countryside.
- responding to contours and the natural form of the land by fitting into folds or valley bottoms and avoiding platforms or exposed skylines or ridges.
- avoiding the crest of a hill, whenever possible, but, where unavoidable, siting it below the skyline and choosing colours carefully.
- locating so as to minimise impacts from the public realm and public rights of way.
- locating in close association with the existing vegetation, such as mature trees or hedges, (on sloping land) aligning a building parallel with the contours and setting the building into the slope in preference to raising floor levels.
- stepping down a slope (where different floor levels are operationally acceptable).

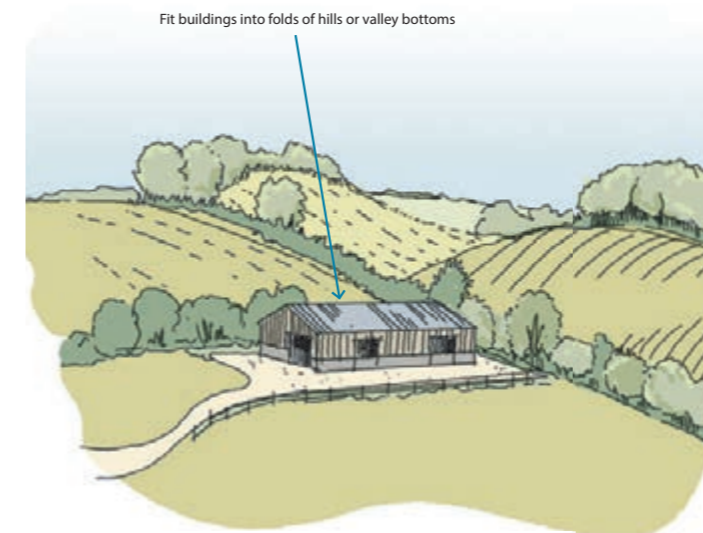


Figure 5.8: Locating new buildings appropriately in the landscape (Bromsgrove DC).

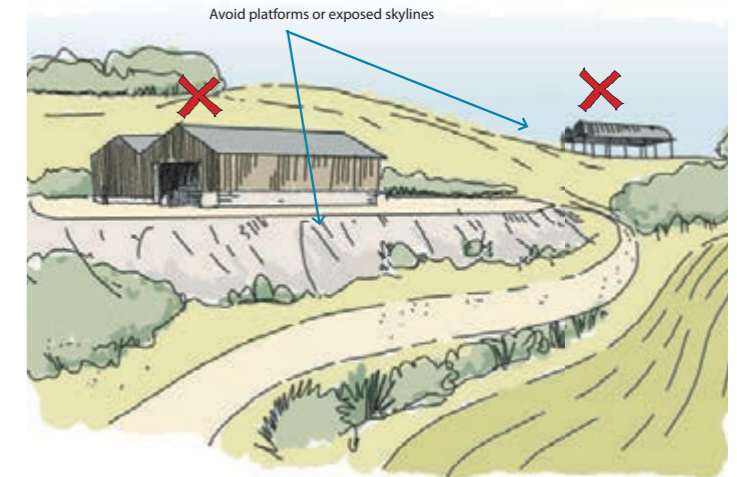


Figure 5.9: Poorly located new buildings in the landscape (Bromsgrove DC).

Scale and form

C.5.3.8 Subject to operational requirements, the scale and form of a new structure can help integrate it into the landscape by:

- not locating very large buildings close to smaller ones.
- using a multi-span building rather than a single span structure (reducing the overall height and creating a more varied and interesting roof line).
- using overhanging eaves to help reduce the apparent height of a building.
- matching, where possible, roof pitches to harmonise with those on existing buildings (unless a low pitched roof is needed to make a building less obtrusive).
- breaking up large expanses of roof and walling with well-designed and carefully positioned functional elements such as roof ventilators, gutters, downpipes, doors and windows (subject to the **Dark Night Skies** requirements).
- avoiding flat roofs (as they are not characteristic to the South Downs).
- favouring dual pitched roofs, (although mono-pitch can be suitable for smaller buildings or lean-to extensions to existing structures or to accommodate green roofs).
- avoiding the creation of excessively large buildings through significant extensions unrelieved by design techniques, (such as breaking the roofline and/or building line or stepping down a slope).

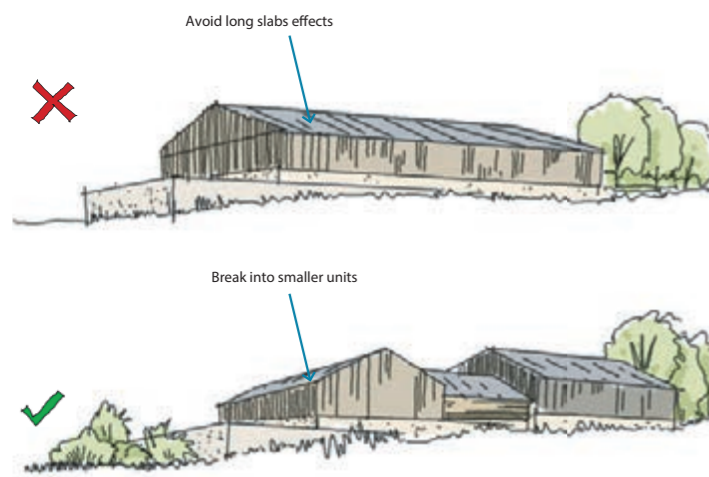


Figure 5.10: Reducing the visual impacts of large new agricultural buildings by considering rooflines and massing (Bromsgrove DC).

Materials

C.5.3.9 Materials need to be selected for durability, ease of maintenance and appropriateness for both the microclimate on the site and expected climate change.

C.5.3.10 Subject to operational requirements, the choice of materials of a new structure can help integrate it into the landscape by:

- limiting the range since too many contrasting finishes and an over-busy palette can create a cluttered appearance.
- avoiding large expanses of cladding of one colour which can increase the apparent size of a building.
- avoiding reflective materials.
- using traditional local materials where practicable.
- using timber where appropriate and locally characteristic.

Colour

C.5.3.11 The choice of colours for a new structure can help integrate it into the landscape by:

- considering the general colour palette of the surrounding context.
- favouring dark colours associated with built form (brown, black or dark grey) which are generally more acceptable as they complement the natural environment throughout the seasons and the different characteristics of daylight during the year.
- generally making the roof darker than the walls, as this has a recessive effect and brings out the building's form. Exceptions may be for operational reasons, to reduce solar heat gain or to reduce the impact on the skyline.
- harmonising where more than one colour is used, (see technical advice on this in BS5502 (Part 20) Building and Structures for Agriculture. General Design Considerations) which can help to unify a group of buildings.
- limiting more contrasting colours for detailing (such as red brick on a stone building) or to sub-divide large wall areas to reduce apparent bulk.
- avoiding reflective, gloss finishes.

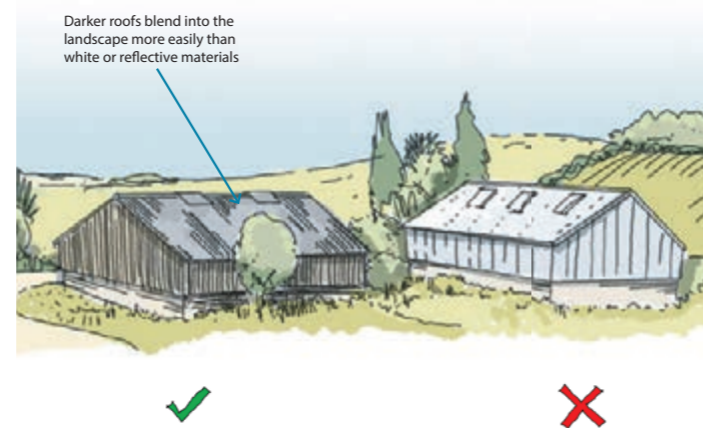


Figure 5.11: Good and bad colours for new agricultural buildings (Bromsgrove DC).

Farm Tracks

C.5.3.12 New access tracks to farm buildings should integrate into the surrounding landscape by:

- minimising the need for new access routes by siting new buildings on existing routes
- respecting, where possible, the historic patterns of land use and movement.
- maximising opportunities to rationalise access points by reducing multiple access points to a single, more acceptable point.
- routing new tracks behind buildings, mature field boundary hedges and trees and along contours.
- surfacing with darker, less visually intrusive, permeable materials, and where possible, a local stone.

Landscaping

C.5.3.13 New agricultural buildings can be better integrated into the landscape with the associated planting and construction of locally characteristic landscape elements. These can include native trees and hedgerows; walls in local stone; water features, such as drainage ditches and ponds; reflecting, where possible, what historically would have featured in the local landscape.

C.5.3.14 Complete screening of new buildings is not normally necessary, as they should be well-designed additions to the landscape.

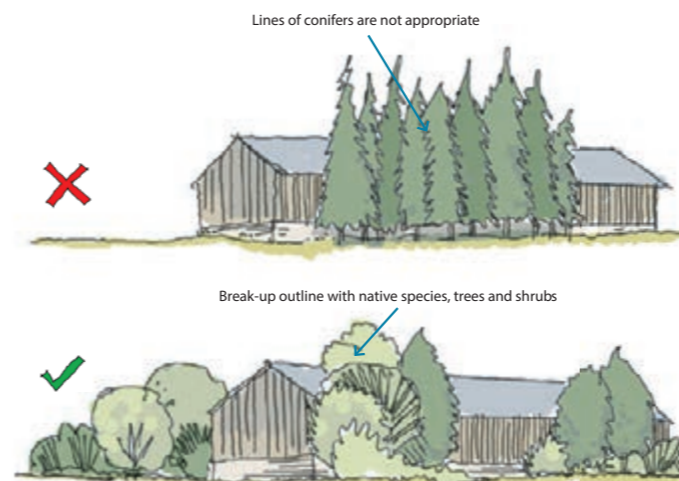


Figure 5.12: Using new or existing planting to help integrate new buildings into the landscape (Bromsgrove DC).

C.5.4 RURAL HOLIDAY ACCOMMODATION

KEY DESIGN PRINCIPLES

- a. The design of holiday accommodation should be rooted in its location, using the established local character and referencing characteristic materials and/or building styles.
- b. The holiday accommodation proposal must include a thorough understanding of the potential servicing, lighting, car parking and other associated indirect impacts.

C.5.4.1 The principle of well-designed holiday accommodation in appropriate locations can help people enjoy the **special qualities** of the National Park (as set out in the National Park's **second Purpose**). However, there is a risk that inappropriate holiday accommodation harms the very landscape that attracts holiday makers to the area.

C.5.4.2 Giving existing redundant rural buildings a new lease of life by converting them to holiday accommodation can be an attractive and sustainable solution (as in *Figure 5.14*), particularly if these buildings are of local built heritage significance. See **Historic England Guidance here and here**.

C.5.4.3 'Off the shelf' standard products, whose design is not landscape-led, (such as in *Figure 5.14*) is unlikely to be appropriate in the National Park.

C.5.4.4 Generally, the simpler the living conditions and the shorter the season (particularly where space heating is not required), the smaller the scale and density of layouts and the simpler the built forms, the easier it will be to successfully integrate holiday accommodation structures in a rural location (as in the landscape-led hint example on p.27).

C.5.4.5 Generally, simple, unfussy forms are likely to sit more comfortably in the landscape and low-key colours, ideally matching or complementing the landscape should be selected.

C.5.4.6 Modern or innovative materials such as oxidised steel, straw bales with lime render, rammed earth etc. may be acceptable depending on context and how well they integrate the development with the landscape (including existing buildings). Timber allowed to silver naturally may also be appropriate.

C.5.4.7 Servicing of the holiday accommodation including utilities, associated car parking, emergency access, service access, lighting, associated outdoor facilities, (such as cooking facilities, toilets and signage), and boundary treatments, all need to be considered for their cumulative impacts on the rural environment.

C.5.4.8 Holiday accommodation which requires planning permission will be subject to sustainable construction requirements in policy **SD48** and the **Sustainable Construction SPD** or **SD14** where converting a historic building.



Figure 5.13: A National Trust bunkhouse in a Victorian farm building conversion in Slindon.



Figure 5.14: Holiday chalets near Owlesbury.

See also Local Plan Policy **SD23** and **Camping and Glamping TAN**.

LANDSCAPE-LED HINT

Respect local character and minimise impacts

Cabins overlooking Loch Nell are only accessible by boat, foot or buggy, avoiding the need for access infrastructure. They nestle between mature trees, reducing their apparent size and visual impact. They have a simple form, lack associated clutter and use elemental materials (oxidised steel, timber and glass). All the above are responding well to this landscape's wild and tranquil character.



C.5.5 SHOPFRONTS

KEY DESIGN PRINCIPLES

New shopfronts should:

- Consist of a frame with a top, bottom and sides.
- Be in proportion to and pay due regard to the rest of the building.
- Consider colour choices carefully and use them to help emphasise the frame.
- Have signage designed as part of the whole, for ease of maintenance and attractive future replacement.
- Consider appropriateness of lighting as a principle and, if used, in its detail.

C.5.5.4 New shopfronts need to conserve and enhance the National Park's cultural heritage by following some good design principles, which are common to both traditional and more contemporary approaches.

Frame

C.5.5.2

- It is important to think of a shopfront as a 'frame' which presents the goods or services provided to potential customers in an attractive way.
- Traditional shopfronts usually use a loose classical idiom in forming the frame consisting of:
 - a stall riser for the base
 - pilasters for the sides
 - a fascia with cornice and perhaps console brackets for the top.
- This classical language is not essential for more modern designs but it is important that there are recognisable top, bottom and sides.
- Whatever design language is used, shopfronts are a great opportunity to introduce visual richness at eye level.

Context

C.5.5.3

- Shopfronts are rarely seen in isolation and their design should pay due regard to the rest of the building and be in proportion with it.
- Particular care needs to be taken with the top of the frame, which should not be overlarge.
- Where shops have spread from one building into the next, the treatment of the shopfront should respect that division.

Colour

C.5.5.4

- The frames should usually be a colour that contrasts with the rest of the building.
- Rich, dark colours give a visual 'strength' to the frame as it is visually holding up the rest of the building.
- Light colours can 'advance' elements of the frame, making them more prominent visually.

Signage

C.5.5.5

- Signage is always more successful if designed as part of the overall shopfront, not bolted on.
- Fascia boards that are designed to be unscrewed and temporarily removed for repainting are encouraged as it is possible to avoid the unattractive imposition

of a new fascia board on top of the old when a shop changes hands.

- Painted lettering, or carefully designed individual letters, present the best impression, plastic much less so. Vinyl lettering is reasonably effective but lacks the lustre and depth of properly sign-written signage.
- Fonts can send subliminal messages. Modern sans serif fonts can be more 'modern' and 'exciting' whilst serifed fonts are more 'traditional', 'long lasting' and 'high quality'.
- Illumination needs very careful thought. Is it really required? If so, how will it be achieved?



Figure 5.15: A simple traditional shopfront in Midhurst.



Figure 5.16: A more richly detailed traditional shop front in Arundel.

See **Historic England Guidance here** and **here**.

See also Local Plan Policy **SD52**.

C.5.6 NON-RESIDENTIAL DEVELOPMENT

KEY DESIGN PRINCIPLES

- Large non-residential buildings will need to use design techniques to reduce the building mass, or apparent mass, to integrate them successfully into residential areas characterised by more domestic scale buildings.
- Non-residential buildings should contribute positively to the public realm where possible.
- Non-residential development should maximise opportunities for GI and SuDS while minimising servicing and car parking impacts.
- Public buildings need to reflect their community function in positive ways.

C.5.6.1 To a much greater extent than residential buildings, non-residential buildings are characterised by their great variety in function, size and form. In addition, policy **SD48** and the **Sustainable Construction SPD** requires larger buildings (above 1000 sqm of floor space) to achieve BREEAM[®] excellent standard and provide an element of green roof, both of which will have some design implications.

C.5.6.2 The landscape-led approach to design, (set out in **Part B**), equally applies to non-residential and multi-residential development. How well access and vehicle car parking (see **C.8.1**) is integrated into the development and how green infrastructure (see **C.9**) is conserved and enhanced, can both be critical to its success.

Offices

C.5.6.3 Office buildings should address the street with main entrances and windows wherever possible and make particular efforts to provide animation to the ground floor street elevations.

Particular care should be taken with how office buildings are serviced, minimising impacts on residential neighbours (visual and noise impacts) and from the public realm (visual impacts of bins and the delivery access for example).

Industrial and Commercial Buildings

C.5.6.4 Industrial or commercial buildings can make a positive contribution to local character if their design follows the landscape led approach. Particular care

should be taken with how industrial buildings are serviced, (as above for offices).

Large industrial and commercial buildings and sheds in particular, will need to demonstrate and often mitigate their visual impact on the landscape of the National Park

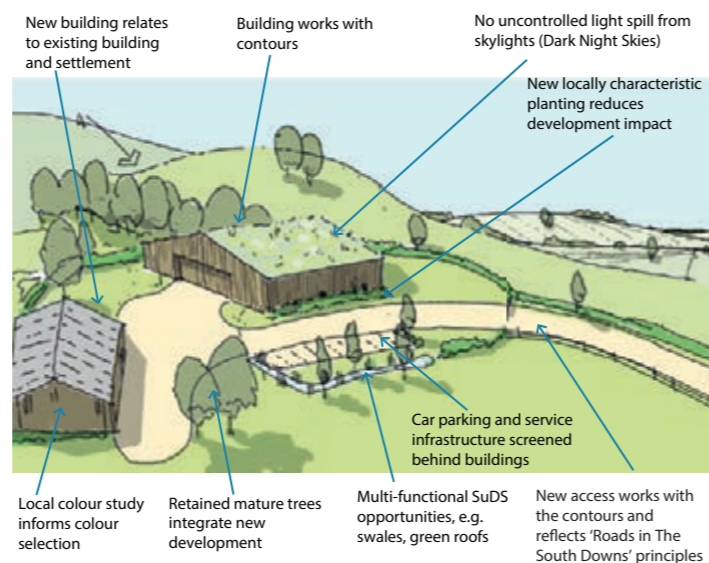


Figure 5.17: Scale, form, orientation, relationship with topography and material selection will all need careful consideration with commercial sheds.

Retail Buildings

C.5.6.5 Retail buildings should address the street with main entrances and windows wherever possible and make particular efforts to provide animation to the ground floor street elevations.

Particular care should be taken with how retail buildings are serviced, (as above for offices), including associated car parking.

Shop front design guidance will need to be followed where this applies.

See also **C.5.5** Shopfronts.

Public Buildings

C.5.6.6 Buildings with some public function have a special requirement to reflect this public role by creating high quality places for public interaction and enjoyment. These buildings include schools and colleges, council buildings, community centres, leisure centres, theatres, museums, art galleries and health buildings.

C.5.6.7 Public buildings should have a positive street presence where possible. The character of the journey from the street to the entrance is important. Attractive and

comfortable places to meet or wait for others should be part of the design brief for associated external spaces where possible.

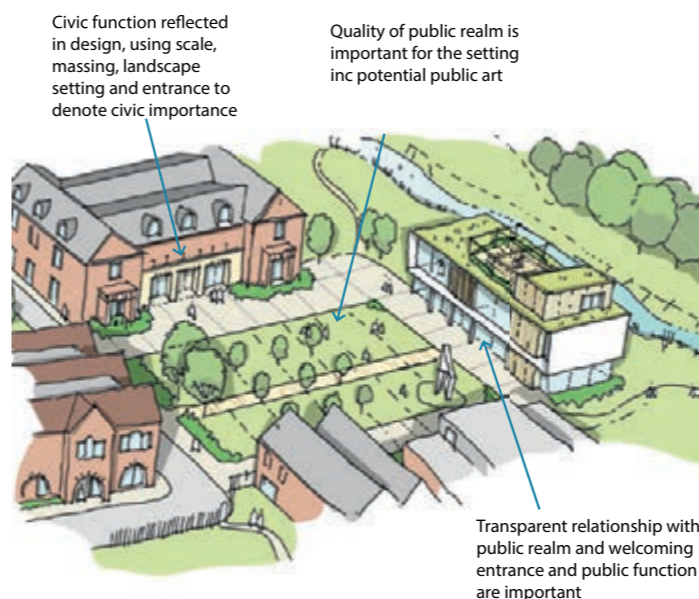


Figure.5.18: Some design principles for public buildings.

Mixed Development

C.5.6.8 In the right locations, the principle of mixed development is to be supported as this encourages activity across a larger part of the day, mitigates against single use zones in settlements and allows the potential for a reduced need for commuting.

C.5.6.9 The different functions and uses of buildings should be distinguished architecturally, while the whole development needs to be visually coherent and respect and enhance local character. The detailed guidance for non-residential and residential development will apply to mixed development.

More care is needed to ensure the amenity of residents in particular is well considered.

LANDSCAPE-LED MINI-CASE STUDY

The Depot in Lewes demonstrates several good examples of how the design responds well to the urban context:

See **Case Study 3: Non-residential** for more detail.



- Building design relates to site's industrial heritage
- Building addresses & enhances pedestrian route
- External shutters response to Dark Night Skies



- Modest building height respects original building and surrounding houses
- Local flint tradition showcased



C.5.7 MULTI-RESIDENTIAL DEVELOPMENT

KEY DESIGN PRINCIPLES

- a. Large multi-residential^o buildings may need to use design techniques to reduce the building mass, or apparent mass, to integrate them successfully into residential areas characterised by more domestic scale buildings.

Multi-residential development should:

- b. Have good visual and physical connections with attractive outdoor space from within the building.
- c. Take particular care with how the buildings are serviced, minimising the visual impact on the public realm.
- d. Integrate well into the wider community (such as providing publicly accessible facilities or spaces).

Sheltered accommodation should:

- e. Have a minimum area of usable open space of 20 sqm per resident (which can include balconies).
- f. Follow nationally recognised dementia-friendly guidance for the design of usable open space where serving older people specifically.

C.5.7.1 Multi-residential development is defined by BREEAM^o as development such as student or sheltered accommodation with a significant proportion of facilities shared, such as kitchens and dining areas. They often have many of the same design issues as non-residential development, set out in the first paragraph of **section C.5.6** previously, particularly if they are large in scale. However they are also places where people live and so their health and wellbeing is critical.

Sheltered Accommodation

C.5.7.2 As there is a significantly higher proportion of the older population that suffers from dementia, all older people's accommodation should follow national guidance on dementia-friendly design such as **NICE** and **CABE guidance**.

C.5.7.3 Residents in older people's accommodation, as well as others in some sheltered accommodation, are also generally much less mobile than the general population and many may rarely, if ever, leave the premises. For these reasons the amount and quality of the available usable external space for those residents is at a premium. The design should mitigate against an institutional feel and celebrate its location with a landscape led approach. The Centre for Ageing Better symbol encapsulates the diversity of older people and the fact that they can also benefit from active recreation.

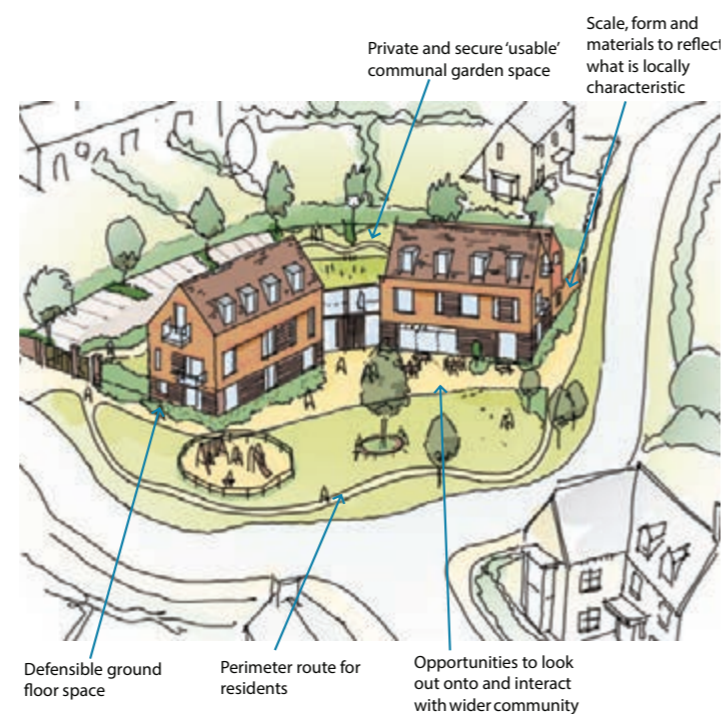


Figure 5.19: Sheltered accommodation needs to speak of its location and provide the best possible internal and external spaces for residents.

C.6 SCALE

C.6.1 GRAIN

KEY DESIGN PRINCIPLES

- a. For a new development to integrate well with its context it needs to take account of the grain that is characteristic of the settlement that it is a part of, without necessarily trying to replicate it.
- b. Where the development forms a new edge to a settlement, some loosening of the grain as part of the transition to the countryside will normally be expected, unless this is contrary to the best of local character.

C.6.1.1 New development grain^o should relate back to evidence of local settlement form and history. The grain of an area is an expression of the pattern of development. This is best illustrated by 'Figure ground' plans (e.g. Figure 6.1). This includes the size and shape of building footprints as well as how they are spaced and aligned and the spaces in between.

C.6.1.2 Small, tight, frequent blocks are considered to be a fine grain, whilst larger, more infrequent blocks constitute a coarse grain. A fine grain has the benefit of allowing for more efficient movement networks.



Figure 6.1: Fine grain in Lewes historic centre (1); industrial quarter (2); Landport estate (1930s) (3); Walland's Park estate (1950s) (4).

C.6.1.3 A 'loose' grain is typical of rural and edge of settlement locations with relatively large gaps between domestic scale buildings. Grain can be regular, as in

planned housing estates, or irregular (or 'organic'), as found typically in more rural areas or following medieval settlement patterns.

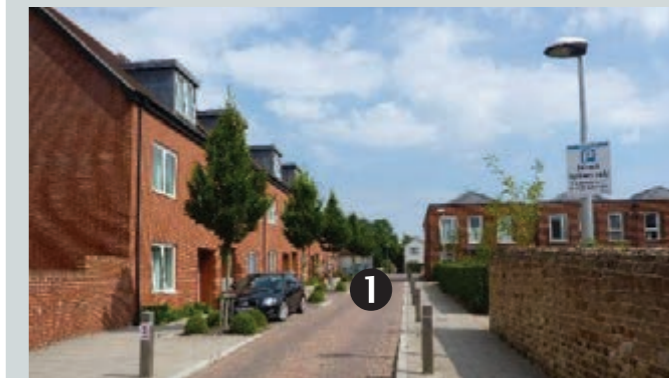
LANDSCAPE-LED MINI-CASE STUDY

Opportunity to repair urban grain in this part of town

St Margaret's Convent housing site, Midhurst



- 1 Former impenetrable block removed
- 2 New streets running north /south repair urban grain
- 3 Residential buildings now facing onto Petersfield Road



- 1 New route links site and beyond to June Lane and town centre

C.6.2 MASSING 

KEY DESIGN PRINCIPLES

- New development needs to be sensitively related to the scale and massing of neighbouring development and spaces.
- New development should generally not be more than 1 storey higher than neighbouring buildings where it directly adjoins existing residential development.
- Orientation, topography, and the character of the surrounding area will also need to be carefully considered as they will affect the perception of the massing and scale.
- Techniques for reducing the perceived massing may need to be employed for larger buildings.

C.6.2.1 Massing has a significant impact on how successfully a building relates to other buildings, the street scene and spaces in general. The approach to the form of the building will have a significant impact on the scale and massing. For example, clustering different forms helps to break up the massing, whereas very deep plan forms (where building dimensions in plan are greater than typically found in domestic-scale buildings) may result in inelegant proportions and massing.

C.6.2.2 The perception of massing is often derived from the relationship the proposal has with neighbouring development, and where the building is located within the site. The perceived mass of a building can be reduced by articulating the roof and the elevations, through the avoidance of dark materials, by using appropriate solid to void ratios and by retaining or planting large canopy trees.



Figure 6.2: Inappropriate building mass can render under-proportioned open space and gardens uncomfortable for users.



Figure 6.3: Massing needs to respect the character of existing buildings.

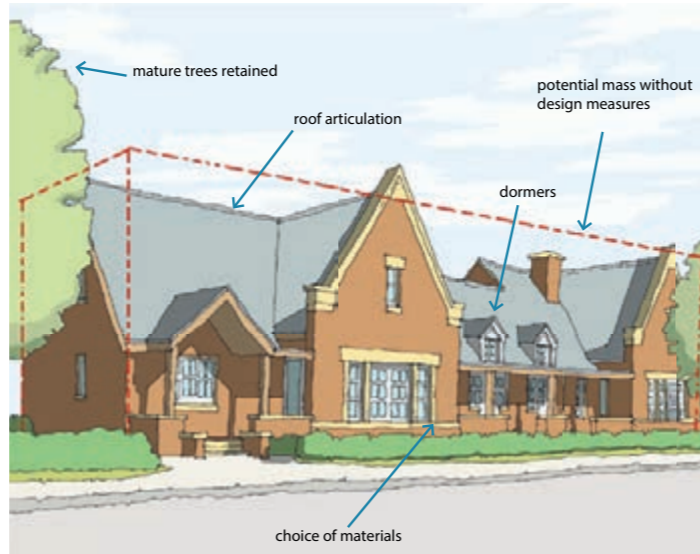


Figure 6.4: The perceived mass of a building can be reduced by a variety of design measures.

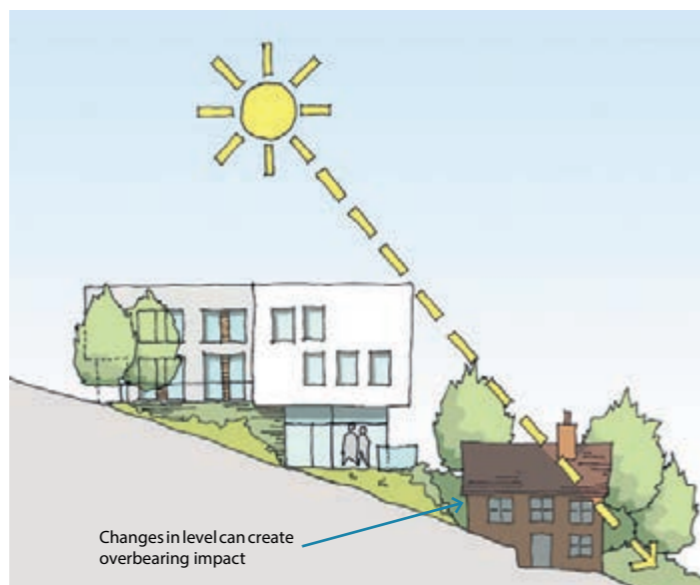


Figure 6.5: Significant changes in level can make massing relationships with existing development worse.

C.7 PUBLIC REALM

C.7.0.1 The public realm is the communal outside space where people move around, spend time in solitary or communal recreation and meet up with others. It is the vantage point from where much of the landscape and townscape of the South Downs National Park is experienced. Some of these spaces such as commercial car parks and spaces between buildings and public rights of way may be privately owned, but still serve a public realm function as they are generally open to all. The majority of the public realm is publically owned. This includes the highway network, footpaths, pavements and squares, public parks and gardens and the forecourts of public buildings such as community centres, libraries, leisure centres and government buildings.

C.7.0.2 The very public nature of these spaces makes it critical that they are well laid out for their expected functions and that the design, craftsmanship and robustness of the **surfaces, boundary structures** and furniture within them are of the highest quality.

C.7.0.3 The public realm should also be accessible for all, which means the needs of different users should be taken into account. This includes those that use wheelchairs, buggies and mobility scooters, or are either old or infirm, those that are blind or partially sighted and able-bodied equestrians and those with physical challenges. The avoidance of steps or the provision of ramps may be necessary in some instances to facilitate better access. The avoidance of clutter and the signalling of safe pedestrian routes and potential hazards using changes in surface textures or other means can help cater for the blind or partially sighted. In all cases, where public realm areas are being created or refurbished, it is recommended that special interest groups be consulted on proposed changes at the earliest possible design stage.

C.7.0.4 The public realm should be designed to maximise the opportunities to reduce crime and disorder.

C.7.1 RURAL HIGHWAY DESIGN 

KEY DESIGN PRINCIPLES

New development should:

- Conserve and enhance the character of rural lanes and routes and be in accordance with **Roads in the South Downs**.
- Use existing access points wherever possible.
- Follow the locally characteristic relationships of roads to other landscape elements:
 - Contours and water
 - Woodlands and trees
 - Field boundaries and settlements.
- Keep new roads as narrow as possible. Consider not necessarily requiring all new roads to be adopted and where this occurs provide suitable management arrangements.
- Minimise visibility splays.
- Avoid signage and remove existing clutter wherever possible.
- Slow traffic by enclosing built form, by landscape design and (limited numbers of) on street parked cars rather than through road engineering measures such as raised tables, humps or rumble strips on new roads.
- Adhere to a road hierarchy, with a main axis or thoroughfare and subsidiary routes.
- Design roads to create safe crossing points.

C.7.1.1 Although main roads used for long-distance travel outside settlements need to be designed mainly for road traffic safety and flow in mind, most other roads and routes in the National Park (the vast majority) should be treated as rural lanes and byways in accordance with the 'Roads in the South Downs' (RSD). **Policy SD21** requires all development in the National Park to follow the RSD principles, including simple uncluttered design and kerb free edges where appropriate (see Figure 7.1).



Figure 7.1: A residential road in Easebourne near the settlement edge demonstrating a successfully low key approach.

C.7.1.2 Roads running through the heart of settlements should be treated as streets for people. Even A-roads which run through towns and villages, while needing to facilitate traffic flows, still need to acknowledge that they are running through a settlement. This can be conveyed by a variety of design interventions such as a surface material change, road width narrowing, or by buildings or trees providing greater enclosure which all have a traffic calming effect. Roads and streets in lower class roads in settlements, should be treated (and potentially adopted) as public open spaces and shared surfaces for all users and their potential for multipurpose spaces and even occasional closures (e.g. for markets, festivals, parades etc,) should be enhanced where possible.

C.7.1.3 Good design will be expected whether or not new roads are adopted by the Highway Authority.



Figure 7.2: The A32 changes its surface treatment as it enters the centre of West Meon to signal to drivers that this is a zone where pedestrians can be expected.

Visibility Splays

C.7.1.4 Over-engineered visibility splays with kerbs, white lines, signs and hedges at contrived angles are not appropriate in rural lanes.



Figure 7.3: Over wide visibility display, big break in the hedge line, ornamental planting, tarmac and kerbed access to single property creates inappropriate suburban effect in rural Hampshire lane.



Figure 7.4: Appropriately low-key access to several properties on same road as Figure 7.3 with modest access width, short break in hedge line, no kerbs and stone surfacing.

Village Gateways

C.7.1.5 Figure 7.5 shows a poor example of an over-engineered gateway design which fails to enhance rural character.

C.7.1.6 Figure 7.6 shows a good example of a village gateway: a lack of clutter, no road markings, road narrowing coordinated with simple signage, minimal granite rumble strip and a new large tree. See also local guidance in [Village Design Statements](#)



Figure 7.5: A poor example of an over-designed village gateway with an inappropriately cluttered result.



Figure 7.6: A simple, uncluttered village gateway, Buriton.

Junctions

C.7.1.7 Streets normally follow a hierarchy. Where a side road or route meets a larger road or route, subservience should be expressed with a physical narrowing and junction dimensions of an appropriate scale. New side streets in rural areas need to take on the character of a rural lane rather than a suburban access road. Generally, over-wide bell mouth entrances, over-generous sightlines and conventional pre-cast concrete kerbs should be avoided where possible.



Figure 7.7: An inappropriately over-engineered new access at East Dean.

C.7.1.8 In *Figure 7.7* a new side road in East Dean (serving only 11 properties and a farm) is inappropriately wide, suburban in appearance and with an over-large bell-mouth, which is out of character with the local context. *Figure 7.8* shows the appropriately understated and narrow character of a junction with a subservient road in Hambledon.



Figure 7.8: Characteristically narrow and low-key Hambledon side street.

C.7.1.9 More detail on design issues such as appropriate use of materials, different scenarios and case studies can be found in **RSD**.

See also Local Plan policy **SD21**.

C.7.2 STREETS

KEY DESIGN PRINCIPLES

- New development should enhance the surrounding streetscape or create new streetscapes that enhance the character of the area.
- Development should aim to create animated streets.
- Streets should be designed for easy access for all.
- Vehicle parking should not visually dominate the streetscape.
- Streets should integrate with existing and future movement networks (especially non-motorised) and create attractive and continuous streetscapes, knitting in visually and functionally with existing development.
- Where possible street clutter should be avoided.

C.7.2.1 The **Manual for Streets** lists five street functions:

- place;
- movement;
- access;
- parking;
- drainage, utilities, and street lighting

C.7.2.2 Where possible, streets should be considered as part of the Public Open Space (POS) (see **C.7.3**). The functions must be balanced so that no one function overrules the other. Streets in residential or pedestrian priority areas should be designed primarily for people, place and access (e.g. as shared surfaces with significant landscape quality) and adopted, managed and resourced as public open space rather than as public highway with its conventional emphasis upon motorised traffic movement.

C.7.2.3 Every street needs to be distinctive while working within a design framework dictated by local character. This includes the urban grain, street hierarchy, vertical and horizontal rhythm, mass and orientation of buildings, setbacks, corner details and materials, including vegetation.

C.7.2.4 In larger villages and towns, street character varies according to its place in a hierarchy. (see **C.1.5** Legibility and Street Hierarchy)

C.7.2.5 Good streets and other public spaces require enclosure by buildings and often by landscape elements, particularly street trees and boundary structures. Large gaps in the street create 'leakage' of space and diminish

sense of enclosure which may not be appropriate in more urban areas or in village centres. The opposite may apply, with large green gaps between buildings, in more rural locations where this is the established street character.

C.7.2.6 The height to width ratio of the buildings in relation to the dimension of the street is a key ingredient in determining street character and signalling where the street is in the wider street hierarchy.

Active fronts are important to animate the street (see **C.1.7** Active Fronts)

Streets are movement corridors, so they need to work for all members of the community with a minimum of kerb and height changes and street clutter. **Manual for Streets** says:

'Streets should not be designed just to accommodate the movement of motor vehicles – a prime consideration is that they meet the needs of pedestrians and cyclists.'

(See also **C.1.2** Access and Permeability)

C.7.2.7 Streets have also latterly accommodated some car parking, which is often appropriate, but its scale must be limited to prevent it dominating the streetscape.

C.7.2.8 Streets should also be accommodating sustainable drainage systems, such as swales, rain gardens or ditches wherever possible, as well as infiltration zones such as grass verges, planted with street trees. (See **C.9.3** Sustainable Drainage). Design measures should be taken to minimise the risk of car parking encroaching into soft areas. (See **C.8.1** Parking).

C.7.2.9 Further guidance on the principles of good street design can be found in the Government's 2007 **Manual for Streets** publication and the follow up 2010 **Manual for Streets 2**

In 2014 English Heritage, Department for Transport, Institute of Highway Engineers, Living Streets, and Urban Design Group published **Street Design for All**. More Hampshire-specific guidance is provided by Hampshire County Council's **Companion Guide to Manual For Streets** and in West Sussex the **County Council Local Design Guide Supplementary Guidance for Residential Development Proposals**

See also **Local Plan policy SD21: Public Realm, Highway Design and Public Art**

LANDSCAPE-LED HINT

New development should enhance the surrounding streetscape



Redundant ambulance station in Midhurst was designed only with function in mind and made no positive visual contribution to the street.



New housing development repairs the street urban grain and creates appropriate enclosure with attractive modern development.

LANDSCAPE-LED HINT

A character study of a street should influence the design of any hypothetical future development nearby



- 1 Front gardens with boundaries
 - 2 Buildings front directly onto street and step down the hill
- Repeated building details, doors and pedestrian gates create rhythm
- 2 storey terraced houses with grouped chimneys and painted render elevations

C.7.3 PUBLIC OPEN SPACE (POS)**KEY DESIGN PRINCIPLES**

- a. The nature of the POS should be informed by the identified landscape character of the area and the needs of local people.
- b. POS should strive to be multi-functional, well-located, overlooked, accessible for all and should serve the whole community.
- c. On larger schemes, fewer, larger open space areas are generally more appropriate than more numerous small areas.
- d. Opportunities for sustainable drainage and biodiversity functions should always be maximised where appropriate.
- e. The POS should form part of a wider connected GI⁶ network and locally native plant species should be prioritised.
- f. Opportunities for public art to celebrate the cultural associations of the site should be taken, where appropriate to the nature of the surroundings.
- g. Surfaces, structures and furniture in POS should be robust and have high quality materials and finishes.
- h. A scheme for the ongoing maintenance and management of the POS will need to be provided.

C.7.3.1 POS consists of all public spaces used by the community, including streets, parks and recreation spaces. Although these are primarily spaces for people in the National Park, they should also be places to enhance wildlife wherever possible and provide biodiversity net gain⁶. Generally, applicants should strive to make them multi-functional. This could include **SuDS**⁶ (see C.9.3), **trees** (see C.9.2) (where characteristic) and other **green infrastructure**⁶ (see C.9) and **Ecosystem Services** functions, without prejudicing the main recreation function. The POS would ideally serve a large range of interests and age groups providing passive recreation and, where appropriate, accommodate more active pursuits and **public art** (see C.14.2).

C.7.3.2 In some locations there may be value in providing facilities to promote or enable cultural activities, such as bandstands, amphitheatre arrangements, performance or display areas, etc.

C.7.3.3 POS should be accessible for all and is often more feasible in larger spaces rather than in smaller dispersed spaces which are less functional and more

difficult to maintain, although not without value. Centrally located positions, overlooked by and close to most people is better than siting POS on the periphery. POS must read as welcoming spaces and not as semi-private space not designed for visitors. Well-located POS can additionally serve as a development focus and an aid to legibility (see C.1.5).

C.7.3.4 The design of fencing, surfacing furniture and signage should be robust and high quality in terms of materials and finishes, should be landscape-led and should aim to avoid unnecessary clutter. Public open space with a passive recreation function should be designed to provide appropriate seating.

See also, **C.12.2.16 Surface Materials, Parks and Play Areas**.



Figure 7.9: Classic timber park bench in a public place in Cheriton.

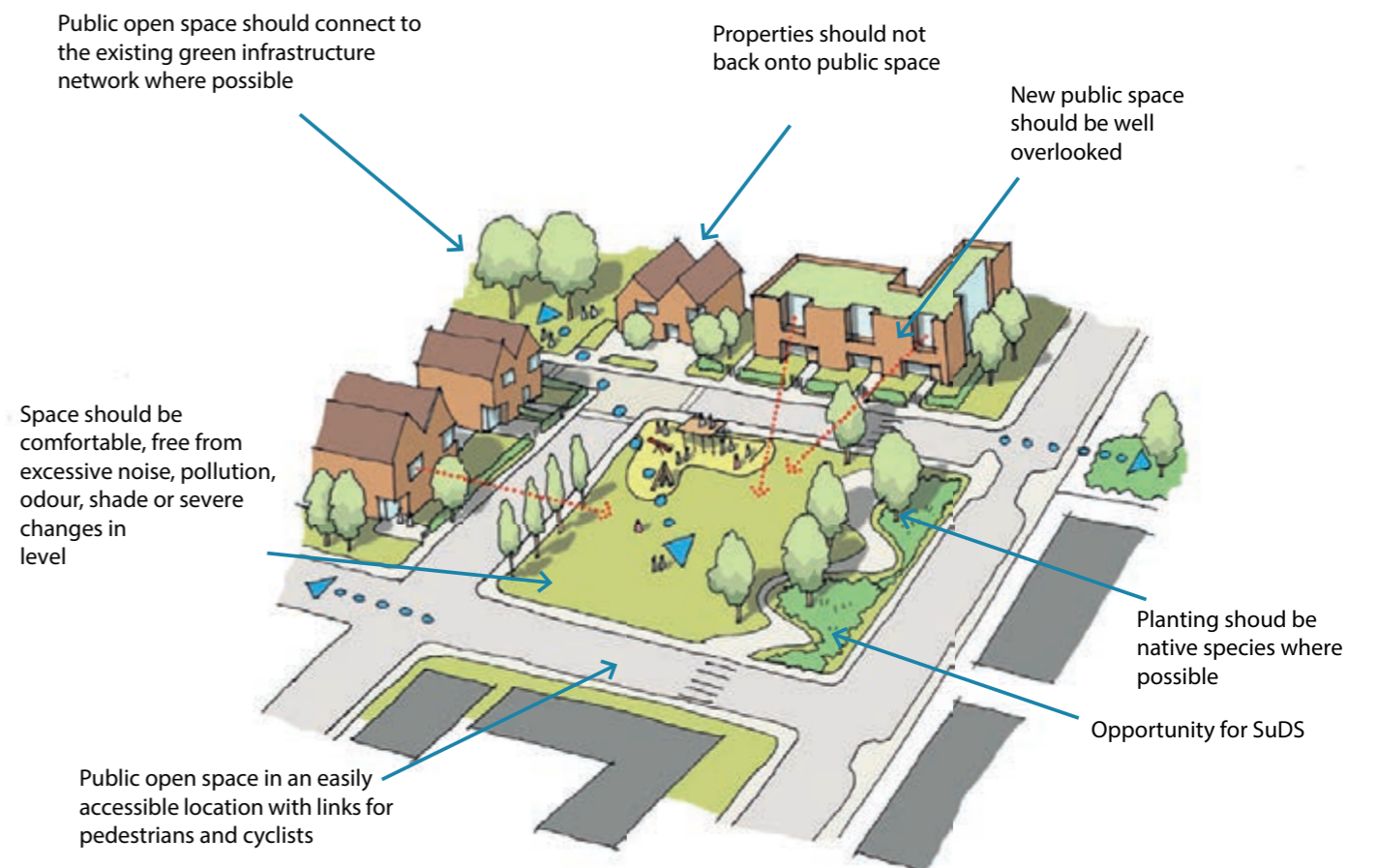


Figure 7.10: Principles of good POS.

C.7.3.5 Streets can also be designed or even adopted as POS, with shared surfaces, locally appropriate materials, street furniture and signage where necessary. Streets can be designed for non-traffic and community activities, with permanent or temporary closures to enable other uses e.g. markets, festivals, parades, etc.

Management Plans

C.7.3.6 Management plans and maintenance schedules are essential to ensure the successful establishment and long term success of POS. CABE provided guidance in **A Guide to Producing Green Space and Management Plans** for parks and other green spaces.

C.7.3.7 Other communal space, such as car parks, footpaths, public squares etc. should equally have their long term standards of aesthetic and functional excellence maintained and adaptation to change managed, by plans and schedules that are agreed at the planning application or condition stage.

Clarity on management responsibility and robust solutions for a variety of predictable maintenance and management issues is necessary.

C.7.4 PLAY SPACES

KEY DESIGN PRINCIPLES

- a. Children’s play areas should be located in accessible places that, where possible, are well overlooked but do not risk unacceptable disturbance to neighbours (following FIT guidance).
- b. The visual impact should be assessed and the design should be appropriate to the local landscape character.
- c. A scheme for the maintenance and management of the play space and any equipment and surfaces will need to be provided.
- d. Where appropriate, opportunities for play should be integrated into the street and other public realm places.

C.7.4.1 Although the ‘play value’ of play areas and equipment is critical, the visual impact is also a consideration, particularly in sensitive landscapes. One good compromise can be to design and implement ‘natural play’ installations which sit much more comfortably in the natural environment than some more urban-style, brightly coloured and highly controlled, fenced and gated traditional play areas.

C.7.4.2 The safety of any equipment will need to be assessed. **RosPA** are the nationally recognised assessors of play safety, including for natural play.

See also, **C.12.2 Surface Materials, Parks and Play Areas.**

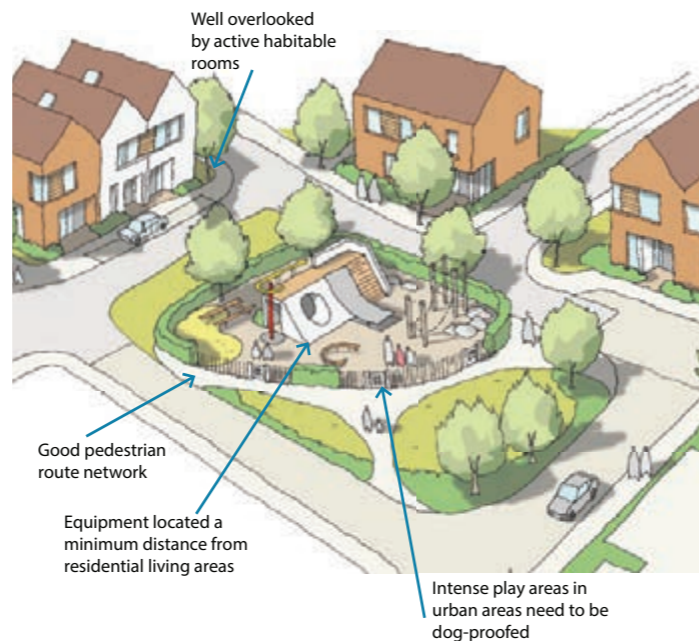


Figure 7.11: Principles of good play areas.

C.7.4.3 Play areas should be accessible for all (including those with disabilities), be subject to **natural surveillance** (see C.7.5) and be a minimum distance from residential property living spaces to minimise potential disturbance based on **Fields in Trust (FIT)** standards (see Figure 7.15). Larger play spaces should make some provision for Special Educational Needs and Disability children (See **Inclusive Play guidance**).



Figure 7.12: A very successful water play feature in Mottisfont NT, Hampshire.



Figure 7.13: Ancient trees are a great play resource.

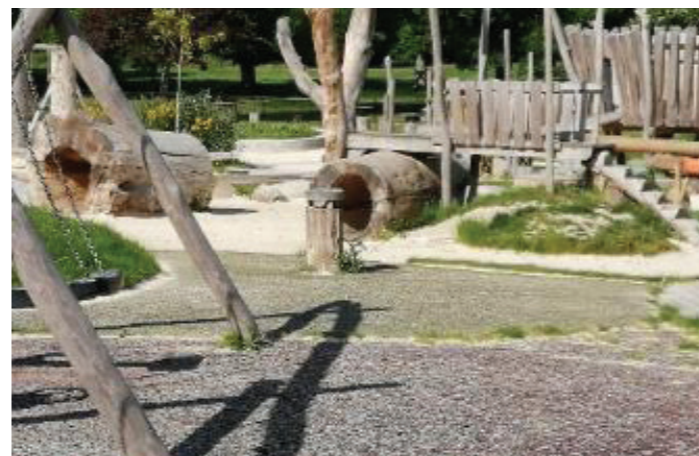


Figure 7.14: The use of unpainted timber play features and low key surface materials can help play areas integrate well into the National Park context.

Play Area	Minimum separation between activity zone & dwelling
LAP ^G	5m to dwelling boundary
LEAP ^G	20m to habitable room facade
NEAP ^G	30m dwelling boundary

Figure 7.15: Fields in Trust standards.

C.7.5 NATURAL SURVEILLANCE

KEY DESIGN PRINCIPLES

All new development should provide, and if possible improve, natural surveillance of new and existing public realm spaces and routes.

C.7.5.1 The idea that somebody is present, and possibly watching, is enough of a deterrent to stop much criminal and anti-social behaviour and provides better sense of security for users. Natural surveillance is the most desirable and effortless design principle. It occurs on the street when people pass by, or from inside buildings or vehicles.

C.7.5.2 It is achieved by designing new development so that the public realm is overlooked. Windows from active rooms, cafes, reception areas, main doors and entrances, meeting places, front gardens, balconies and roof terraces, as well as busy routes, can all be employed to improve natural surveillance.

C.7.5.3 Public realm areas that can benefit from natural surveillance are streets and footpaths, areas of public open space, communal parking areas, and areas around communal bin and bike stores. The landscape design of spaces, such as trees in streets and car parks, should take into account the potential conflict between the desirability of direct sightlines for natural surveillance and obstructive vegetation. This is achieved by the proper coordination of the relevant professionals' design strategies (e.g. architects, landscape architects, highway or lighting engineers) and their respective drawings for a site (See *Figures 7.16 and 7.18*).



Figure 7.16: Natural surveillance of the street.



Figure 7.17: Places in built up areas that are not overlooked are more at risk from vandalism.

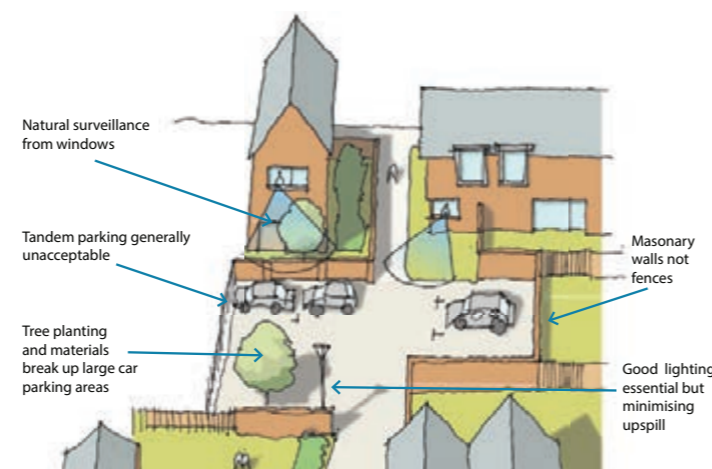


Figure 7.18: Communal car parking should be overlooked.

C.8 PARKING & SERVICES

C.8.1 PARKING

KEY DESIGN PRINCIPLES

- Car parking design should be well integrated, with good landscape treatment and should avoid a public realm dominated by cars, hard standing, too many materials and associated clutter.
- All parking design should be landscape-led with layout and materials responding to the landscape character of the place.
- Car parking areas and cycle parking should maximise opportunities for enhancing green infrastructure and sustainable drainage.
- Development layouts and detailed design should minimise the opportunities for anti-social car parking on pavements and green spaces.
- All residential car parking should be safe, conveniently located for the dwellings they serve, overlooked and accessible for all.
- Cycle storage for residents and users of non-residential buildings should be safe and convenient to use, secure and sheltered from the elements.
- Garages which are designed to accommodate bicycles should meet minimum dimensions to ensure they can be removed comfortably without the need to remove vehicles.*
- Large rear car parking courts serving houses should be avoided where possible.
- Car parking should not obscure clear and direct routes between the front door and the street.
- Car parking design should accommodate EV charging points either on plot or in adjacent car parks to conform with **Policy SD22** and the **Sustainable Construction SPD**.

*see *Figure 8.7*

C.8.1.1 The number of spaces for cars (and bicycles) appropriate for any type or scale of development is determined with reference to the parking standards set in the **SDNPA Parking SPD**. Car parking must be successfully integrated into development. Therefore, a parking strategy should inform the design layout from an early stage.

C.8.1.2 A combination of car parking approaches nearly always creates more capacity, visual interest and a more successful place.

C.8.1.3 Where possible, street and shared court car parking should not be allocated to individual properties as this is a much more efficient use of space.

C.8.1.4 White paint lines and numbers are unsightly. More aesthetically pleasing alternatives include small metal plates to number spaces; setts, metal studs or timber lines to define spaces.

C.8.1.5 Most car parking solutions will require generous green infrastructure, such as trees or rain gardens, to mitigate the visual impacts, maximise opportunities to enhance wildlife and provide shade.

See Green Infrastructure chapter (**C.9.0**).

C.8.1.6 Too many materials, colour changes and small areas of kerbing and planting leads to an over-busy result. Simple palettes and layouts are generally encouraged.



Figure 8.1: Instead of ugly white or yellow lines, parking places can be indicated by a change of road surface.

On Street Parking

C.8.1.7 The most traditional car parking method is to provide unallocated spaces parallel with the street. This enables every space to be used by anyone and to its greatest efficiency. It often allows residents to see their car from the front of their house and contributes to an

active street and traffic calming, while keeping most vehicular activity on the public side of buildings.

C.8.1.8 Parking bays which are perpendicular to, or at an angle to the street direction, can accommodate more cars than parallel parking spaces, but they increase the width of the road, they are potentially more dangerous (due to the need to reverse into traffic), and, if adjacent to homes, car lights can have a negative impact on the ground floor windows of habitable rooms at night.

C.8.1.9 Continuous areas of communal street parking are also visually intrusive and need to be broken up.

The proportion of on-street parking appropriate for a particular scheme will be considered on its own merits, within the local context and with regard to the parking standards set and the environmental impact of the proposals.

C.8.1.10 Street layouts should be designed to discourage parking on pavements or on areas of green space.



Figure 8.2: The visual impact of cars in traditional on street parallel car parking in a suburban street is successfully mitigated with rain gardens and street trees.

Parking Squares

C.8.1.11 Parking squares can provide more car spaces in a wide street than parallel kerbside parking.

They need to be designed with robust materials and as attractive public spaces which also accommodate parked cars. This can be achieved with generous and appropriate green infrastructure, surfaces other than tarmac and appropriate street furniture.

Small squares can add interest and provide parking in a traffic calmed environment. Although not originally designed as a parking area, the historic market square in Midhurst (Figure 8.3) does accommodate some residential parking controlled by lockable bollards as

well as a café terrace. It is an inspiration for how new urban parking squares could and should aspire to also be attractive areas of multi-functional public space, providing opportunities for communal activities such as market stalls, ceremonies, events, the annual Christmas tree.



Figure 8.3: Midhurst Market Square.

Home Zones and Shared Space

C.8.1.12 'Home zones' originated in Holland, are legally defined and consist of shared space with built-in traffic calming. They prioritise pedestrians over all other vehicles, creating a more convivial environment and fostering stronger street communities.

Environmental enhancements, space defined by frontages and the use of high quality surface materials are requirements of a successful scheme. Home zones need to allow for access and some car movement and parking, but cars and highway design should not dominate, as these areas should primarily be safe pedestrian environments.



Figure 8.4: A Dutch 'woonerf' or homezone in Haarlem, the Netherlands.

Rear Court Car Parking

C.8.1.13 Rear court car parking can be favoured by some applicants who wish to remove all or most cars from public view. They can be a very effective way of accommodating car parking for flatted development in particular.

However, locating car parking at the rear of houses can lead to inactive frontages, discourage neighbourliness, walking and cycling and create safety and security problems both on the street and within the parking courtyards or unobserved garages. Furthermore, rear parking courts use land very inefficiently, often resulting in small gardens, reduced privacy, and parking by those without allocated rear spaces in inappropriate places.

C.8.1.14 The 2006 English Partnerships guide "Car Parking. What Works Where" states;

"Do not park in the back of the block until on street and frontage parking permutations have been exhausted. Use of the mews or rear court should support on street provision, not replace it."

C.8.1.15 Where rear court parking is unavoidable, it should be restricted in scale, particularly where it serves houses and it should be well overlooked, should create attractive places and should provide other public benefits such as enhancing green infrastructure and sustainable drainage. See Figure 7.18 (Natural Surveillance, C.7.5).



Figure 8.5: A rear parking court behind flats with significant landscape/green infrastructure.

In Curtilage Parking

C.8.1.16 Many modern residential developments provide in curtilage parking. This may provide the car-owner with greater security and ease of access but it is a less efficient use of space than unallocated parking and prevents parking in the street across the access to the property.

C.8.1.17 Particularly when plot widths are narrow (below 6m) the parked car will usually visually dominate the front of the house. This effect will be magnified if this method is repeated at regular intervals in a street.

Where in-curtilage parking for individual houses is to be used, it is generally preferred that car spaces should be to the side of the main building and at least 5.5m behind the building line to prevent the vehicle protruding.

New homes should maintain a clear and direct route between front doors and the street by avoiding car parking that obstructs this and balancing the amount of parking in front of plots with appropriate planting.

C.8.1.18 In-curtilage parking in front of narrow-fronted properties should be avoided if better alternatives are available and where unavoidable should be restricted to 2 adjoining properties to reduce the visual impact of parked vehicles on the street scene.

Drive widths should be at least 3.2m where also serving as the main pathway to the property.

Private car spaces and drives visible from the street should be surfaced in small unit permeable pavers, or other materials (such as gravel) which will allow sustainable drainage, raising the environmental quality of the scheme. (See C.12.2 Surface Materials)

In Curtilage Garages

C.8.1.19 When provided, there are several design considerations:

- Garages are a very inefficient way of accommodating cars as research shows that only around half are actually used for that purpose. For this reason, their use should be limited on multi home developments.
- Integral garages are best accommodated in wide fronted buildings (incorporating ground floor front windows) at least 6.0m in width and at least 2 storeys in height to limit car dominance and encourage informal surveillance of the street.
- Repeated garages taking a large proportion of the ground floor frontage of a street should be avoided as this leads to a lack of fenestration and street animation.
- Car barns or car ports are much more likely to be used than garages and can be a good way to integrate groups of cars into a landscape.

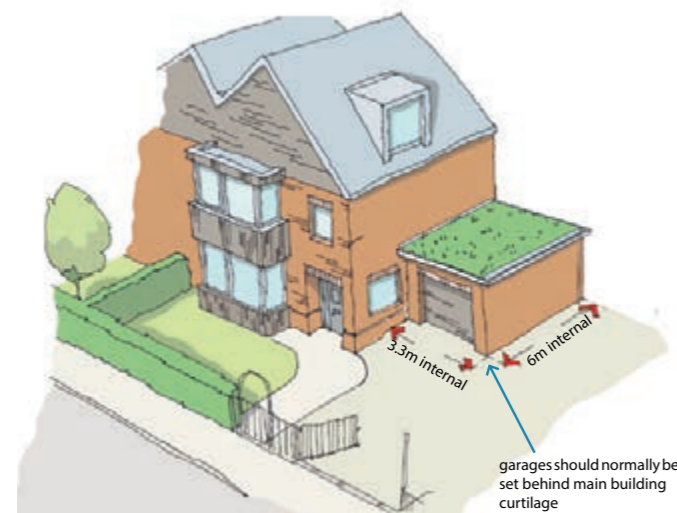


Figure 8.6: Garages should be set back and have minimum dimensions to accommodate cycle storage.

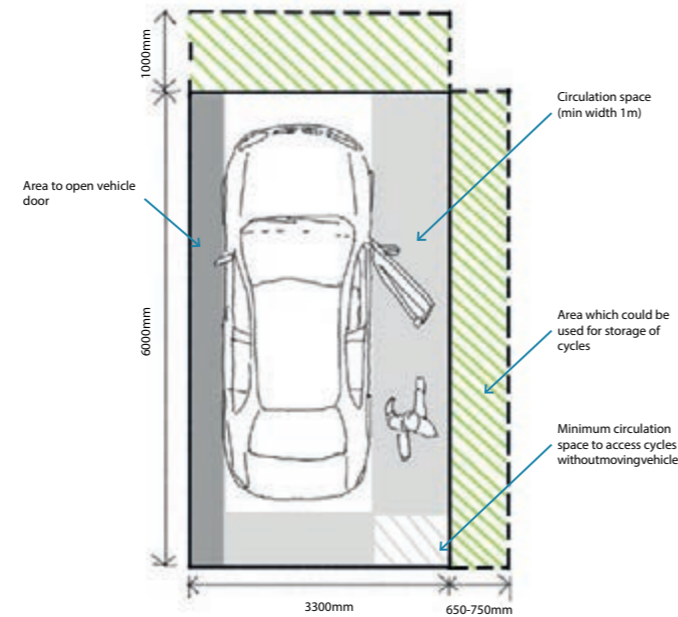


Figure 8.7: Minimum dimensions for garages (or car barns) storing bicycles (from Cambridge Cycle Parking Guide for Residential Developments).



Figure 8.8: A car barn using local traditional building style and materials.

Communal 'remote' car parking

C.8.1.20 In some larger developments, car parking can be partly or wholly located in communal blocks within a short and convenient walking distance of the buildings it serves. If this is well designed, preferably still with some natural surveillance, this can effectively allow a low car, or even a car-free environment with all the benefits that can bring, particularly for residential areas. The added benefit of this approach is that rather than designing in car parking space that could become redundant as society evolves and possibly levels of car ownership drop, communal parking areas can easily be adapted to other uses in the future, if less space is required for private cars.

C.8.1.21 Where 'remote' car solutions are used, streets and spaces closer to homes may need to be designed to make uncontrolled car parking less easy, to discourage antisocial car parking behaviour. Provision for disabled drivers, activities such as dropping off passengers and shopping and access for emergency vehicles, waste collection, bulky deliveries and removals to homes will still need to be fully considered.

Cycle Parking

C.8.1.22 Cycle parking in residential development should be designed to make it at least as convenient and attractive for residents to use cycles as a car when making local journeys. Storage should be as near to the street as possible. This could be integrated into the main building, in garages or in bespoke standalone storage, if located discreetly. The design of storage structures should be high quality and consistent with the overall design concept for the site/development.

C.8.1.23 Visitor cycle parking should be as near to entrances to the buildings they serve as possible. Their design should be appropriate to context, but a simple, yet robust style, similar to the 'Sheffield' type of rack, in steel or timber (depending on context) would generally be appropriate. It is important that the frame and at least one, but ideally both wheels can be locked to the stand. See **National Guidance**.



Figure 8.9: Timber versions of the 'Sheffield' type of cycle rack.



Figure 8.10: SDNPA bespoke 'Sheffield' style cycle stands and repair station equipment at West Dean.



Figure 8.11: Timber cycle locking post on Centurian Way, West Dean.



Figure 8.12: Simple, robust cycle storage in natural materials.



Figure 8.13: Cycle storage can be a good opportunity for green roofs.

C.8.1.24 Further detailed guidance on good cycle parking and storage in new residential development can be found in the [The Cambridge Cycle Parking Guide](#) the [Cycle Parking Guide for Residential Developments](#) and chapter 11 of [National Guidance](#).

Large Car Parks

C.8.1.25 Some developments such as for commercial, community or multi-residential uses will normally require significant car parking areas. These areas will need generous visual mitigation to reduce the impact of large numbers of vehicles and hard surfacing but they also serve as significant opportunities to provide visual, functional and ecological enhancements through generous [green infrastructure](#)⁶ (GI), including multi-functional [sustainable drainage](#)⁶.

Rural Car Parking

C.8.1.26 The design of car parks in the countryside or on the settlement edge must ensure they integrate into the surrounding landscape and avoid unwelcome visual impacts and suburban character. The layout, scale, materials and mitigation measures using green infrastructure must be landscape-led and aim to enhance local character. Over-large car parks should be avoided where possible as they will conflict with local character and their visual impacts are more difficult to mitigate.

C.8.1.27 Simple materials, based on what is locally characteristic, an absence of highway elements such as kerbs and clutter and locally appropriate planting represent the best approach in most locations. (See [Figure 8.13](#)). The use of stone topping such as tar and chipping finish or, where use is not too frequent, a loose bound gravel are good approaches. In both cases, the stone selected should match the local stone. Concrete or plastic reinforced grass solutions are not usually appropriate, except to reinforce soft areas for occasional or overflow car parking and access.



Figure 8.14: An appropriately low-key rural National Trust car park at Woolbeding.

Other Parking

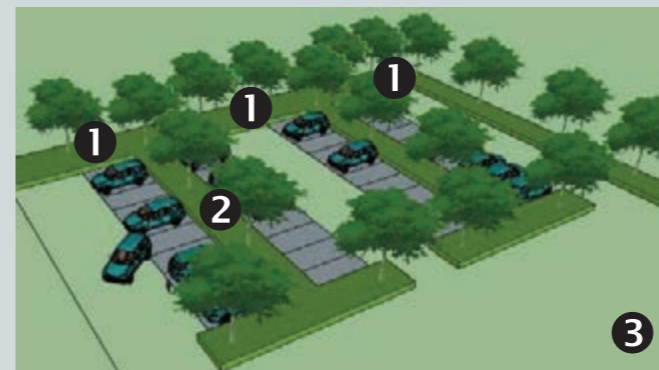
C.8.1.28 For specialist accommodation for older people and for people with disabilities, secure storage space under cover, with an electricity supply, is also required for powered wheelchairs or mobility scooters.



Figure 8.15: Neat and efficient mobility scooter storage and charging units in a retirement home (metroSTOR).

LANDSCAPE-LED ILLUSTRATION

Large car parks need to maximise opportunities to conserve and enhance local green infrastructure.



40 car space illustration

- ① Space for the green infrastructure, including tree planting should be used at the end of circulation runs (1) rather than using it for more convenient car movement around the car park.
- ② GI with trenches, suitable for large tree planting and SuDS (e.g. swales or rain gardens), between banks of parking spaces.
- ③ GI needs to be what is locally characteristic, e.g. native trees.

C.8.2 SERVICES AND ANCILLARY STRUCTURES

KEY DESIGN PRINCIPLES

- a. All underground services should be incorporated in shared trenches with common ducting where possible. They should be considered at an early stage in the design layout and should be designed to be compatible with GI and SuDS.
- b. All service apparatus, overground and underground services and access covers should be integrated into overall external works / landscape design and not be fitted as afterthoughts.
- c. All new developments should be served by gigabit-capable full fibre broadband at the point of occupation unless this is not feasible due to remoteness.
- d. Best endeavours should be made to ensure all new cable services are underground and, where feasible, existing overhead services are rerouted underground.
- e. External lighting should be minimised and its dark night skies and day time impacts reduced as much as possible.
- f. Meters, vents and flues should be as discreet as possible and not be presented as a design afterthought.
- g. Bin storage should be well integrated, accessible, discreet, safe and secure and aligned with the local Waste Authority collection service.
- h. Routes from bin storage to bin collection points should be direct and as uncomplicated as possible.
- i. Energy infrastructure should be discreetly located and any landscape screening locally characteristic.
- j. Metal support poles, columns, brackets and housings for signage, lighting, services and other infrastructure, should be painted black to reduce the visual impact and provide uniformity of appearance in the National Park, unless there are sound design reasons for alternative finishes.

C.8.2.1 All services should be integrated into the wider external works design. This may mean

- trying to make otherwise unavoidably unattractive elements (such as meters, vents or utility plant) as discreetly located as possible, away from the public realm; or;

- integrating them visually with the streetscape as possible (including the choice of materials and colour which coordinate and/or reflect local character) or;
- sometimes they can serve as opportunities for public art interventions or ways of celebrating local craftsmanship.



Figure 8.16: An example of a service cover used as an opportunity for public art, Japan.

Underground Services

C.8.2.2 Despite only the lids of inspection chambers being visible, underground services can have significant impacts on a development's layout.

Underground services should, where possible, be delivered together in shared service corridors as this provides greater ease of access for service maintenance and it frees up more space within the street for other uses, such as tree planting (see *Figure 8.18*).

C.8.2.3 Underground services should not enter the root protection areas of important retained trees and should not be present in the root soil volumes of proposed trees. Service and utility trench layouts, drainage pipes and street trees (or other valuable soft landscape) should be designed together so that conflicts are avoided.

C.8.2.4 Where paving is being employed to raise the quality of surfacing in the public realm, particularly in urban areas, recessed covers should be used. The manhole cover should ideally run parallel with the paving direction but even when this is not possible, good detailing can effectively reduce the visual impact of the cover. (see *Figure 8.17*)



Figure 8.17: Service manhole recessed cover helps to protect integrity of paving, even when at an angle. (Pavingexpert.com).

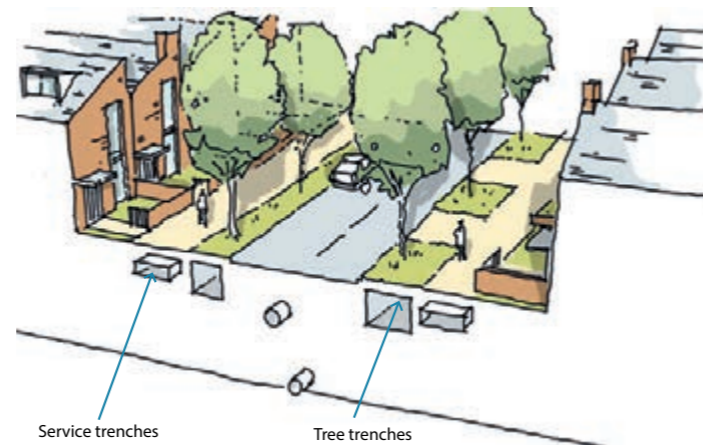


Figure 8.18: Service trenches should be designed to avoid tree planting trenches (from *Architecture PLP*).

Broadband

C.8.2.5 The Local Planning Authority supports the approach detailed in the **National Planning Policy Framework** to promote full fibre digital infrastructure which provides for gigabit-capable broadband. The Authority therefore expects the provision of on-site infrastructure to enable all residential and non-residential premises to be directly served by fibre optic broadband technology for the highest available speeds. (1 Gigabit in 2021, but subject to future upgrades) unless this is not feasible in more remote areas of the Authority.

C.8.2.6 Multi-dwelling buildings must be equipped with a common access point capable of serving all the dwellings within the building.



Figure 8.19: (left) Laying ducting (BT Openreach) with inspection chamber and (right) duct end with drawstring to allow for future easy laying of fibre cable to a house.

Further guidance on this can be found at **Approved Document R** of the Building Regulations

Over Ground Services

C.8.2.7 Where possible, existing over ground services such as telephone and low voltage electricity cables should be undergrounded as part of a new development. New over ground cabling should generally be avoided.

Meters, vents and flues

C.8.2.8 Meter boxes, rainwater goods (gutters and drain pipes), vents and flues should coordinate with each other and with other materials on the elevation. Elevations should indicate these details as there is the potential to have a negative significant impact if designed badly or considered too late in the design.

C.8.2.9 Ideally, services should be discreetly hidden, or sited on a return, if available, rather than on the main street elevation, whilst still allowing external access.

Lighting

C.8.2.10 External lighting should be appropriate to landscape context and should be designed to meet identified needs of access, security and safety (See BS 5489-1:2020 Standards for Street Lighting And Related Equipment), but must avoid any undesirable spillage or pollution including from reflective surfaces.

This particularly applies in the core dark night skies areas (see **C.15**).

Lighting should be designed to minimise light spill and also to reduce clutter in daylight. Bollard lighting may be a good option to provide low level light and minimise both dark night skies and daytime impacts.



Figure 8.20: Simple timber bollard lighting directing light downwards in West Dean Estate.

C.8.2.11 Landscape elements such as street trees should not be prejudiced by lighting columns or underground ducting. More guidance on lighting in new development can be found in the **Dark Night Skies Technical Advice Note**.

Bin storage

C.8.2.12 Bin storage needs to be carefully considered and should align with what the local Waste Authority collection service provides.

The design and materials of bin storage areas and structures and pick up locations should avoid clutter, be well integrated with and be consistent with the design concept for the site/development.

Where possible, bin storage and other building services, should be integrated into the main buildings and structures of the development and if that is not possible, space should be allowed for it to be well-integrated into the external works and landscape design of the development.

C.8.2.13 The bin storage should not be located in an overly prominent position but should be accessible and safe for all intended users. Overly complex routes from dwellings or long narrow alleys to collection points should be avoided.

Where refuse bins are required to be visible from the public realm (e.g. from the street), they should be sited within well-designed refuse stores that are easy for occupants to use or behind well designed front property boundary structures (see *Figures 10.2 and 11.7*).



Figure 8.21: This bin store is also an attractive invertibrate habitat.

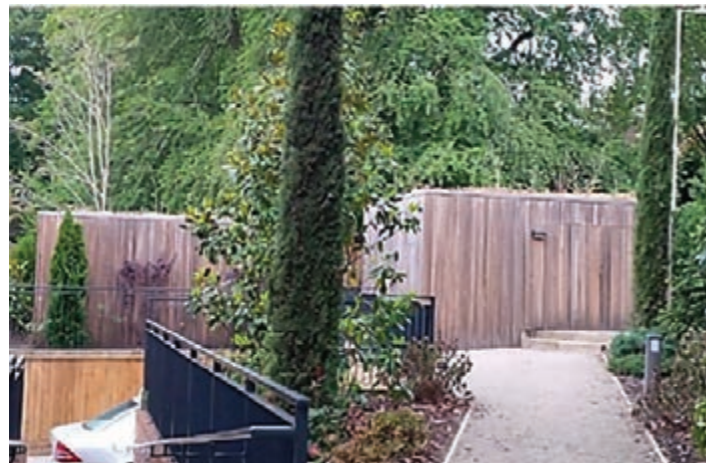


Figure 8.22: Attractive bin and bike storage, Winchester.

C.8.2.14 On large urban development sites, underground segregated waste storage should be considered as this involves very large waste collection volumes which require reduced rates of emptying and maintenance and eliminate the need for hundreds of separate wheelie bins.



Figure 8.23: Underground bin scheme launched in 2017 by Cambridge University in flatted development which eliminated the need for 9000 wheelie bins.

Energy Infrastructure

C.8.2.15 Sub stations, off grid fuel storage and similar infrastructure should be designed into the layout at the earliest stage, integrated as an ancillary structure or as part of landscape treatment and located discreetly. Any landscape screening should be part of the landscape strategy and not present a standard suburban character.



Figure 8.24: Gas plant poorly located in a prominent position on the approach to residential development and using inappropriate suburban character screen planting, Stroud.

Sheds and ancillary buildings

C.8.2.16 Sheds and ancillary buildings for domestic and non-residential development should be well-considered. If it is possible to locate them in more discreet positions away from the public realm or at least away from prominent sites such as on road junctions and at the end of vistas, that should be encouraged. Where unavoidably visible, they should be designed to integrate with the new development and the wider landscape character of the site.

The use of local materials and building styles should be considered as well as associated landscape design which matches the local landscape character. These buildings can often be a good opportunity for green roofs (Figures 9.27 and 9.28).

C.8.2.17 Lines of pitched roofs appearing above garden boundaries from repeated garden sheds (see Figure 8.25) should be avoided where visible from the public realm and monopitch or flat roofed green roofs may be a better visual alternative.



Figure 8.25: Conventional pitched shed roofs in small rear gardens create a cluttered, discordant visual effect along a public footpath and visual harm on countryside edge, Midhurst.

Bus shelters

C.8.2.18 Although bus shelters generally do not require planning permission, the Authority would still encourage a landscape-led approach to their design. They can be an opportunity to use locally characteristic materials, such as local stone or timber and use traditional craftsmanship. There are also many examples of bus shelters with green roofs.



Figure 8.26: An attractive bus shelter in Selborne with a traditional timber construction and timber shingle roof.

Residential Electric Vehicle Charge Points

C.8.2.19 Policy SD22 and the Sustainable Construction SPD require electric vehicle (EV) charge points for all new dwellings where feasible. Most new dwellings are either detached, semi-detached or end of terrace and in these cases can accommodate a wall mounted charge point on the drive next to the main house or in a car barn/garage

on their plots. These should be located as discreetly as possible.

C.8.2.20 For mid-terrace houses a standalone charge point may be needed adjacent to the car space allocated to each dwelling. For flatted developments it will be expected to provide charge points at a rate of 1 between 8-10 car spaces. Separate communal provision for charging electric bicycles should also be considered for properties without access to a private drive, car barn or garage.



Figure 8.27: Illustration of how EV charge points could be located for flats (ringed in red).

C.8.2.21 The Energy Saving Trust provide useful design guidance on standalone EV charge point locations and design relevant to off plot locations. Care needs to be taken with locating EV charge points and any associated signage in the street to minimise clutter and to avoid potential pedestrian safety issues. In the most sensitive locations, such as in conservation areas, the visual impact may be unacceptable.

C.8.2.22 One approach to reduce street clutter is to utilise other street furniture, such as lamp posts. The location of these units needs to factor in the potential trip hazard of cables connecting them to charging cars. Cables should avoid crossing pedestrian routes.



Figure 8.28: A converted lamp post housing an on street EV charge point (Lucy Zodian).



Figure 8.29: EV charge points serving residents in a town house development in Lewes and also serving as traffic bollards.

For detail on minimum technical specifications see the [Sustainable Construction SPD](#)

C.9 GREEN AND BLUE INFRASTRUCTURE

C.9.1 CONSERVING AND ENHANCING GREEN AND BLUE INFRASTRUCTURE (GI AND BI)

KEY DESIGN PRINCIPLES

- Conserving, enhancing and creating GI and BI should be a fundamental part of a development's Landscape Strategy response to a site's opportunities and constraints.
- A palette of locally appropriate GI and BI components should be generated through the landscape-led approach.
- GI and BI should be designed at the masterplan stage to create a network of joined up elements for people and nature within and outside the site. The GI elements can be a wide range of scales and sizes.
- GI and BI should be as multi-functional as possible,
- New development should make best use of GI and BI to deliver **Ecosystem Services** and biodiversity net gains.
- New development should consider the full potential for urban GI and BI within developable areas and be well integrated into buildings and spaces.
- New developments should contribute to the strategic aims and ambitions of the **SDNPA PANN**.

C.9.1.1 Local Plan policy SD45 requires all development to maintain or enhance existing green and blue infrastructure and provide new GI.

Definition of Green and Blue Infrastructure

C.9.1.2 Green Infrastructure (GI) planning incorporates natural solutions to deliver a wide range of benefits (Ecosystem Services) for both people and wildlife. GI includes parks, open spaces, playing fields, woodlands, wetlands, river and canal corridors, allotments, public rights of way, hedgerows, gardens, building integrated habitats such as bat or bird boxes, green roofs and walls, GI can be thought of as creating a "people and nature network (PANN)". The Authority is building a strategic network in and around the National Park, so

development sites within these areas should contribute to these strategic aims and ambitions. See **SDNPA PANN**.

C.9.1.3 Blue infrastructure (BI) refers to water elements, like rivers, canals, ponds, wetlands, floodplains, water treatment facilities, wet ditches, **SuDS** features etc.

C.9.1.4 Well-designed Green and Blue Infrastructure can be used to support or replace conventional engineered (grey) infrastructure. For instance, by reducing flood risk; filtering and intercepting air and water pollutants; providing micro-climate benefits such as shade, shelter, cooling and wind speed reduction, in addition to its more widely appreciated benefits to recreation, health and wellbeing and biodiversity. Effective delivery of these multiple services will generally entail advice from relevant experts.

C.9.1.5 Benefits derived from GI and BI should also help to achieve Ecosystem Services (See **Ecosystem Services TAN**) at all scales from insectariums and bat boxes and ponds up to new parks or nature reserves.

Characteristic GI

C.9.1.6 New GI must be locally characteristic. It should contribute to the existing positive character (patterns) and relationships of landscape elements within the site and its context. So, for instance, if sinuous woodlands which follow contours are a local characteristic, then this would be a positive design principle for new GI.

Address needs and opportunities

C.9.1.7 The component or type of GI proposed should also address a local need or opportunity. Does the site lie within a Biodiversity Opportunity Area^G or **PANN^G** – could this influence the type or design of GI? Or is it close to designated sites, reserves or project areas with objectives that the new development could contribute positively to?

Examples of need or opportunity might be to;

- protect or enhance water quality
- better connect woodlands
- improve recreation opportunities.

- provide shade and shelter
- improve biodiversity
- provide flood risk mitigation
- provide food and fuel production
- link development via PROWs to countryside
- improve ecosystem services provision from existing GI.

GI and BI design

C.9.1.8 Successful GI design at scale requires multi-disciplinary project teams and design and delivery that continues right through the design process. GI and BI opportunities should be highlighted through the Landscape Strategy (see **Part B**), reflecting local contextual evidence. Design teams should ensure principles of GI – e.g. permeability for wildlife, are not undermined by later decisions.

Scale

C.9.1.9 Good GI is designed at all scales.

At a small-scale, **trees, green roofs, green walls** and **rain gardens** together contribute to a network of GI through a site. At a micro-scale, bee bricks, bird and bat boxes, preferably integrated into buildings, also contribute (see *Figure 9.1* and e.g. **Wiener Eco-Habitat Bat and Bird Boxes**). At a larger scale, retained and enhanced hedgerows or new species-rich grassland can also all positively contribute to wider connectivity and permeability, ensuring new developments are well-connected for people and wildlife.



Figure 9.1: Examples of building-integrated bat and swift boxes (Wiener) and a bee brick in a new house in Buriton.

Space

C.9.1.10 To achieve meaningful urban GI, space within developable areas needs to be planned from the start and should be part of the initial and developing landscape strategy for a site.

In practice this means that space should be allowed for rain gardens and for the appropriate growing space and root soil volume for trees in streets and car parks; roofs need to be designed to take sedum or other green roof layers; gardens need to be adequately sized to allow for some hedge and tree planting. Creative ways to use available space should also be used, such as green roofs on ancillary buildings, swift boxes on buildings and insectariums on balconies etc.

Multiple benefits

C.9.1.11 Good GI is designed to generate multiple benefits (Ecosystem Services) for people and wildlife. One example of this and of the several policy objectives that GI can achieve, is demonstrated by the native hedge garden boundary approach outlined in the landscape-led illustration at the end of this section.

People

C.9.1.12 Although some GI, by its very nature, such as along railway and highway corridors, green roofs and water bodies, is inaccessible, in the main, good GI is designed for people. Opportunities for people to connect with nature and the landscape should be taken in developments of all types.

People

C.9.1.12 Although some GI, by its very nature, such as along railway and highway corridors, green roofs and water bodies, is inaccessible, in the main, good GI is designed for people. Opportunities for people to connect with nature and the landscape should be taken in developments of all types.

C.9.1.13 GI can provide access for people; through, around and beyond a new development site. The experiences generated along the way can help schemes to meet **Purpose 2** by enhancing and interpreting people’s experience of the National Park.

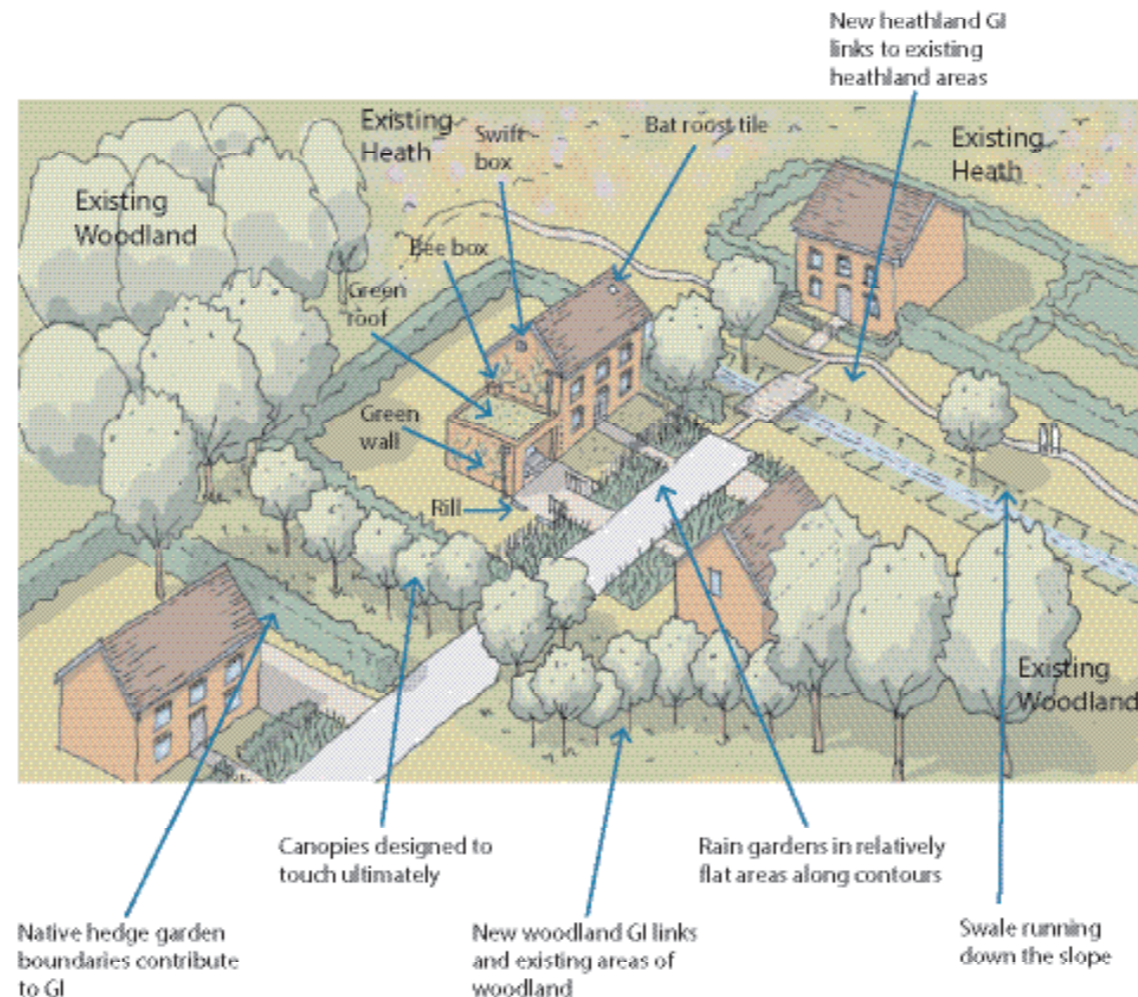


Figure 9.2: Examples of some GI and BI interventions in a new development.

C.9.1.14 GI can support people and communities by helping us adapt to a changing climate. (see **SDNPA Sustainable Construction SPD**).

Biodiversity

C.9.1.15 Development should maximise opportunities for biodiversity net gain⁶ (BNG) which should be clear, meaningful and measurable (as per the **NPPF** and the emerging Environment Bill). BNG is defined as development that leaves biodiversity in a better state than before.

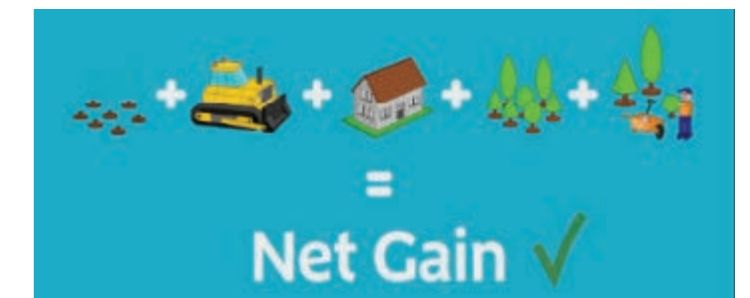


Figure 9.2: Biodiversity Net Gain (Natural England).

C.9.1.16 Biodiversity evidence should be gathered to inform the earliest stages of the design process and BNG should be ‘landscape-led’, i.e. the context of the site steers the type of habitats to be created and enhanced in the delivery of net gain in order to both be of benefit for biodiversity and characteristic to that location. See **SDNPA Biodiversity Net Gain Technical Advice Note** on BNG in the National Park.

C.9.1.17 The applicant should check if the site lies within a Biodiversity Opportunity Area or ‘GI hotspot’ area (known as Natural Capital Investment Area) in the PANN and look at how the strategic actions and measures which are set out in the PANN could be addressed by existing and new G&BI.

Urban GI

C.9.1.18 GI also needs to penetrate the developable areas of new development from the plot of a single garden to the streets and spaces between multiple and non-residential buildings in a network connecting within and without the developable area.

Urban green infrastructure includes trees and other vegetation in streets, car parks and gardens; pocket parks, communal and staff gardens, native boundary hedges and roadside verges; rain gardens and other multifunctional SuDS elements such as planted swales; green roofs and green walls. The contiguous and

connected nature of urban GI (e.g. joining tree canopies) is critical to its value.

C.9.1.19 These should be supplemented by other locally appropriate interventions that encourage wildlife such as bat roosts, swift boxes etc.



Figure 9.3: The Syngenta development, Fernhurst.

C.9.1.20 The landscape strategy for the Syngenta development proposals (Figure 9.3) combines urban GI (multi-functional SuDS, street trees and green roofs, native boundary hedges, ground floor and roof terrace gardens) with structural GI (wooded east/west and north/south green linear spaces, a reinstated water course and new pond) with the surrounding woodland beyond the site. See **Case Study 1: Large Residential**

Microclimate

C.9.1.21 The contribution that new and existing GI and BI can make to improving and harnessing the microclimates within a site should be explored from the outset of the design process. Trees for example can provide shading, cooling, rainwater infiltration, wind reduction and noise reduction; water features, green roofs and walls can provide cooling. These functions are beneficial but need to be designed and co-created within the overall masterplan to ensure that opportunities for solar power, solar gain, key views and so on are not unacceptably reduced.

The use of expert assessment to take all factors into account to achieve optimal outcomes for intended uses and context is recommended.

C.9.1.22 Microclimate can be managed through good landscape design to provide more comfortable environments for people. This can include:

- Deciduous trees and structures with climbing plants that can provide summer shading in outside spaces or prevent overheating in buildings.

- Water features and vegetation that can provide summer cooling to adjacent spaces.
- Shelter belts of trees and hedges that can prevent excess winds and turbulence affecting otherwise exposed spaces.

C.9.1.23 Landscape design can also help with the energy efficiency of buildings. This can include:

- Green roofs and green walls to provide extra insulation and avoid winter heat loss.
- Summer tree shading of living space windows that can reduce the need for mechanised building cooling by reducing solar gains.
- Shelter belts of trees and hedges that can also reduce building heat loss where they divert or reduce prevailing winter winds.

C.9.1.24 The extent of solar gain reduction produced by summer tree shading will vary depending on the height of trees and buildings, where they are located in relation to the building and sun path, and the type of trees (deciduous or not, shape and density of foliage). The impact of buildings can be assessed using a solar shading analysis if required. When assessing the impact of trees, only existing mature and healthy trees being retained should be accounted for and only if they are tall enough and located close enough to the glazed areas to have a useful shading effect.

C.9.1.25 More guidance on designing GI and BI in new development can be found here:

- **Landscape Institute guidance**
- **Natural England guidance**
- Interreg Europe: **Place-making and Green Infrastructure**
- **Biodiversity Opportunity Areas Hampshire**
- **Biodiversity Opportunity Areas Sussex**
- **Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol** (See reference TLL 15)

LANDSCAPE-LED ILLUSTRATION

Maximise opportunities to enhance locally characteristic GI

Native hedge garden boundaries have the potential to help development comply with many **Local Plan** policies, in contrast with fences or walls which fail to meet any of them.



Native hedges: GI, wildlife food & nesting; manage to suit owner; provides attractive seasonality; improve with age; can be part of SuDS; promotes wellbeing; improves soils & stores carbon; positive edge to public realm/settlement; prickly species provide security benefit.

C.9.2 TREES, HEDGEROWS AND WOODLANDS

KEY DESIGN PRINCIPLES

The design of development proposals in respect of trees, woodlands and hedgerows should:

- Be in line with British Standard 5837 and other relevant national tree guidance.
- Take into account that all trees are a material consideration in the planning system and should be considered from the start of the design process.
- Be informed by an on-site survey and (for larger or sensitive sites) specialist advice from a qualified arboriculturist.
- Retain existing trees wherever possible, unless there are sound justifications for removal.
- Demonstrate a precautionary approach to construction activity close to trees or hedgerows.
- Where characteristic, replace all trees lost through development on or near the site (and where not physically possible, provide financial compensation).
- Maximise opportunities for substantial increases in tree canopy, unless there are sound justifications not to.
- Demonstrate the right plant for the right place and the right reason, following a landscape-led approach.
- Favour locally native species, unless non-natives are more appropriate.
- Maximise multiple ecosystem services benefits;
- Demonstrate the highest standards for planting and aftercare.

Introduction

C.9.2.1 Trees are a crucial part of the South Downs landscape in hedgerows and woodlands and as single or groups of trees in both rural and urban locations. They also provide multiple benefits through delivering Ecosystem Services.

C.9.2.2 Applicants are expected to follow best practice by following a landscape-led approach to design and national best practice guidance.

The tree advice in this document and in national guidance is not a substitute for seeking expert advice from a suitably qualified arboriculture professional specific to the site and trees.

National Guidance

C.9.2.3 All development must be undertaken in line with British Standard (BS) 5837:2012 'Trees in relation to Design, Demolition and Construction' and all tree works must be carried out in accordance with BS 3998 'Tree Work Recommendations'. BS 8545 provides guidance on how to estimate soil volume requirements (P61) and how to maintain trees to ensure their success.

C.9.2.4 The 2021 National Planning Policy Framework in para 131 requires new streets to be 'tree-lined' and promotes all opportunities for new tree planting including community orchards.

C.9.2.5 The most challenging environments for planting and establishing trees are in streets, car parks and other hard landscapes. The Trees and Design Action Group (TDAG) provides excellent guidance on this in **Trees in Hard Landscapes: A Guide for Delivery (2014)**, **Trees, Planning and Development: A guide for Delivery (2021)** and **Trees in the Townscape: A guide for Decision Makers (2021)** and also see Tree Council Guidance [here](#) and [here](#)

C.9.2.6 Guidance in relation to underground utilities: **NJUG Volume 4** (NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees)

C.9.2.7 Guidance for trees near buildings: **NHBC Standards** Chapter 4.2 – Building near trees.

Evidence

C.9.2.8 A general site survey will provide evidence on topography, site artefacts, services etc.

C.9.2.9 Policy SD11: Trees, Woods and Hedgerows sets requirements for survey and other supporting evidence.

C.9.2.10 The relevant recommendations of BS 5837 should be applied in all cases where trees may be affected by development works.

C.9.2.11 In all but the most simple of cases, evidence of expert advice from a suitably competent specialist will normally be required. The assessment will include proposals for trees to be removed or retained. A tree survey is also part of the **SDNPA Validation checklist** which lists documents needed to accompany a planning application.

Existing Trees and Hedgerows

C.9.2.12 The objective, following their assessment and categorisation on a site, should be to retain existing trees and hedgerows wherever possible, unless there are sound justifications for removal.

C.9.2.13 The design proposals should demonstrate a precautionary approach to any construction activity in close proximity to trees or hedgerows.

C.9.2.14 The expectation, will be to replace all trees lost through development (in a ratio, size and species to be approved by the Authority), unless trees in the location are not locally characteristic. If no suitable location for tree planting is available on or near the site, a payment, based on a **CAVAT[®]** (or alternative agreed method) valuation of the removed tree(s), should be made to the Authority to be used for new tree planting in a suitable alternative location.

C.9.2.15 Tree protection guidance can be found in BS 5837. This includes:

- avoidance of fires
- avoidance of compaction
- changes of level
- spilling of chemicals

C.9.2.16 Root Protection Areas (RPAs) should be protected with appropriate barriers. Excavating within the RPA, is likely to lead to severing tree roots or leaving them exposed or damaged.

C.9.2.17 The installation of underground utility apparatus can be significantly detrimental to the long term health of trees in close proximity, and trees can cause damage to the apparatus if not planned carefully. Mechanical trenching can cause soil compaction, sever roots and change the local soil hydrology. Even hand digging or excavation by air lance can cause damage to tree roots if they are not carefully pruned in line with best practice set out in BS5837 (Trees in relation to design, demolition and construction) and BS3998 (Tree work. Recommendations), or allowed to desiccate if exposed to air for too long.

C.9.2.18 Services should not be routed through RPAs of existing trees, and, if unavoidable, only with detailed insertion methods drawn up by a qualified arboriculturist.

C.9.2.19 Mechanical damage to the tree, often through inadvertent machinery damage, can create pathways for pathogens to enter the tree and cause decline. The

application of construction exclusion zones and canopy protection areas is meant to prevent this.

C.9.2.20 Take care to preserve the soil horizons as far as possible. Increasing the soil level, will impede drainage and nutrient flow and cause compaction.

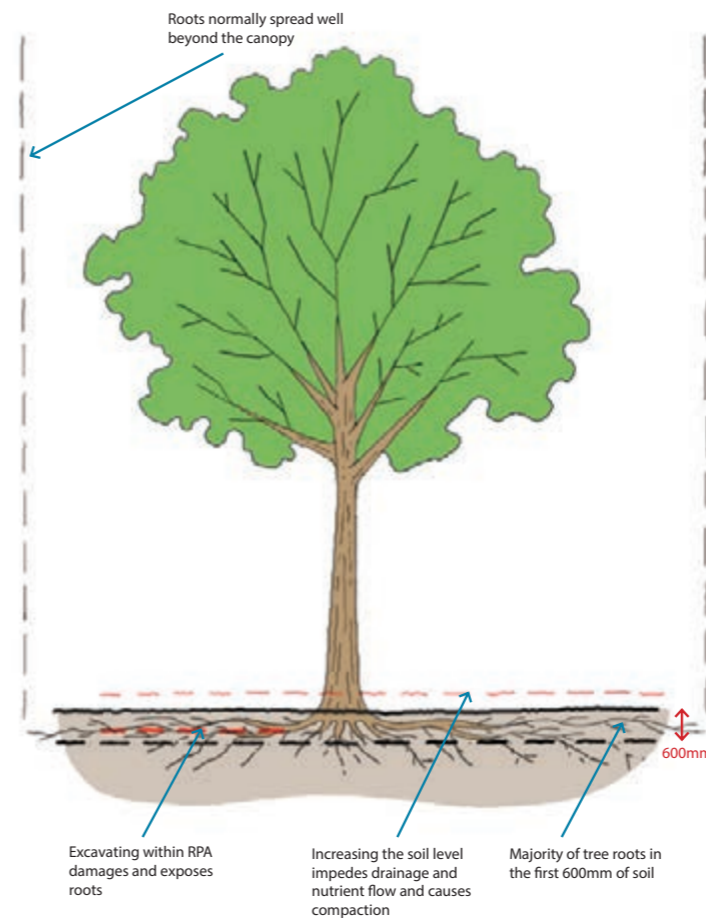


Figure 9.5: The importance of avoiding changes in soil levels within RPAs.



Figure 9.6: This retained mature tree in Midhurst has become the focus for this part of the development and added great value.

Statutory Protection

C.9.2.21 Notwithstanding the status generally afforded to trees, they may also be subject to specific statutory protection. Any works that may affect any tree within a Conservation Area, subject to some technical exceptions, must be notified to the Authority, allowing six weeks for the Authority to either allow the works or apply for a Tree Preservation Order (TPO).

C.9.2.22 Any works that may affect a tree subject to a TPO, require an application for formal consent from the Planning Authority before the works can be carried out, subject to some technical exceptions relating to health or safety.

C.9.2.23 The Authority has a statutory duty to consider applying a TPO to any existing trees that are retained and / or to new trees planted as a condition of a planning permission.

C.9.2.24 Carrying out works to trees in Conservation Areas or subject to TPOs, without notifying or gaining consent from the Planning Authority is a criminal offence.

C.9.2.25 Trees may also be given special protection under conditions attached to a planning permission and failure to comply can result in enforcement action being taken against the owner of the land.

C.9.2.26 To check if a hedgerow is protected see **Government Guidance** on hedgerow protection.

A formal application is needed to remove or break into protected or 'important' hedgerows.

C.9.2.27 Felling licences are normally required for felling 5 cubic metres of timber in a calendar quarter. See **Government advice**

C.9.2.28 Natural England and Forestry Commission 'standing advice' should be consulted for works affecting ancient woodland, ancient trees and veteran trees. It is a material planning consideration for local planning authorities.

Conserving and Enhancing Tree Cover

C.9.2.29 The general expectation for new development is for a significant net increase in tree cover.

C.9.2.30 Where trees, woodland and hedgerows are locally characteristic, they should be part of the green infrastructure of the site and contribute to biodiversity net gain.

C.9.2.31 There will be exceptions to this, where the emphasis on more tree cover is not characteristic. Two examples of this might be: in the working yard area

of a farmstead development or in an area of the South Downs where buildings set in open landscapes are more characteristic than settlements nestled among trees and woodland.

The Right Tree in the Right Place

C.9.2.32 The landscape-led approach for trees, woodlands and hedgerows means understanding the role these have in the site and its surrounding landscape, including how they relate to contours, settlement edge, buildings and water. This is expected to inform choices about new tree planting and which trees to retain.

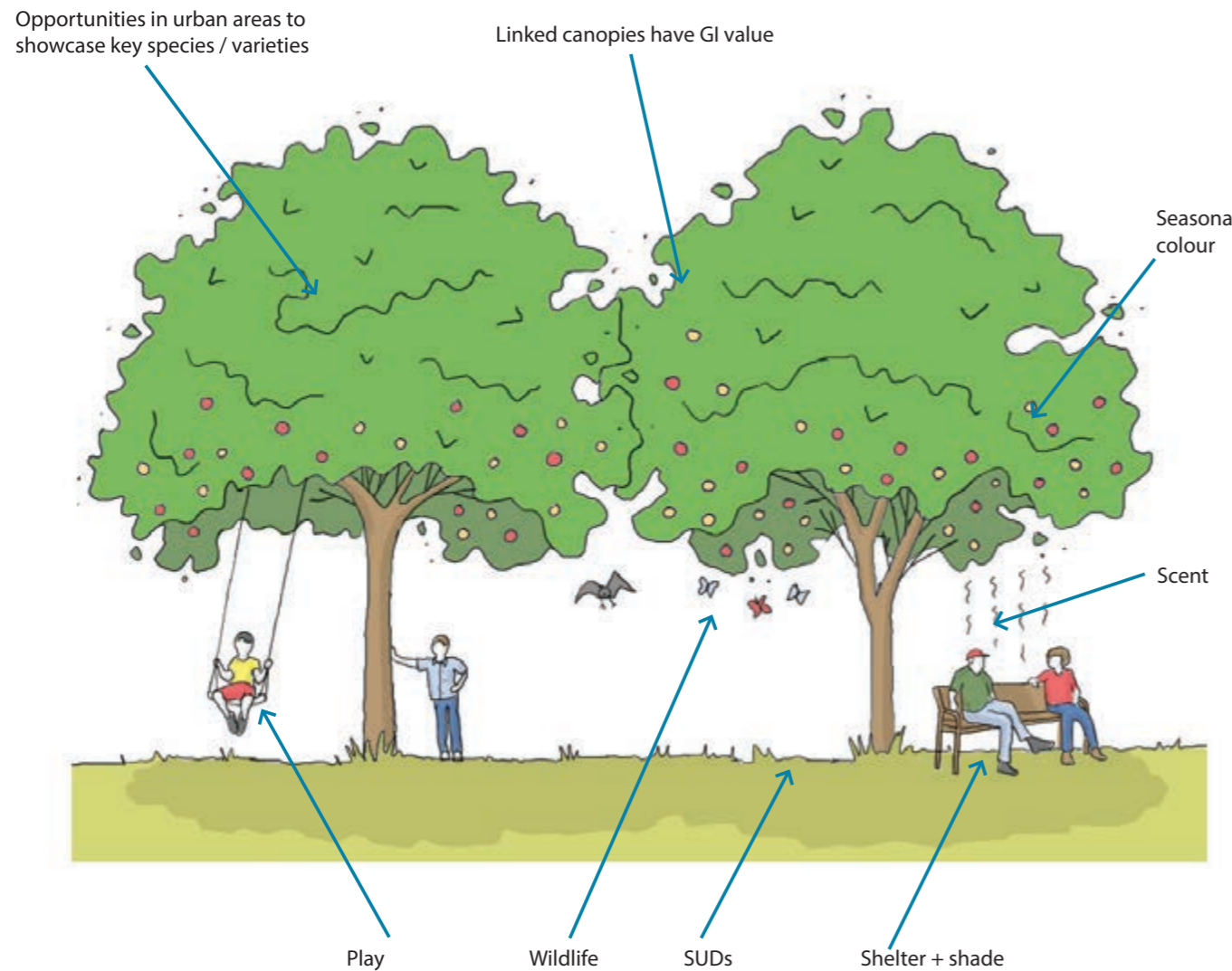
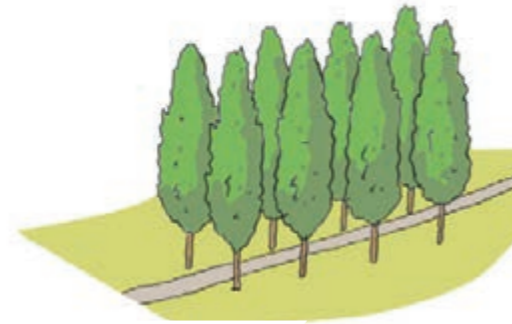
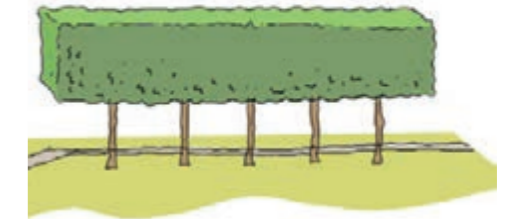


Figure 9.7: Trees in public open space.

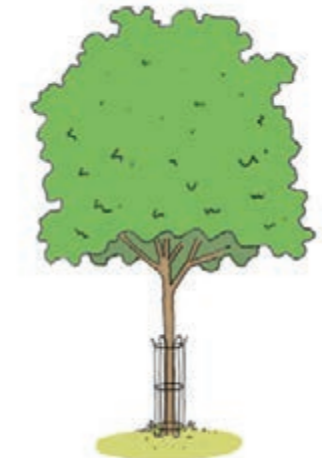
Non natives with a purpose are appropriate eg part of an arboretum or parkland restoration. Formal avenues may be appropriate



Pleaching or other close management



Specimen trees



Parkland style planting

Figure 9.8: Trees in designed landscapes. Non-natives with a purpose are appropriate, e.g. as part of an arboretum or parkland restoration.

C.9.2.33 In rural areas, it is expected that new plantings will normally be of native species associated with the local landscape character, but with due consideration for the implications of climate change, pests and diseases.

C.9.2.34 For trees on the settlement/countryside edge, total screening of new development is not the objective. A mix of species in a naturalistic (unevenly spaced) arrangement with gaps is normally best practice, unless something else is demonstrated to be locally characteristic.

C.9.2.35 In urban and developed settings, effective use may also be made of non-native species or varieties where their essential characteristics provide functions, including visual attractiveness and ecosystem services, that are better suited to their particular context and surroundings.

C.9.2.36 For trees in private gardens a minimum distance is needed depending partly on foundation type but also to allow space to grow and avoid 'pressure to prune'.

C.9.2.37 The SDNPA Tree Species List should be consulted to help select the right plant for the right place for the right reason. This is based on the Trees and Design Action Group (TDAG) publication **Tree Species Selection for Green Infrastructure: A Guide for Specifiers (2018)** which also provides detailed guidance on this.

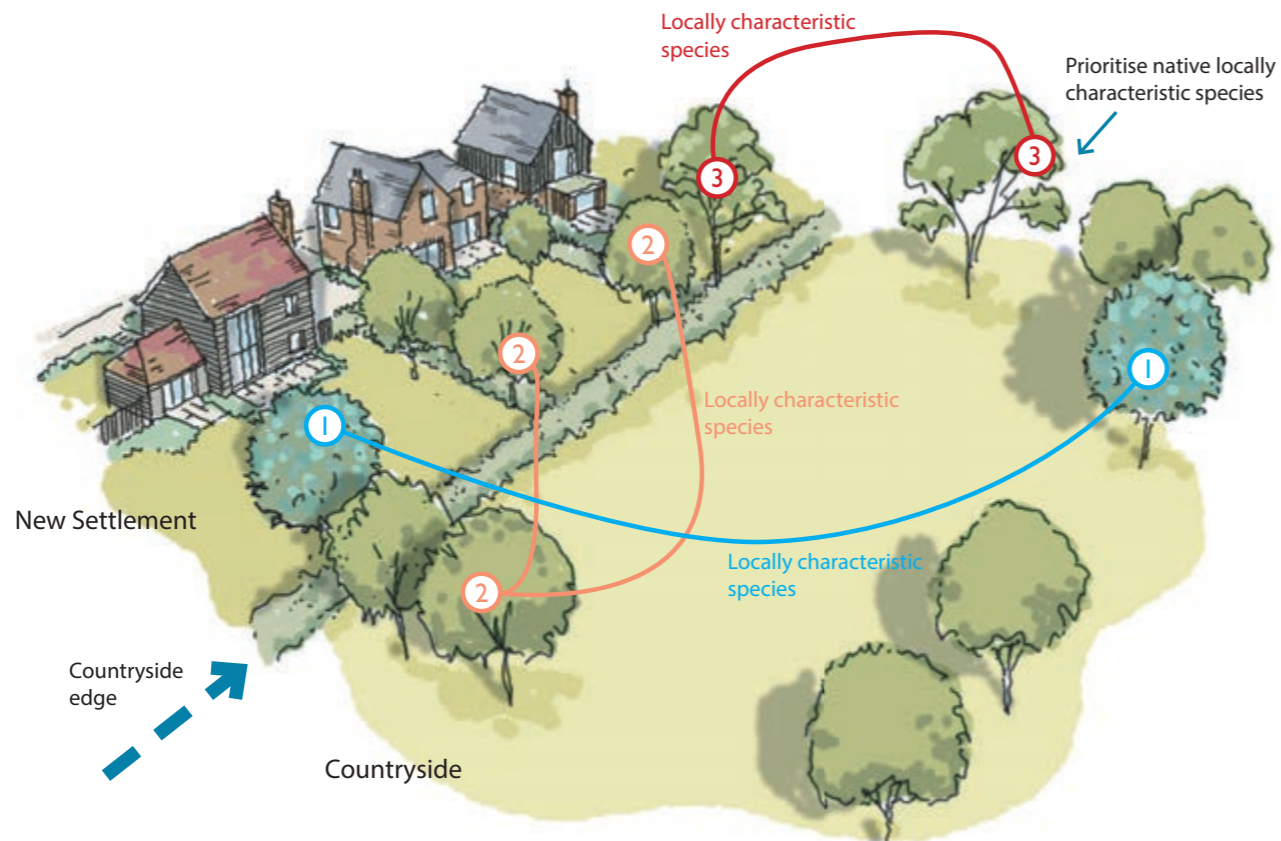


Figure 9.9: Trees on countryside edge should prioritise locally characteristic native species and be planted in an irregular, naturalistic way.

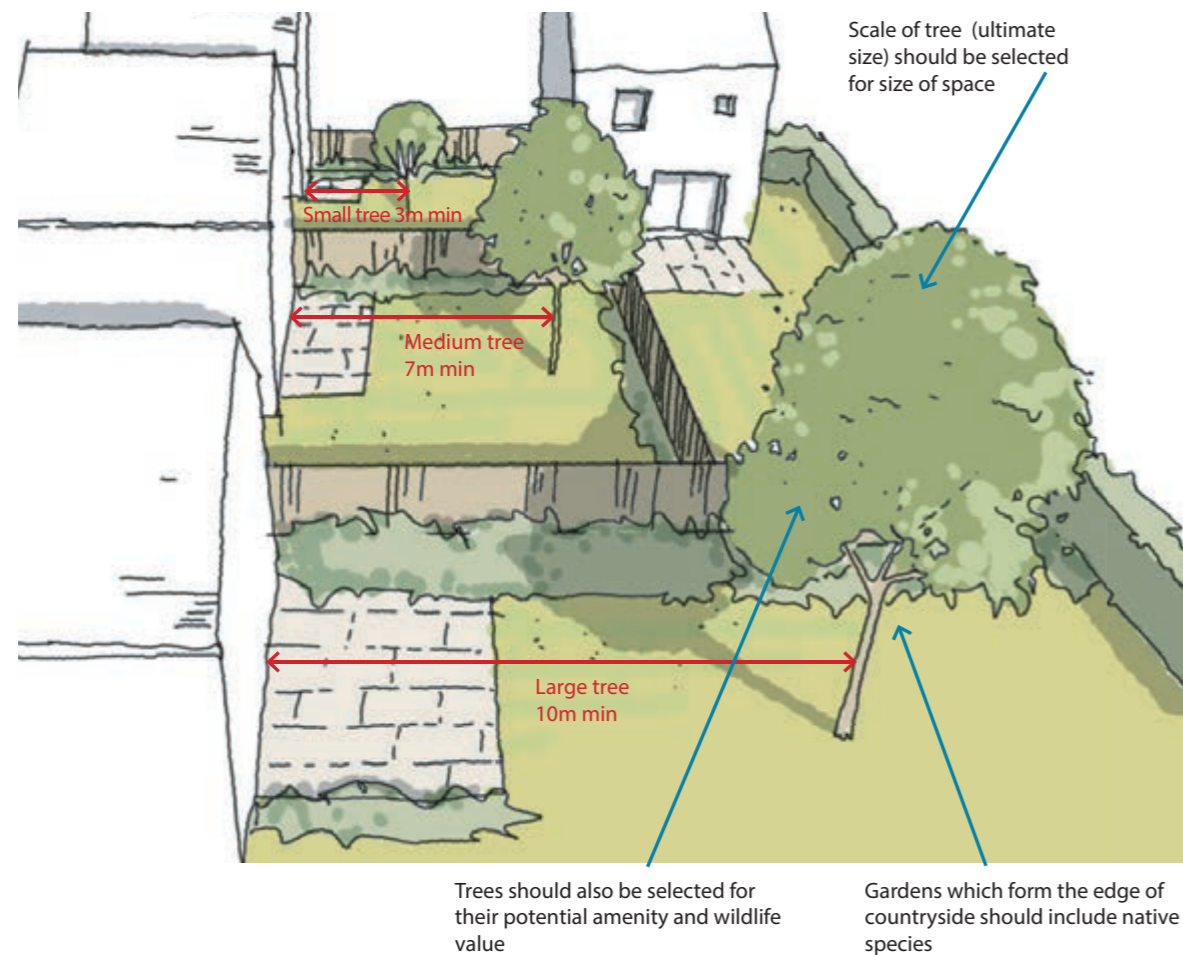


Figure 9.10: Trees in gardens.

C.9.2.38 Some design principles for trees in streets are illustrated in Figure 9.11:

- 1 The ultimate size of the tree should relate to the scale of the street
- 2 Minimum distance from habitable rooms and foundations needed
- 3 New street layouts should try to accommodate the occasional very large tree, such as in squares or pocket parks
- 4 Tree planting can help integrate street car parking
- 5 Modest planting areas will require structural soils under hard surfaces to achieve minimum soil volumes
- 6 Root soil volume can be partially achieved through soil in trenches
- 7 but may need to be supplemented with structural soils under hard surfaces
- 8 Street lighting design (lux levels, column and ducting locations) must work with tree planting layout

- 9 Service trenches should be located to minimise interference with tree trenches and root zones, with root barriers

C.9.2.39 Some design principles for trees in car parks are illustrated in Figure 9.12:

- 1 Where trees or woodland about the site, the car park tree planting should be designed to extend this green infrastructure
- 2 Trees should be selected and located to try to achieve a closed canopy ultimately
- 3 Root soil volume can be achieved through generously dimensioned trenches (ideally at least 3m wide, minimum 2m) where roots can join together
- 4 Root soil volume may need to be achieved through use of structural soils under hard surfaces where planting area is inadequate. E.g. here 40m³ provided in 1m deep system of crates
- 5 Avoid sappy trees or trees with problem fruits over car parking spaces

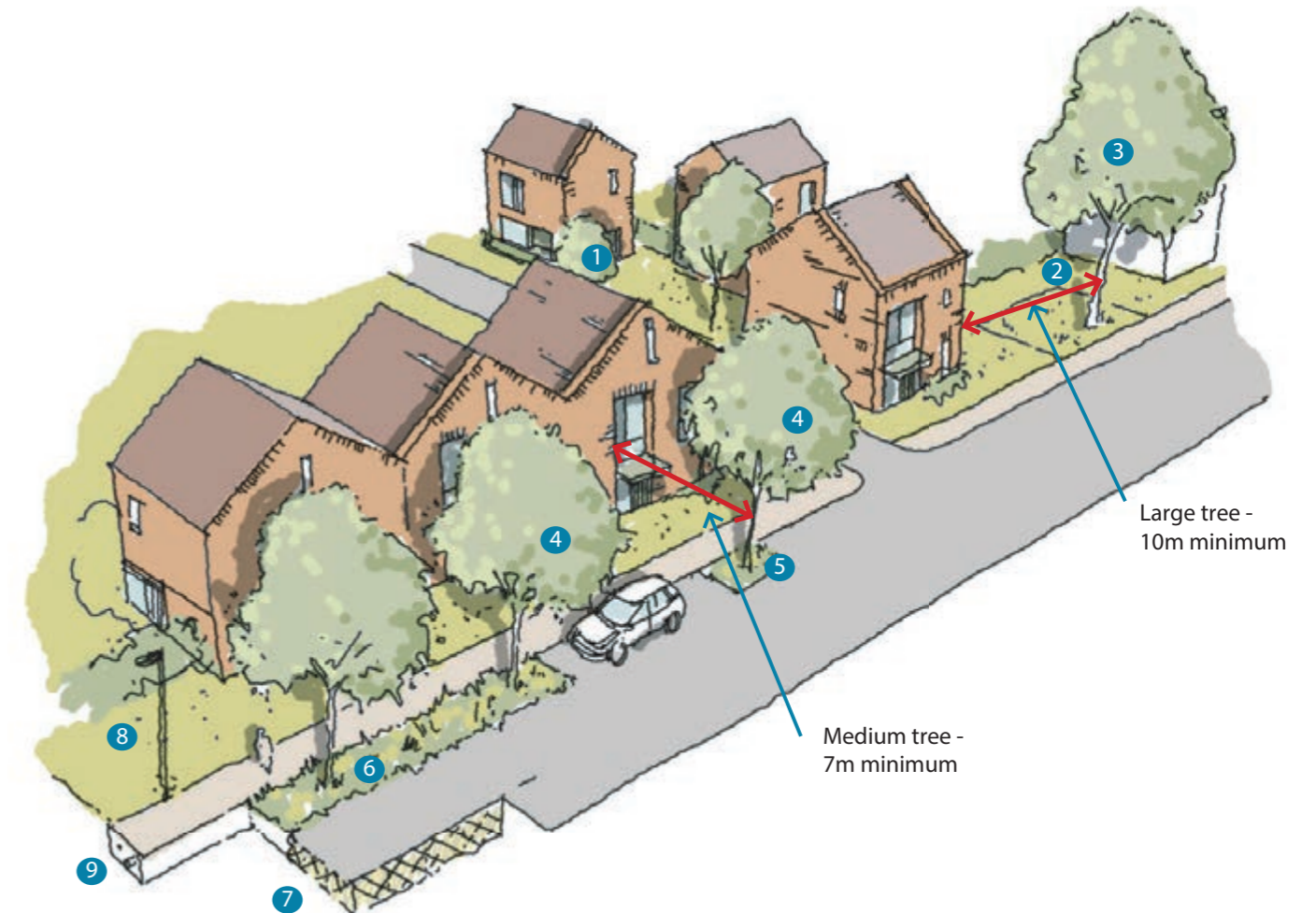


Figure 9.11: Trees in streets.

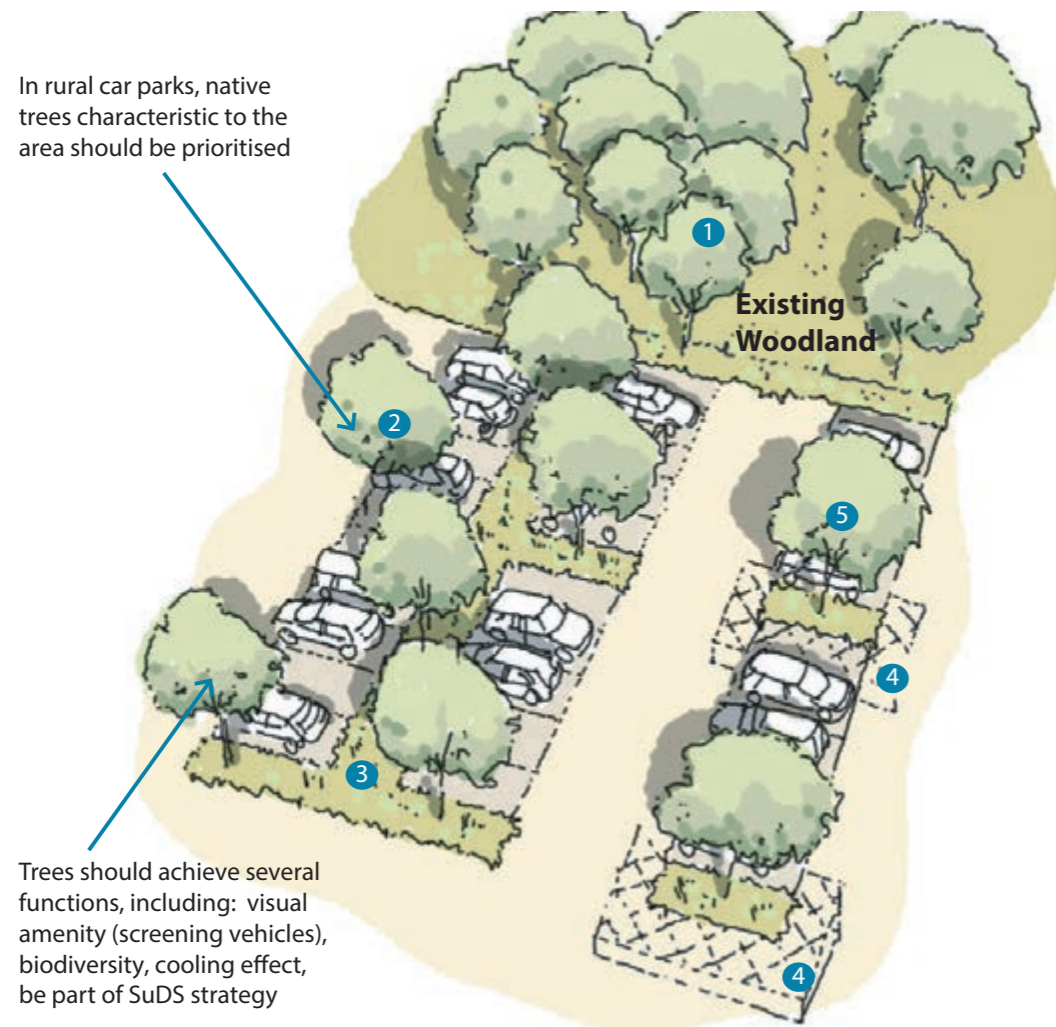


Figure 9.12: Trees in car parks.

C.9.2.40 New development should not depend on visually impenetrable screening belts of trees or woodland to integrate new buildings into the landscape, unless, exceptionally, this is the only way to integrate development that would otherwise have a negative visual impact which cannot otherwise be mitigated, such as significant infrastructure.

C.9.2.41 It is essential that the space trees will eventually need, both above and below ground, is considered from the very outset of the design process. This will help to ensure policy requirements and design principles are met; and reduces the risk of the need for significant layout design change to accommodate retained and new trees.

Ecosystem Services (ES)

C.9.2.42 Trees, hedgerows and woodlands can contribute to Ecosystem Services as set out in policy **SD2: Ecosystem Services**. See **SDNPA Technical Advice Notes** for guidance on how to prepare the required Ecosystem Services Statement.

C.9.2.43 Climate change mitigation & adaptation

- Larger trees (while alive or used in construction) lock up more carbon, create greater cooling effect, (when native) support more species and ultimately may create more significant amenity value.
- Trees with a wider canopy form and in groups are better for cooling and shade.
- Deciduous trees on the west side of buildings provide shade in summer to counter internal overheating and the need for mechanical cooling, while allowing daylight in winter.
- Tree shade in open spaces, car parks and children’s play areas is particularly valuable.
- Planting that is diverse in age, species and genetics, connects up to other green infrastructure and is stress tolerant, builds in greater resilience.

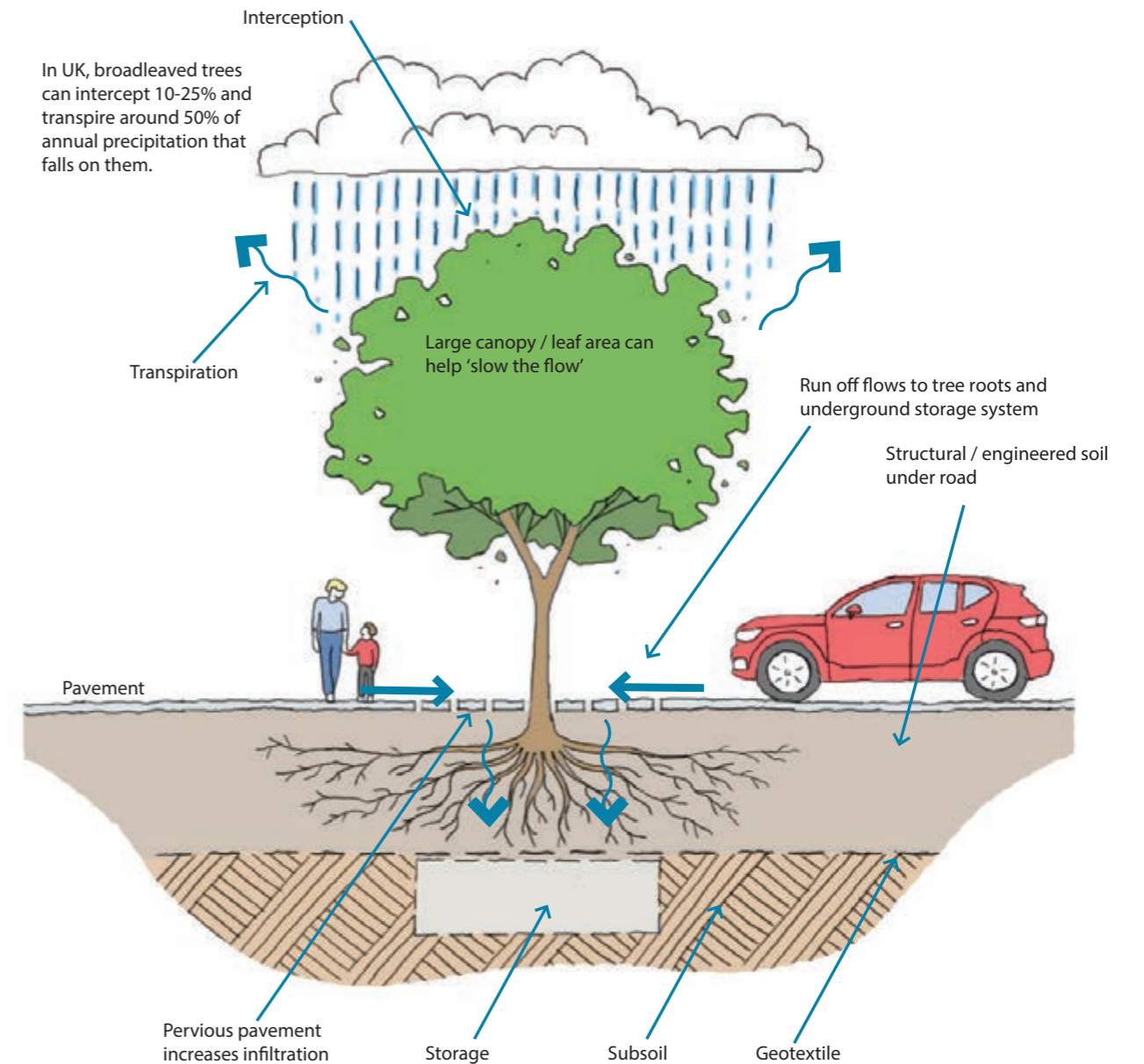


Figure 9.13: Trees and SUDs.

C.9.2.44 Tree, hedgerow and woodland plant selection may also be influenced by the following constraints and benefits:

- aesthetic qualities
- suitability for site environmental characteristics and the wider landscape setting
- other functional requirements (e.g. landmark, screening, framing, directing, sheltering)
- productive requirements (e.g. food, fuel, fibre, disease resistance)
- above and below ground constraints (such as utility services) and available space for growth
- undesired potential shade and light or view obstruction, bearing in mind mature tree size and

shape, expected hedgerow height, leaf size, foliage density, orientation to windows, gardens, solar panels, viewpoints, etc.

- appropriate scale of mature tree
- maintenance and safety considerations (longevity; resilience to storm, pest and disease risks; toxic or noxious fruit or pollen risks; insect infestation risks; implications for nearby land uses such as schools, footpaths, play areas, highways; sensitivity to climate change, etc.)
- ecosystem services benefits.

C.9.2.45 Water Management (flooding and water quality)

- Retention of large canopy trees helps intercept precipitation and runoff (trees can account for between 8 and 68% of interception per rainfall event).
- Use trees in areas of hard surfacing to increase interception and retention of runoff.

C.9.2.46 Nature Conservation & Habitat Connectivity

- A diversity of species is needed that provides suitable habitat to the species found nearby (as identified by the local biodiversity record centre).
- Trees hedgerows and woodlands should be located to maximise connectivity with the wider landscape and habitats.
- Select tree species for their nectar, pollination and fruit.
- Maximise the total volume and connectivity of the canopy.
- Plant to create multiple layers to the canopy, such as hazel shrub layer with oak standards.

C.9.2.47 The UK Biodiversity Action Plan (BAP) list of the habitats and species most threatened and most in need of conservation action is an important reference source for design and selection of new planting of trees, hedgerows and woodlands.

C.9.2.48 As well as a variety of priority species that rely on trees, there are a number of woodland priority habitats, including lowland mixed deciduous woodland, lowland beech and yew woodland, wet woodland, wood pasture and parkland and traditional orchards. For more details of the BAP priority habitats see [here](#), and for the priority species see [here](#).

C.9.2.49 Conserving and Enhancing Soils

- Trees, woodland, and hedgerow planting can reduce soil erosion from wind and water by providing shelter from weather and improve soil stability via roots.
- Selecting suitable locally native trees, which best suit site conditions, is the main way to encourage strong associations with the network of beneficial fungi (mycorrhiza) in the soil. Mycorrhiza are the key

to creating the successful conditions for certain tree species to thrive.

C.9.2.50 Air Quality Management

Trees and hedges have been shown to reduce air pollutants such as particulates and nitrous oxides through deposition of pollutants on the surface area of leaves and bark and also through dispersing air pollution (see [Woodland Trust report](#)).

Hedges may be more effective in reducing pollution from road traffic as they are present nearer the source at ground level.

C.9.2.51 Health and Wellbeing

- Seasonal colour, the amenity benefits of tree planting and the colour green all provide wellbeing effects.
- Bringing nature to people through trees and the other species, such as birds, associated with them, has been shown to have mental health benefits.
- Trees in the highway can contribute to traffic calming.
- Air quality improvements

C.9.2.52 Cultural Links

- Trees can often make a significant contribution to place making in new development.
- Species associated with a particular place, provide reinforcement of cultural heritage and character, e.g. Dutch Elm resistant elms in areas where elms have been lost in recent decades.
- Trees can sometimes provide framing for important views, e.g. to The Downs from settlements.
- Trees and Hedgerows can have important historical associations, e.g. the Queen Elizabeth Oak, Cowdray Park, Midhurst, see *Figure 9.13*.
- Veteran trees and ancient woodlands provide a tangible link to the past.
- Traditional forms of woodland management, such as rotation coppice with standard trees, reflect the way the landscape would have appeared for many centuries and the traditional products that were produced from them and continue to support the wildlife which uses them (e.g. dormouse).

Planting Good Practice

C.9.2.53 Good practice is set out in national guidance:

- Tree Council guidance [here](#).
- BS8545 provides a great amount of detail for those specifying and planting trees as part of developments.
- NBS Landscape, Section Q, is an industry standard source of specifications for good practice relating to landscape operations, including planting and aftercare.

C.9.2.54 The key requirements include:

- Good quality stock, free from defects, pests and diseases, of good form and of identified provenance.
- Careful handling in transit and storage prior to being planted, ensuring that roots, rootballs or containers are not allowed to dry out.
- A suitable size and depth of hole or pit to accommodate roots.
- Good quality growing medium, with compost and / or fertiliser incorporated where necessary.
- Planting at an appropriate depth.
- Support for young trees as necessary using canes or staking, as appropriate to size and setting.
- Protection from damage by animals or vehicle impact where necessary and mulching to reduce weeds.

Quality of Tree Planting Environment

C.9.2.55 Best practice guidance is provided by the Trees and Design Action Group 2014 publication [Trees in Hard Landscapes](#), BS5837 and [NHBC Chapter 4.2 Building Near Trees](#).

C.9.2.56 Infrastructure and tree lifespan

New buildings, structures, hard surfaces and foundations (particularly in areas of expansive clay subsoils), together with associated utility services, should, wherever possible, be designed to avoid acting as constraints on the retention of existing trees or the establishment and growth of new plantings, bearing in mind future growth, the potential effects of climate change and root water demands on soils and subsidence risks.

C.9.2.57 Soil compaction

When soil is compacted it restricts the supply of oxygen, water and nutrients reaching the roots, thus starving the tree of what it needs to survive. A single pass of a heavy vehicle, particularly in wet conditions on clay soils, can cause irreparable compaction damage to the soil and result in serious damage to or loss of trees, potentially some time after the event. The use of Root Protection Areas (RPAs), with physical barriers establishing construction exclusion zones (including the temporary storage of construction materials), is designed to provide essential protection for existing trees. RPAs will normally be calculated by a qualified professional and in accordance with BS5837.



Figure 9.14: The Queen Elizabeth Oak, which Queen Elizabeth I sat beneath in 1591, is estimated to be up to 1000 years old and is the second largest sessile oak in the country (Monumental Trees).



Figure 9.15: Supermarket car park: Trees failing after a few years due to inadequate root soil volume and compaction.

C.9.2.58 For new trees in hard surface areas, such as in streets and car parks, a minimum root soil volume of uncompacted growing medium will be necessary.

C.9.2.59 Watering and Drainage

New trees need adequate air and water to allow healthy growth. This can be achieved by either maximising the size of the opening for the tree in natural ground or in hard surfaces, using permeable material.

C.9.2.60 Root soil volume

Applicants should estimate the soil volume required at the early stages of design, and expand as much rooting environment below paved surfaces by using load bearing planting structures.

Further information can be found in BS8545 and Green Blue Urban [soil calculator](#) for different trees.

C.9.2.61 The landscape design should make use of connected adjacent tree planting areas, such as planting in continuous trenches, where tree roots are able to grow

between trees in a protected rooting environment or enable underground use of directly adjacent green areas.

C.9.2.62 In hard planting areas, load bearing planting structures should be used, these are either:

- Highly specialised structural growing media. There are three main types: Sand (tree soils), medium sized aggregates, large stone (Stockholm system).
- Cellular confinement systems. These are modular plastic or concrete cell structures that provide load-bearing capacity by acting as a bridge or vault. Space under hard surfacing filled with loose soil to support tree growth



Figure 9.16: An example of a cellular system under a street (GreenBlue Urban).



Figure 9.17: An example of a structural soil system (clean stone lattice with soil added) in New York City (CU-Structural Soil).

C.9.2.63 Utilities

- Common ducting or, failing that, dedicated trenches for mixed services minimise the potential conflicts with trees.
- Service runs should be shown on the same plan as proposed and existing tree planting to minimise potential conflicts.

C.9.2.64 CCTV

Trees need to be carefully selected, accounting for ultimate crown spread or proposed management to avoid excessive screening of important CCTV camera angles.

C.9.2.65 Lighting

Lighting schemes should be integrated with tree planting proposals (on the same layout plan) to avoid potential conflicts. Where there are valuable existing trees, lighting column positions may need to be changed.

C.9.2.66 Construction stage damage

Mechanical damage to the tree, often through inadvertent machinery damage, can create pathways for pathogens to enter the tree and cause decline. The application of construction exclusion zones and canopy protection areas is meant to prevent this.

C.9.2.67 Highway trees

Trees planted in the highway (which may include verges) need to be adopted by the Highway Authority, meet that Authority's standards and often incur a payment for their adoption and future maintenance.

C.9.2.68 It is important that the safety of road users is considered in the selection of trees adjacent to highways (in terms of visibility, risk of failure and obstruction of high vehicles).

C.9.2.69 Adequate space should be provided for trees to grow, so that trip hazard risks to pedestrians and cyclists from exposed roots are minimised along pavements.

C.9.2.70 There may be opportunities to plant trees in non-highway land which can also serve as street trees.

Hedgerows and Development

C.9.2.71 Hedgerows are very important components of the South Downs landscape. They help with connectivity and often are in need of beneficial management or enhancement. This might include supplementary planting, or completely new hedgerows, to increase connectivity.

C.9.2.72 Locally native species would normally be expected (See previous section on [Right Tree in the Right Place](#))

C.9.2.73 Temporary fencing during establishment may be necessary, to prevent gaps being made by people.

C.9.2.74 Suitable maiden trees may need to be planted as standards too, to create mature trees for the future.

C.9.2.75 The use of traditional hedge laying techniques built into the management plan would help ensure the long term health and robustness of the hedgerow.

Woodlands and Development

C.9.2.76 Multiple benefits

Woodlands absorb air pollution, regulate temperatures and the impacts of climate change and increase people's health and wellbeing. Increasing resilience of existing woodlands can also be a major contributor to achieving a biodiversity net gain for the development.

C.9.2.77 Connectivity

Woodlands function at their best when they form an interconnected network for species to migrate around, and to create a link with the wider landscape. Preventing severance, and promoting connectivity with the wider landscape, can be a powerful tool in achieving biodiversity net gain. It also links the development with the landscape and creates a stronger sense of place.

C.9.2.78 Woods benefit from being worked. Access into and around woods for ongoing management is important. Developments should not impede the workability of a woodland, even if it is not currently being worked.

C.9.2.79 Many of the design principles for trees above, apply for woodlands as much as they do for individual trees and small groups. Often, however, due to the way that woodlands and tree groups have grown together, or how they are managed, they do have additional considerations that should be taken into account when designing a development within close proximity to them.

The following are key considerations which development proposals are expected to demonstrate have been addressed:

C.9.2.80 Increased pressures from development should be considered, and mitigation measures planned as early as possible. These include increased:

- visitor numbers
- dog walking
- pollution and waste
- fire risk
- predation from cats and dogs of woodland species.

C.9.2.81 Groups of trees may function as one organism. Often when trees grow together, they form mutually beneficial functions and adapt to grow alongside neighbouring trees, and seek to achieve a balance. Disruption to this, such as by poorly executed thinning or cutting roots, can cause unwanted knock-on effects down the line.

C.9.2.82 There is help out there for woods. There are many groups and organisations that exist to help work our woods. Applicants should make use of this resource so that the woods become a valued resource, not a burden. Applicants should consider whether the local community and residents can get involved too. The Authority can provide further advice on managing and enjoying woodlands.

See **Woodland Trust** and **Forestry Commission** on guidance and grants for new woodlands

Ancient Woodland, Veteran Trees and Development

C.9.2.83 Ancient woods are designated areas that have remained under continuous woodland cover since 1600, although trees within such areas may be of any age. They may be harvested as part of an agreed management regime, but they are relatively undisturbed by human development. These areas are therefore the UK's richest and most complex terrestrial habitat and they are home to more threatened species than any other.

An **ancient tree** is a tree which is remarkably old for its species and this can vary dramatically depending on the species. The older the tree, the more vital to wildlife it becomes. All ancient trees are also known as veterans.

Veteran trees are survivors that have developed some of the features found on ancient trees. However, veteran trees are usually only in their second or mature stage of life.

C.9.2.84 The 2021 National Planning Policy Guidance 175C says:

'You should refuse planning permission if development will result in the loss or deterioration of ancient woodland, ancient trees and veteran trees unless:

- *there are wholly exceptional reasons and*
- *there's a suitable compensation strategy in place'*

C.9.2.85 Natural England have an **Ancient Woodland Inventory** for England for woods above 2ha. Applicants should treat ancient woodlands that are less than 2ha with the same degree of care as those that appear on the inventories, and regularly consult the inventories as they are periodically updated.

C.9.2.86 Other distinct variations of designated ancient woodlands include:

- Wood pastures identified as ancient
- Historic parklands (Protected as a heritage asset in the NPPF)

For further information about veteran and ancient trees see **Government standing guidance**

C.9.2.87 The Authority will apply the mitigation hierarchy referred to in the **NPPF**, and requires developments first and foremost to avoid loss or deterioration of Ancient Woodlands.

C.9.2.88 A key feature of the Government advice is the use of 'Buffer zones', with a minimum distance of 15m from ancient woodland, or 15 times the diameter of the Ancient or Veteran tree being protected. The actual appropriate distance may need to be greater, depending on the scale, type and impact of the development. The Authority will assess this on a case by case basis. See **Government standing guidance**

C.9.2.89 For exceptional cases, for which it is permitted to allow the unavoidable loss or deterioration of such features, a comprehensive package of mitigation measures will be required to reduce the impact as much as possible, and for irreplaceable habitats, an extensive compensatory strategy will be required, secured through conditions and/or other appropriate means. Compensatory measures are very much a last resort, and can only ever partially compensate for the loss/deterioration. For further information on the sorts of measures that might be involved please consult the **Government standing guidance**.

C.9.2.90 It is important to stress the role that 'other' trees and woodlands play in creating an interconnected network of habitat that is vital to support ancient woodlands, veteran or ancient trees. Deterioration of this as a result of a development may, also be treated as a direct negative impact, or 'deterioration' of irreplaceable habitat mentioned in the NPPF.

Plant Health and Biosecurity

C.9.2.91 It is essential that all plants, including trees and shrubs, are planted free from pests and disease, and with maximum traceability in terms of where they have come from in the world ('provenance').

C.9.2.92 Further information is available from the UK government on measures that applicants can take to practise good biosecurity in respect to tree planting. The following guidance is also recommended: BS8545: Trees: from nursery to independence in the Landscape and from the **Arboricultural Association** and **Government advice**

Management and Maintenance

C.9.2.93 The maintenance and management of trees, hedgerows and woodlands should be incorporated within a Landscape and Ecology Management Plan (LEMP⁶) where this is required for planning purposes.

Post planting monitoring and management should be programmed and budgeted for at least five years from the date of planting or at least thirty years if part of biodiversity net gain. However in practice longer terms may be required, depending on the proposed uses and lifespan of the development.

Once planted, young trees require maintenance to ensure they become established as healthy specimens. This will typically include:

- Watering, especially of larger specimens in urban areas
- Weed control
- Inspections for damage and remedial attention, including formative pruning
- Adjustment of stakes, ties etc. and eventual removal following establishment

C.9.2.94 Where possible, the maintenance and management of hedgerows should be carried out by a single owner and not divided by multiple owners. Similarly, ideally, woodlands should be managed by a single owner.

C.9.3 SUSTAINABLE DRAINAGE

KEY DESIGN PRINCIPLES

- Drainage approach and design should be informed by, contribute to and ensure proposals are coherent with the surrounding landscape in a drainage strategy.
- The drainage approach and design should ensure multifunctional benefits wherever possible, i.e. enhancing water attenuation and quality and providing biodiversity and landscape amenity.
- Drainage schemes should manage all sources of surface water, protect people and property from flooding and should not create additional flood risk beyond the site.
- Drainage schemes should be designed to match greenfield discharge rates & volumes and follow natural drainage routes as far as possible.
- Source control elements should be maximised, whilst engineered solutions (e.g. pipes, tanks and large steep-sided basins) minimised.
- Surface water not collected for use should be discharged according to the following hierarchy:
 - To ground,
 - To a surface water body,
 - A surface water sewer, highway drain, or another drainage system
 - To a combined sewer where there are no other options, and only when agreed with the relevant sewage undertaker.
- Surface water discharges should not adversely impact the water quality of the receiving water bodies, both during construction and when operational. Interception of small rainfall events should be incorporated into the design of the drainage system.
- The design of the system must account for the likely impacts of climate change and likely changes in impermeable area over the design life of the development.
- A maintenance plan for construction and for operational stages in perpetuity should be prepared. This should cover: a schedule of activities, practicable access (for people and any necessary machinery), health and safety, outfalls and any other considerations, such as biodiversity.
- New homes should be provided with water butts wherever possible and appropriate.

Drainage Strategy

C.9.3.1 New development must have a drainage strategy (proportionate to the scale of development) that deals efficiently with predicted water volumes and flows and applicants should discuss requirements with local district and borough engineers, but wherever possible, the Authority favours a Sustainable Drainage System (SuDS) Approach.

C.9.3.2 Applications will be required to provide a drainage strategy; an outline as to how water will be sustainably managed on site. The nature of the strategy, and its presentation, is expected to reflect the scale and nature of the proposals and the site's context. For smaller schemes (e.g. a single new home) the drainage strategy may be part of a Design and Access Statement.

C.9.3.3 The drainage strategy may also help inform the Ecosystem Services statement that is a requirement under policy **SD2**. See the SDNPA **Ecosystem Services TAN**.

C.9.3.4 Sustainable drainage systems, commonly referred to as SuDS, or 'Rainscapes', provide an improved approach to the management of surface water runoff from hard surfaces such as roofs and car parks by replicating natural processes. Compared with traditional engineered drainage systems, SuDs can maximise the additional benefits that can be achieved by reducing site-based, local and catchment-wide flood events. They allow ground water recharge which reduces water pollution, enhance biodiversity and provide landscape amenity enhancement.

C.9.3.5 SuDS aim to mimic natural drainage systems on development sites as far as possible

C.9.3.6 Drainage approaches for schemes within the South Downs National Park are expected to:

- Be landscape-led
- Follow natural processes
- Deliver multiple benefits
- Take into account climate change

SuDS components

C.9.3.7 There are a range of SuDS components which have different functions and benefits.

More detailed advantages and disadvantages of each of these components is set out in the **Susdrain guidance**.

Source Control

C.9.3.8 Source control components are located close to the hard surface runoff source, such as a building or road and deal with the more frequent but smaller polluting events (First 5mm-10mm of rainfall)

- Green Roofs (see **C.9.4**) with the possibility of an extra drainage layer
- Rainwater Harvesting (usually collected from roofs for use in gardens or for WC flushing) All new residential developments should have rainwater butts where possible.
- Unless sound justification otherwise, roads, parking areas, hard standings and driveways should be permeable (such as gravel or permeable paving). Footpaths and other lightly used hard surfaces should be permeable or shed to surrounding permeable ground.

Of the above, green roofs offer the most opportunities for multifunctional benefits.

Swales and Channels

C.9.3.9 Water needs to be conveyed across a site to a lower level and vegetated channels (swales) are the preferred method particularly in preference to underground pipes.

- Swales
- Channels and Rills

Swales generally have the most multifunctional benefits, (easy access water conveyance; water quality through lateral flow via vegetation; biodiversity and amenity) while rills are more suitable where space is constrained, but also can be planted and can have play value. Swales should be designed with sufficiently shallow slopes to avoid risks of children falling in and to enable their easy access and escape.

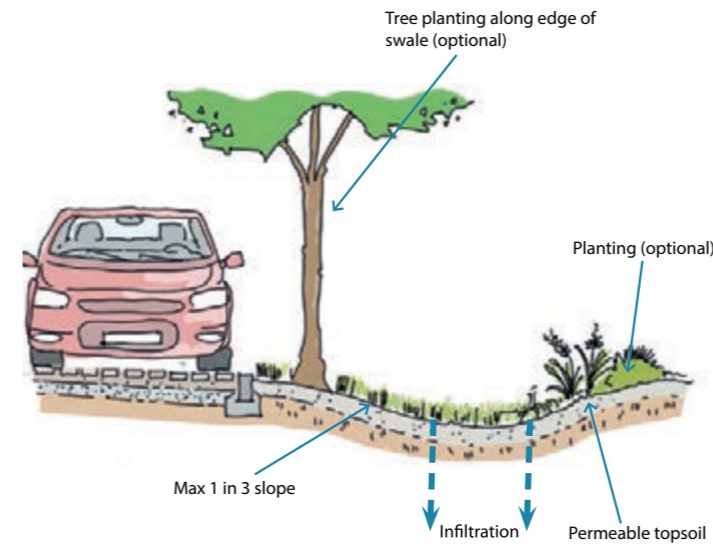


Figure 9.18: Swale (from Susdrain).



Figure 9.19: Swale in new housing development (Ciria SuDS Manual).

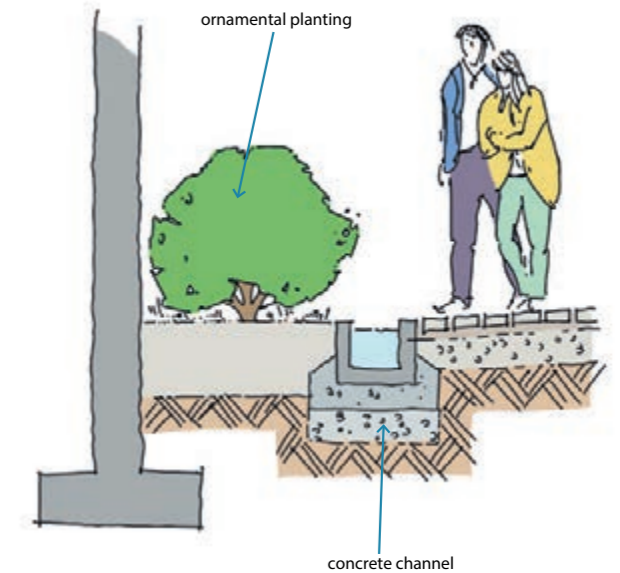


Figure 9.20: Rill with planting (from Susdrain).



Figure 9.21: Freiburg has 15km of rills running through the city streets, including the very busy commercial centre.

Filtration

C.9.3.10 Filtration removes sediment and other particles, improving water quality

- Filter strips are gently sloping areas of grass that water flows onto and across removing silt
- Filter trenches are shallow gravel-filled excavations providing some temporary storage for infiltration or filtration for runoff.
- Bioretention areas are vegetated areas with specially designed engineering soils and sand layers, which filter out pollutants from surface water runoff normally associated with highways.

C.9.3.11 Of the above, Bioretention areas have the greatest potential for multi-functional benefits.

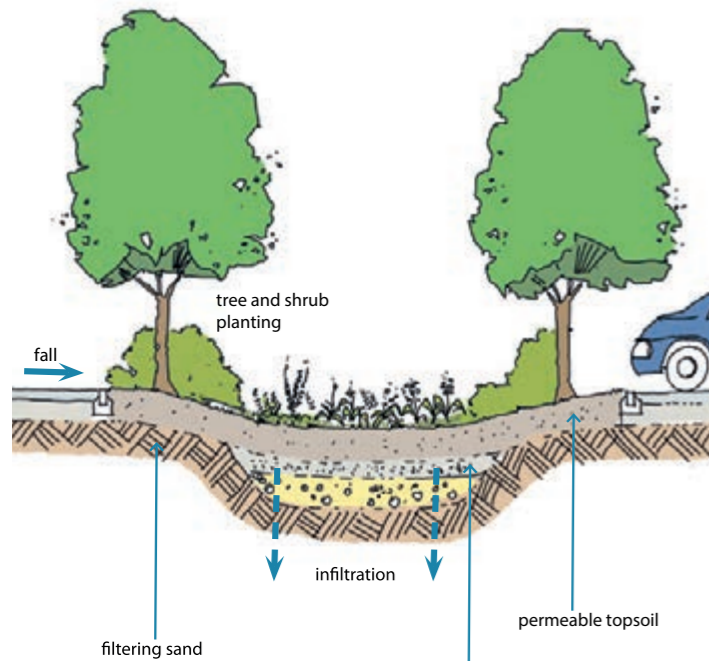


Figure 9.22: Bioretention area (from Susdrain).

Infiltration

C.9.3.12 Infiltration components are used to capture surface water runoff and allow it to infiltrate (soak) and filter through to the subsoil layer, before returning it to the water table below.

- Soakaways store runoff from a single house or from a development and allow its efficient infiltration into the surrounding soil.
- Infiltration trenches are usually filled with permeable granular material.
- Infiltration basins are dry basins or depressions designed to promote infiltration of surface water runoff into the ground.

- Rain gardens are very similar to a bioretention area, without engineering soils and they do not provide as much water treatment. A rain garden is primarily used to manage runoff from roofs (and relatively unpolluted areas).

Of the above, planted infiltration basins and rain gardens have the greatest potential for multi-functional benefits.

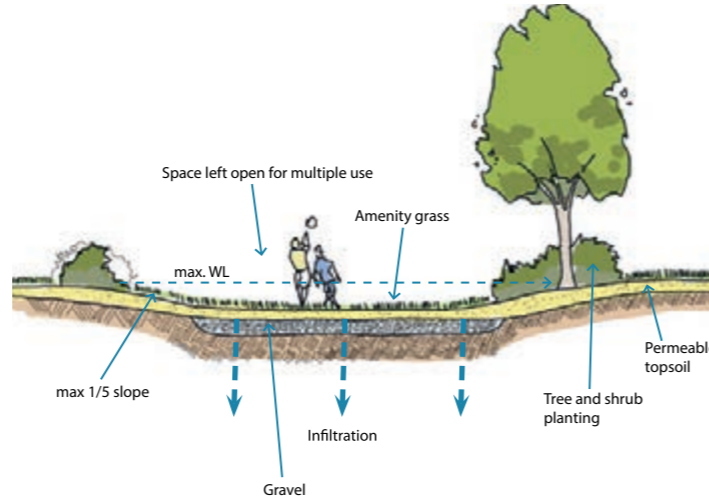


Figure 9.23: Infiltration basin (Susdrain) RELABEL.

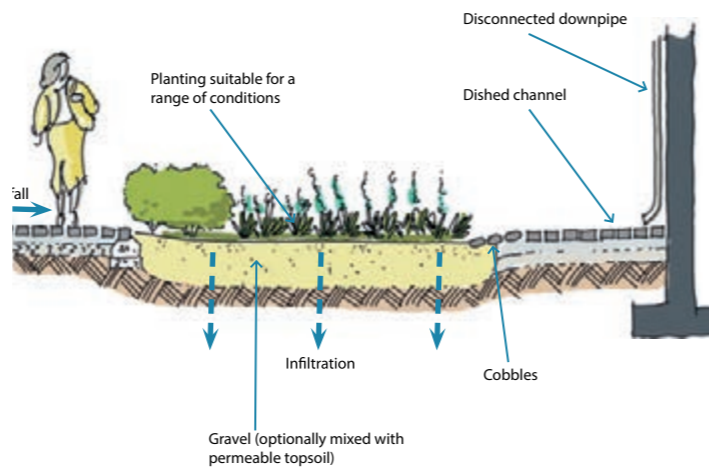


Figure 9.24: Rain garden (from Susdrain).



Figure 9.25: A rain garden in Southampton city centre.

See [further design guidance on rain gardens](#).

Retention Basins and Detention Ponds

C.9.3.13 These either provide storage, through the retention of surface water runoff, or attenuation through the detention of surface water runoff.

- Detention basins (or ponds) are open, usually flat areas of grass that are normally dry, except after major storm events. In heavy rainfall they are used to store water for a short time and so they can fill with water. The potential negative design implications of health and safety drivers for safety fencing, rafts and signage need to be carefully considered.
- Retention ponds are open areas of shallow water, designed so they can accommodate rainfall and provide temporary storage for excess water.

Geocellular tanks with a high void ratio, have begun to replace underground pipes or tanks that would normally store water.

C.9.3.14 Of the above, geocellular storage has no multifunctional benefits while detention basins and retention ponds have great potential multifunctional benefits including a recreation function for the former (while dry) and the latter can host water activities.

Wetlands

C.9.3.15 Wetlands are densely vegetated water bodies that use sedimentation and filtration to provide treatment of surface water runoff and should be the last stage of the SuDS management train.

Inlets, outlets and control structures

C.9.3.16 These are important components of well-designed SuDS schemes. They allow water to flow into and out of features as well as controlling the rate at which water flows along and out of the system.

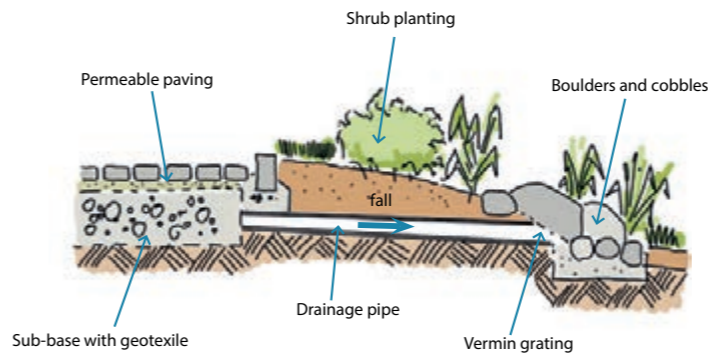


Figure 9.26 Inlet connecting permeable paving to swale (from Susdrain).

Other Guidance

C.9.3.17 The [SuDS Manual](#) (CIRIA publication C753) provides guidance on the design process and can be used by those checking designs and calculations to ensure that sustainable drainage principles have been applied.

The [Susdrain website](#) has a list of national and international information sources providing specific design guidance or tools.

The Types of SuDS that may or may not be adopted by Water and Sewerage companies are listed on pages 2-3 of the [Southern Water SuDS Guidance](#).

In West Sussex, see [WSCC Policy for management of surface water](#).

See also Local Plan Policies [SD17](#), [SD49](#) and [SD50](#).

C.9.4 GREEN ROOFS AND WALLS

KEY DESIGN PRINCIPLES

- a. Green roofs should be designed to meet specific benefits and landscape strategy objectives and should incorporate suitable management plans.
- b. Minimum soil depths of 100mm will be required.
- c. Green roofs should be implemented in accordance with the **GRO Green Roof Code (2014)** or subsequent update.
- d. Proposed green roofs and walls can be considered as part of the landscape strategy for a development

C.9.4.1 Green roofs have many benefits (see *Figure 9.37*) and are now a requirement for a proportion of larger residential and non-residential developments in the National Park. The **Sustainable Construction SPD** requires all major non-residential development and housing schemes of 10 dwellings or more to have at least 10% of their total roof area as green roofs. Green roofs must be designed with the final functions clearly in mind, the roof engineering implications fully understood and with an appropriate maintenance and management strategy. They should be viewed as part of the wider landscape strategy, final landscape design and landscape management for a site.



Figure 9.27: Green roof on sports pavilion, Kingston.



Figure 9.28: Sedum green roof on a garden shed.

C.9.4.2 There are a variety of green roof types that can be used depending on the proposed function. The industry tends to describe these differences in terms of ‘intensity’. The more intense green roofs are designed for private, communal or public recreation and are correspondingly more engineered and expensive to construct and maintain, with a range of planting similar to that found at ground level.

C.9.4.3 Extensive green roofs are simpler and cheaper, less accessible and are limited to low growing plants with less soil depth requirements.

A further extensive variant is the ‘brown roof’, which is a prepared substrate designed to self-seed with locally available air and bird borne plant species. This is more suitable where a green roof’s aesthetic appearance is less critical.

C.9.4.4 Green roofs need to be designed so that the underlying structure is sufficiently strong to take the extra weight of the saturated soils, any drainage layer and vegetation. All green roofs help intercept rain water but ‘blue roofs’^G are designed to collect and attenuate storm water and are thus a very effective SuDS feature. (see **C.9.3**).



Figure 9.29: A green roof car port (DIY green roofs).


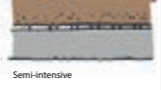
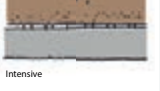
	Green roof type		
	Extensive	Semi-intensive	Intensive
			
Use	Ecological landscape	Garden or ecological landscape	Garden, park or roof terrace
Type of vegetation	Moss, herbs, and grasses	Moss, herbs, and grasses	Lawn/perennials, shrubs and trees
Benefit	Water retention, thermal & biodiversity	Water retention, thermal biodiversity & amenity	Water retention, thermal biodiversity & amenity
Depth of substrate	100-150mm	120-250mm	150-400mm
Weight	80-150 kg/m ²	120-200 kg/m ²	180-500 kg/m ²
Cost	Low	Periodic	High

Table 9.30: The three main green roof types.

Green Walls

C.9.4.5 Intensive green walls have sophisticated substrate and irrigation systems and may not need to touch the ground at all. These can be very attractive and artistic but are more expensive to build and maintain. At the most extensive end, self-supporting climbing plants (such as ivy) are allowed to attach themselves and climb an adjacent wall or fence. An intermediate approach is the use of supporting structures allowing twining plants, such as Clematis varieties to cover a façade.

C.9.4.6 The planting selected should be appropriate to the landscape strategy objectives and be true to the landscape character of the area.



Figure 9.31 and 9.32: Extensive green walls of magnolia grandiflora and ivy on an office building in Edinburgh.

Instant living screens or ‘fedges’ can now be supplied for when instant effects are required.



Figure 9.33 and 9.34: instant ivy screen and willow ‘fedge’.

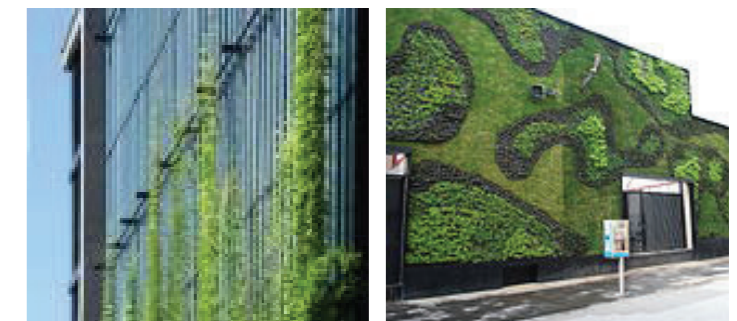


Figure 9.35 and 9.36: supported ivy green wall and intensive green wall.

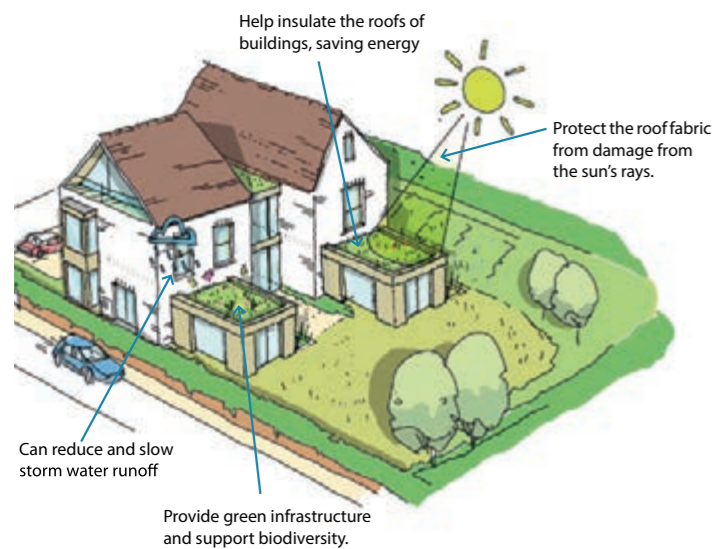


Figure 9.37: The main benefits of green roofs.

Green Roof further guidance

C.9.4.7 The GRO **Green Roof Code (2021)** or subsequent update.

Further technical guidance can be found in the **DIY Green Roof Guide**.

See also **green roof training**.

C.9.5 ORNAMENTAL PLANTING

KEY DESIGN PRINCIPLES

- Ornamental planting schemes should be restricted to areas close to buildings, including front and rear private or communal gardens.
- The exception to the above is where ornamental planting is an integral part of parkland or historic or contemporary garden design.
- In other cases, planting selection and design should enhance what is already locally characteristic to the area.

C.9.5.1 In the National Park, the need to integrate new development into the wider landscape, to enhance green infrastructure, to provide Ecosystem Services and biodiversity net gain all justify the emphasis on locally characteristic native planting for woodland, heathland or species rich grassland interventions.

C.9.5.2 Plants not locally native and/or ornamental planting can create unwelcome suburban character in the wrong locations. Despite this, there is a role for non-locally native and ornamental planting in certain circumstances and particularly in gardens and urban areas.

C.9.5.3 Designed landscapes such as parklands and ornamental gardens have been created using a whole range of plants including non-native ornamental trees and shrubs. Further use of some ornamental plant varieties may continue to be appropriate in new or refurbished designed landscapes.

C.9.5.4 Ornamental planting schemes in association with development can also come under this category. Their function may be to improve the immediate setting of a building or to provide a particular historic or aesthetic garden character. Simple schemes may consist of lawns, trees and planting beds with more complex designs consisting of more involved layouts and garden structures.

C.9.5.5 Some ornamental planting can provide real wildlife benefits, such as those attracting pollinating insects. Applicants should try to avoid providing a standard mix of shrubs and other ornamental plants that are repeated and over-used in many planting schemes.

C.9.5.6 The need to reduce mains water usage should also encourage applicants to consider drought resistant plants, particularly in sunny areas of the site

The **RHS** provides some advice on this.



Figure 9.38: Drought resistant garden, Hampton Court (RHS).

LANDSCAPE-LED HINTS

Landscape design needs to respond to site opportunities and constraints

The landscape evidence that informed:

- Lewes Depot cafe terrace ornamental planting scheme included:
 - Pinwell Road is a busy pedestrian route – need tough plants
 - South-facing – need drought resistant plants
 - Highly urban and hard surroundings – need attractive flowering plants to provide visual relief and attract pollinating insects



- Lewes Depot Green Roof included:
 - Site overlooked by residents, so need to mitigate visual impact
 - Site tight and development dense so needed to maximise GI and SuDS opportunities, so use of roof space efficient.



C.10 RESIDENTIAL AMENITY

C.10.1 PRIVATE GARDENS

KEY DESIGN PRINCIPLES

- a. Houses with 2 and more bedrooms should usually have a private amenity space of at least 60% of the internal floor space of the house.
- b. Where north-facing gardens cannot be avoided, they should generally be extended to avoid excessive overshadowing.

C.10.1.1 There exists a hierarchy, ranging from gardens open to the public, which have a community or commercial purpose, communal gardens that serve a discrete number of users and private gardens that serve individual households. Public Gardens have an additional public safety aspect, that is absent from private gardens, and which needs to be part of their design brief.

Rear Gardens

C.10.1.2 There is a tendency for new housing development to reduce the size of back gardens, but the smallest gardens are limited in their usefulness for recreation, or opportunities for food growing and the resultant over-dense urban grain may conflict with the local landscape character and settlement pattern.

C.10.1.3 Larger homes ought to have correspondingly larger rear gardens as they are more likely to be used by families. A good guide for a minimum rear garden size is an area that is at least 60% of the floor space of the house. A typical 3 bedroom, 5 person house, of 100 sqm should therefore have a private amenity space of at least 60 sqm.

C.10.1.4 Rear gardens for two storey houses that are north-facing should ideally be longer than 10m as otherwise a large part of the garden will be cast in the shadow of the house for large parts of the day.

Exceptions to these rules might be appropriate where homes directly front onto or are near open green space or in town centre locations with a tight urban grain and the minimum garden length figure could be reduced for bungalows and extended for higher buildings proportionately.

Private amenity space may be provided in innovative ways such as in internal courtyards, roof terraces or balconies.

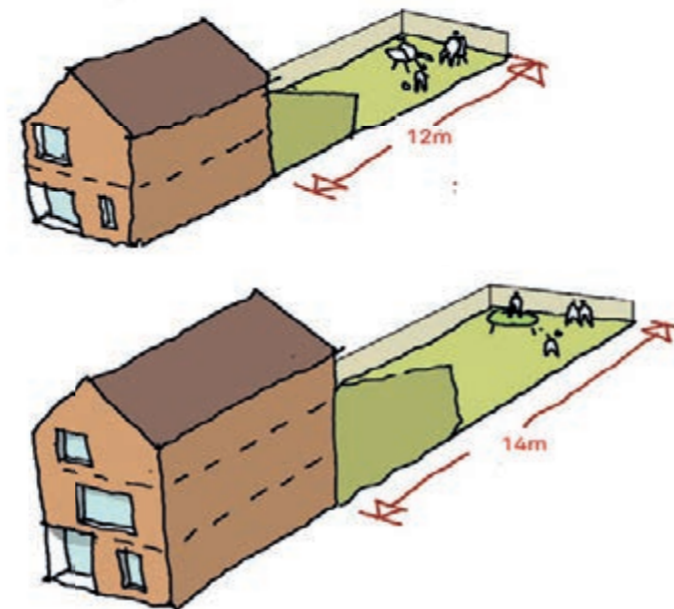


Figure 10.1: Ideal minimum rear garden lengths for northerly aspects.

Front gardens

C.10.1.5 Front gardens are characteristic of both urban and rural settlements in the National Park. They provide 'defensible' space and a good transition between the public realm of the street and the private areas of dwellings.

C.10.1.6 Large front gardens may not always be appropriate because they reduce densities, but with sufficient space they allow scope for planting, sitting out and informal social interaction. If front gardens are to be used for bin storage, it is important that structures accommodating them are integrated into the design and screened by front and party walls and sufficient space is allowed for planting.

C.10.1.7 Pedestrian gates are also highly characteristic of front gardens in the National Park and usually line up with front doors, creating rhythm in a street when repeated.

C.10.1.8 Many settlements in the National Park also include a tradition of homes which front directly onto the street. If this is part of the character of a place then it is appropriate to repeat this proportionately in new development, but defensible space should also be provided, where possible.

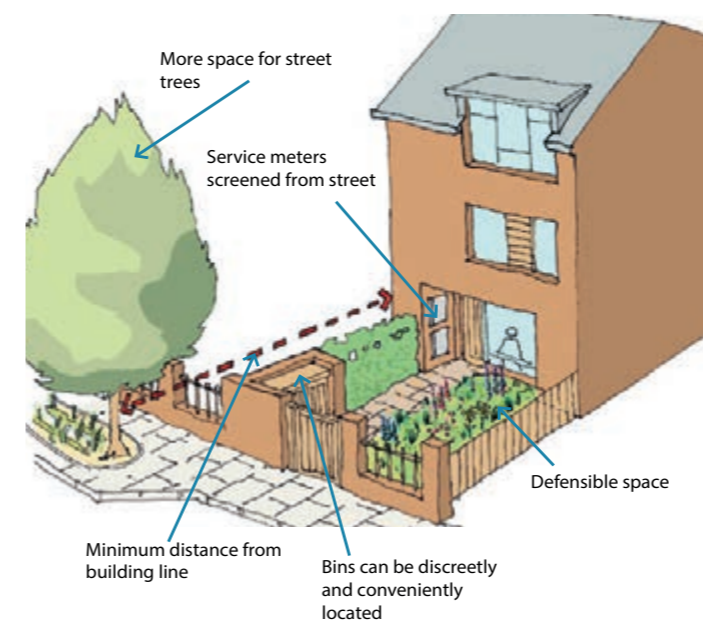


Figure 10.2: Front gardens can serve several functions.

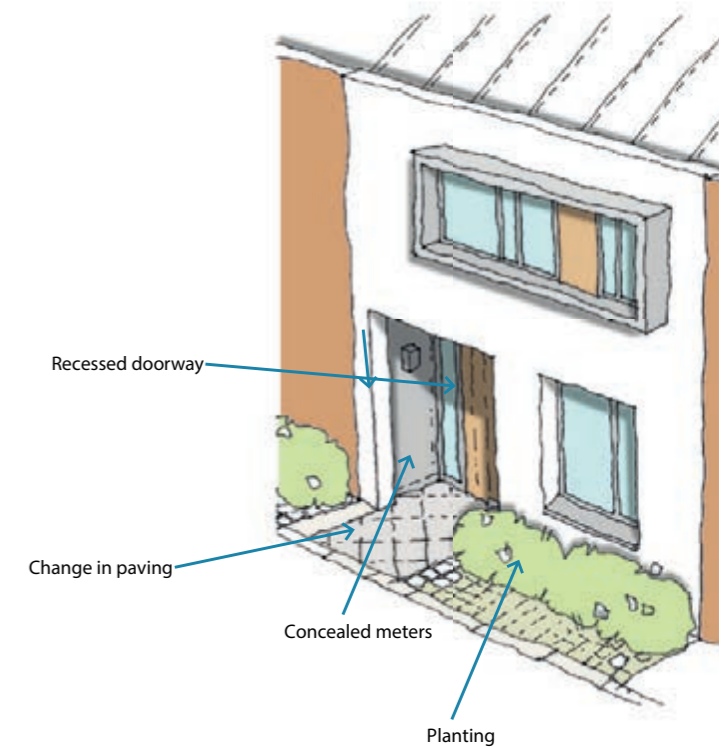


Figure 10.3: defensible space without a traditional front garden.

LANDSCAPE-LED HINT

Discover what is locally characteristic for front gardens to inform new development.



Jevington

- 1 Culturally: where residents can plant up, have 'defensible space' and interact with their neighbours and passers-by.
- 2 Physically: Front gardens with characteristic boundaries and pedestrian gates

C.10.2 COMMUNAL GARDENS

KEY DESIGN PRINCIPLE

Communal residential gardens should generally consist of at least 20m² of usable open space per dwelling and where possible incorporate multifunctional GI and SuDS.

C.10.2.1 Communal gardens (and allotments) for residents or staff and visitors in non-residential development should be designed in a landscape-led way reflecting local landscape character and providing attractive and multi-functional spaces incorporating green infrastructure enhancement (see C.9) and SuDS (see C.9.3) and contributing to ecosystem services.



Figure 10.4: Well-designed communal garden space between houses at Goldsmith Street, Norwich.

C.10.2.2 Communal gardens are often associated with apartment blocks or multi-residential buildings such as retirement homes, but could equally be provided to serve houses. They should be sized to provide meaningful spaces for the residents they serve. A good guide for a minimum amount of communal garden space is 20m² per dwelling.

This calculation should include areas of private amenity (such as balconies) provided but should exclude areas that cannot be described as 'usable'.

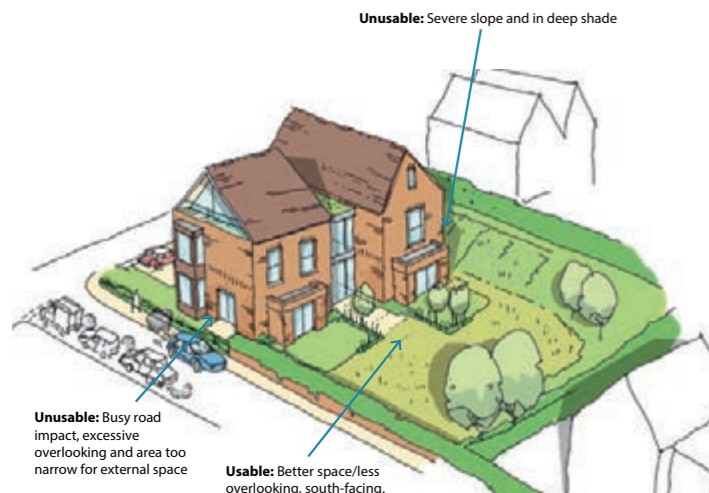


Figure 10.5: Usable and unusable communal garden space.

C.10.3 BALCONIES

C.10.3.1 Balconies are mostly a feature of apartments and can provide some much needed (semi) private amenity and fresh air for flat-dwellers. To count as useful amenity space, balconies should be dimensioned sufficiently to at least accommodate a small table with two chairs and relevant access space (Figure 10.6).

C.10.3.2 Balconies can assist with providing good levels of natural surveillance (see C.7.5) and active frontages (see C.1.7), making the public realm safer and animating street elevations.



Figure 10.6: Potential dimensions for balconies.

C.10.4 PRIVACY AND DAYLIGHT

KEY DESIGN PRINCIPLES

- All new development should consider the private amenity and daylighting of new and existing residents.
- Overlooking distances for rear windows between existing and new homes should be at least 22m and 20m respectively.
- Good daylighting in dwellings and non-residential buildings should be maximised (subject to dark night skies requirements).

Privacy

C.10.4.1 A minimum distance should be provided between opposing rear windows of neighbours. The minimum distance from rear windows of a new development to the rear windows in an existing dwelling of 22m (and 20m in wholly new development) should generally be observed. These parameters should be extended by 5m where there are three or more storeys.

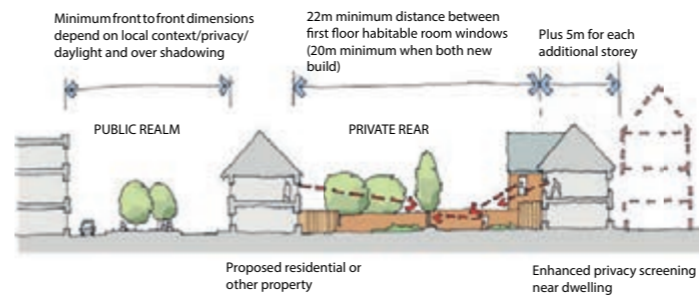


Figure 10.7: Traditional perimeter block arrangement creating a minimum back to back distance and private garden zone behind houses and a public realm in the front.

C.10.4.2 Privacy is less of a concern at the front of properties which face onto the public realm (the street) as people generally have different expectations here compared with the rear of the property.

Daylight

C.10.4.3 Good quality natural light helps to make the interior of a dwelling or a work place a more pleasant and enjoyable place to spend time. It also reduces the need to use electric lighting.

C.10.4.4 The amount and quality of natural light depends on the:

- size and position of windows,
- the shape of rooms,

- the colour of internal surfaces,
- and the structures that surround the building.

A daylight factor (DLF) for inside buildings is expressed as a percentage of the daylight experienced outside on an overcast day. In offices, a DLF of between 2 and 5 is desirable at desk height. With a DLF of 2 or below, the room appears dim, and electric lighting will likely be used.

C.10.4.5 Electric light circuit design should be zoned to take account of fenestration so that only the darker areas of the office receive electric lighting when necessary.

C.10.4.6 In all habitable rooms, the Authority requires windows. Roof mounted 'light tubes' can bring natural light into corridors, landings and other rooms where window light cannot penetrate sufficiently.

C.10.4.7 The size of windows to provide good day lighting must be balanced with privacy requirements within the home. It is important that the orientation, location and use of the room are all taken into account when considering the size and location of windows.

The dark night skies (see C.15) requirements must also be considered. BREEAM assessments include credits for minimum standards for natural daylight levels for non-residential buildings.

C.10.4.8 New development must not create excessive overshadowing of the windows of habitable rooms, and should maintain adequate daylight levels in neighbouring properties. Figure 10.8 shows how this can be calculated. Overshadowing of established solar collection, such as photovoltaic panels or tiles should also be avoided.

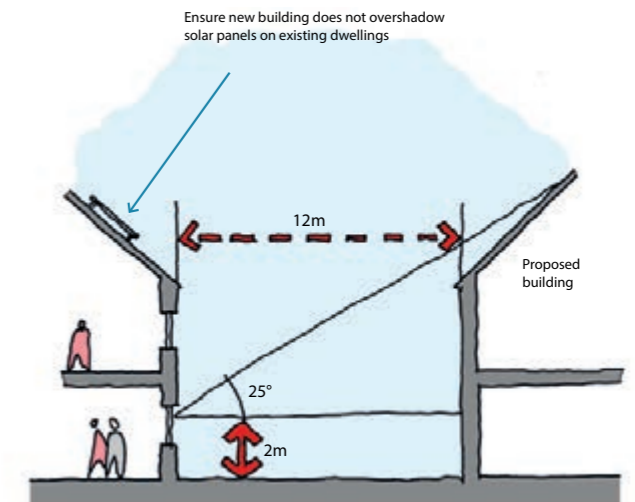


Figure 10.8: Daylighting diagram for new development adjacent to an existing property.

C.11 BOUNDARIES

C.11.1 RESIDENTIAL BOUNDARIES

KEY DESIGN PRINCIPLES

For rear garden boundaries:

- New residential development should minimise rear garden boundaries exposed to the public realm including shared car parks.
- Where rear garden boundaries exposed to the public realm are unavoidable, public realm garden boundaries should avoid timber close board fences.

For front garden boundaries:

- Front garden structures with pedestrian gates will be expected where locally characteristic.

For all garden boundaries:

- All property boundaries visible from public realm should be enhancing the established local character, using traditional materials, designs and styles. Close board or panel fences are unlikely to be appropriate.
- Where possible and appropriate, rear, front and inter-garden boundaries should include locally native hedges and trees and allow for wildlife movement.

C.11.1.1 Boundaries often serve several functions beyond simply indicating property lines, depending on their location. Their contribution to the public realm is also very important. This chapter looks at what types of boundary are suitable in different locations.

Rear Gardens

C.11.1.2 Rear gardens behind houses require enclosure due their largely private nature and the need for security. New residential layouts should try to minimise the extent of rear garden boundaries backing onto public realm, including communal car parking areas. The best layout is often the perimeter block (see **C.1.6**) with the ends of gardens backing onto each other.

C.11.1.3 Where exposed rear garden boundaries cannot be avoided, they should be robust and characteristic of the best examples of local boundary materials found in the area. Rear gardens should be quiet areas for private relaxation and so where they back onto roads or communal car parks, solid walls in local brick or stone

may be the most appropriate for their acoustic mitigation properties. Where backing onto the countryside, native hedge planting may be the most appropriate choice. Sometimes a combination of walls and hedges may be needed to address both noise pollution and the need to enhance green infrastructure.

C.11.1.4 Well specified and constructed timber panel and close board timber fences do have their place, particularly between private gardens and where native hedges are not appropriate.

However, they are not usually suitable where visible from the public realm, such as in a street due to their suburbanising and 'anywhere development' effect. In these situations, locally characteristic, brick or stone walls or native hedges should be selected. The low acoustic insulation properties of standard timber fences make them unsuitable on roads and car parks (see *Figures 11.1 and 11.3*) and other noise sources behind domestic rear gardens. See also **Timber fences** in **C.12**.



Figure 11.1: Close board fences between very small rear private gardens and car parking, Midhurst, provide only minimal acoustic insulation.



Figure 11.2: Poor quality and lightweight timber panel fences are not a good long-term solution in the public realm as they are not very robust.



Figure 11.3: Rear gardens backing onto car parks, where unavoidable, should be in brick or stone with planting where possible.

Front Gardens

C.11.1.5 Although in some locations, houses fronting directly onto the street is locally characteristic, boundaries to front gardens provide several functions. Firstly, they reinforce the defensible space role of front garden space. To achieve this in the long term they should ideally be made of robust materials.

C.11.1.6 Front garden boundaries can also make a significant contribution to the street scene. Locally characteristic structures such as brick or stone walls, railings or rustic palisade fences complement the buildings and help define the streetscape.

C.11.1.7 Pedestrian gates are also a characteristic of front gardens in the National Park. They are encouraged in new development as they add a rhythm to the street

scene, especially when lined up with front doors of houses.

C.11.1.8 Front structures generally should be restricted to around 1.0m height to encourage intervisibility between the ground floor of the house and the street. In terraces, front gardens walls can provide screening for wheelie bins which is positive, but front garden boundaries that are too high (above 1.4m) can lead to streets becoming less animated.



Figure 11.4: Front garden walls in Buriton in local stone (flint) and brick with pedestrian gates.



Figure 11.5: New property boundary in Hambledon matches the neighbouring locally distinctive front boundary.



Figure 11.6: Front boundaries in Twyford consisting of locally characteristic rustic timber pale fencing and hedging.



Figure 11.7: Front garden walls screening bins in terraced houses, Hampshire.

Between garden boundaries

C.11.1.9 The default choice for boundary structures between gardens in most new housing developments is the close boarded fence. While these provide the containment and privacy that most occupiers are seeking, they do not maximise the potential such boundaries have for creating **green infrastructure**⁶ links across and through developable areas. Where there is sufficient space and especially where there is the opportunity to link across blocks and to other GI, native hedges and trees will be encouraged, using what is locally characteristic to the area and in conjunction with, for instance, a post and weldmesh fence, where security is needed.

C.11.1.10 Where fences or walls are necessary, the design should allow for the passing of hedgehogs and other wildlife (such as frogs and toads) between gardens.



Figure 11.8: Established properties in Corhampton show extensive hedge boundaries and mature trees between gardens. New development in the centre fails to respect this character and has minimal GI value.



Figure 11.9: Even where fences (or walls) are selected, provision for wildlife routes between gardens should be designed for wildlife.

LANDSCAPE-LED HINT

New development should respect traditional boundary character



Lamberts Lane, Midhurst

1 Rear and front garden property boundaries in local stone with pedestrian gates onto the street

New residential development in the area with either front or rear garden boundaries facing onto the street should consider continuing this tradition, all the better to integrate the development.

C.11.2 EDGE OF COUNTRYSIDE BOUNDARIES

KEY DESIGN PRINCIPLES

- New settlement boundaries with the countryside should respond to landscape character and enhance the natural beauty and cultural heritage of the National Park.
- Boundaries should seek to be understated and, where appropriate, use locally native tree and hedge species.

C.11.2.1 Edge of settlement boundaries with the countryside are especially sensitive. New buildings do not need to be simply screened off from countryside views (because the development itself should be designed to read as part of the landscape).

It may be appropriate to use native hedge and tree planting to help with integration of new development while still allowing for glimpses of new built form, blurring the transition between countryside and settlement, as this is characteristic of most settlements in the National Park. Some settlements, with a more hidden character, may require more careful design to conserve this character including the use of some screen planting. The use of exotic varieties such as Leylandii would not be appropriate.

C.11.2.2 Boundary structures will often need to provide some security and privacy and provide barriers to agricultural stock. Simple and understated designs are usually the most successful. Boundaries should enhance the established local character, using traditional materials, designs and styles.



Figure 11.10: Simple, post & wire fencing and locally native trees and shrubs border residential properties at Newton Valence providing an appropriate low-key boundary treatment.

See also, in Layout, **C.1.8 Countryside/Settlement Edge**

LANDSCAPE-LED HINTS

Boundary design needs to reflect location and function

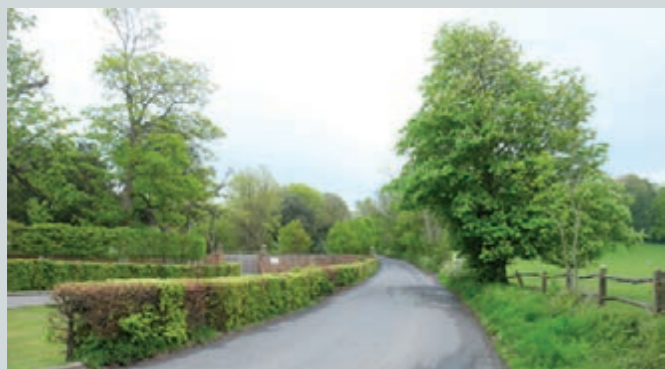
Painted steel traditional style railings are in character with both the Victorian architecture and the original municipal function of the Twyford Waterworks. The open nature of these railings also allows free passage for most wildlife on this rural lane.



Red brick boundary wall to Cheriton Primary School uses the traditional local material, creates a secure school environment and coordinates well with the school building with its fine detailing and Flemish bond coursing.



Estate part of Glyndebourne Opera House venue uses traditional rural chestnut post and rail fencing while clipped formal hedging and brick walls with decorative pillars, reflect the grandness of the buildings.



C.11.3 PUBLIC BOUNDARIES TO NON-RESIDENTIAL DEVELOPMENT

KEY DESIGN PRINCIPLE

Non-residential boundaries in the public realm should be locally characteristic and reflect the functions of the building while providing as many public realm benefits as possible.

C.11.3.1 Non-residential boundary structures that bound or are visible from the public realm need to achieve several different objectives. Their prime purposes are to mark the ownership or functional change and to contain and protect the business taking place inside the boundary. The visible boundary structure also needs to enhance the character of its location and the public realm. This should involve using materials and/or designs that are locally characteristic.

C.11.3.2 The boundary should also reflect the function of the development. A boundary associated with a public building should reflect its civic function with more formal structures such as brick walls with piers or railings. A community development may wish to emphasise its openness and so a boundary that invites people in rather than blocks them out should be considered.

C.11.3.3 Boundaries to non-residential buildings can be opportunities for **public art** (see **C.14.2**) interventions

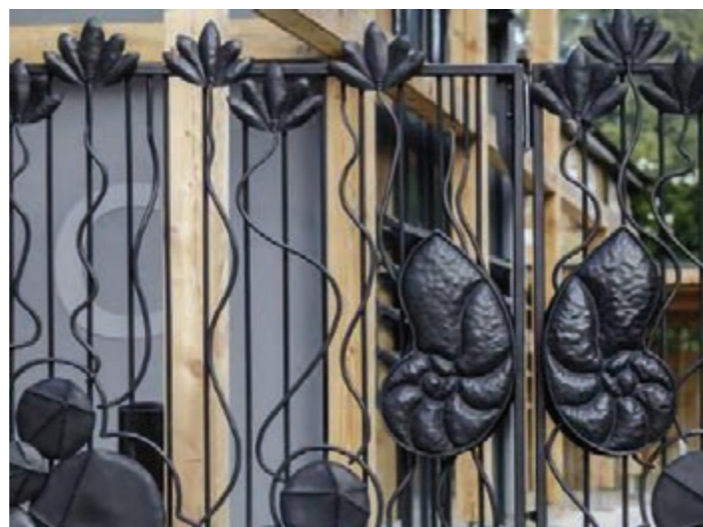


Figure 11.11: An example of a boundary structure used for public art.

C.11.4 PUBLIC OPEN SPACE BOUNDARIES

KEY DESIGN PRINCIPLES

- a. New POS boundaries should be locally characteristic and reflect the nature of the POS.
- b. Boundaries should protect the space for its proper use.

C.11.4.1 Public open space (POS) varies in nature from formal parks to much more informal recreation grounds and areas mainly for nature conservation. Generally, the style and materiality of their boundaries (if boundaries are needed at all) should reflect both their nature as well as enhancing local landscape character.

C.11.4.2 One thing many public open spaces can be vulnerable to is unregulated and anti-social parking of vehicles unless there are well designed deterrents in place. There can be a tendency to enclose or to provide long lines of bollards both of which may not be locally characteristic and the latter can look regimented.



Figure 11.12: Post and chain boundary to village green used at Cheriton is traditional but can get visually dominant if on a large scale and does not invite spontaneous use.

C.11.4.3 One less visually intrusive approach is to use earth modelling (if possible, together with SuDS features, such as a swale and tree planting) rather than bollards or knee rails for example, to discourage anti-social car parking.

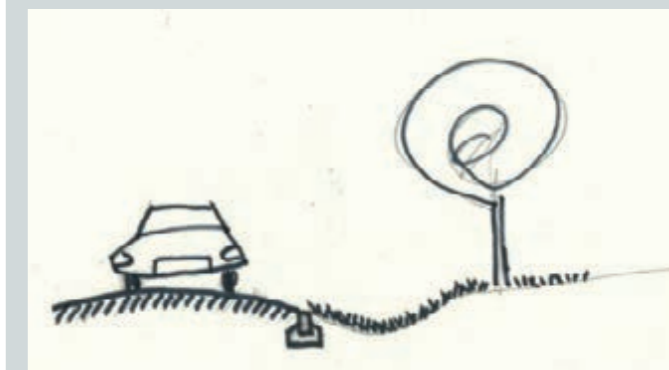


Figure 11.13: A boundary and entrance with a more formal and civic character around Southover Grange Gardens POS in Lewes.

LANDSCAPE-LED HINT

Local evidence informs best boundary approach to new open space

Former Syngenta residential development, near Fernhurst



Study of local village greens identified their unenclosed nature

The design response for a new 'village green' POS is therefore to avoid all boundaries, including hedges, but allow some trees and earth modelling to protect the space from anti-social car parking.

C.12 MATERIALS

C.12.1 BUILDING MATERIALS

KEY DESIGN PRINCIPLES

- New development is expected to respond to local character and be inspired by vernacular building, boundary structures and ground surfaces by using materials and detailing that best match those used traditionally in the locality, to reinforce local distinctiveness.
- In those instances where 'contemporary architecture' is acceptable (having regard to local character, context and heritage), locally traditional materials should still be used where possible. Modern materials should only be used where they are of high quality and appropriate to their context.
- Building techniques, decoration and styles that enhance the appearance of materials in new buildings should be employed; including attractive use of texture, colour, and patterning.
- Brick bonds and detailing (such as copings) will be expected to respect local traditions.
- High levels of durability and appropriate craftsmanship in the use of materials and good levels of finishing will be expected.
- Over busy material palettes should be avoided.
- The selection of materials that have low embodied energy, low general environmental impacts, including the re-use and recycling of materials and the use of locally sourced materials is encouraged.
- Sample panels on site for key materials and workmanship (such as brick or flint walls, etc.) are likely to be required for approval.

C.12.1.1 The quality and appropriateness of external finishing materials and detailing in new development are critically important to design success in the National Park. The character and appearance of settlements throughout the National Park derive in large part from the distinctive local and traditional building materials used. Applicants should also use and reference local design guides, including **Village Design Statements**, and local amenity society guidance documents, where relevant.

Particular requirements are likely in Conservation Areas (see **C.3.0**).

C.12.1.2 It is acknowledged that some traditional materials, such as certain local stones or bricks may no longer be easily available and in these cases the best match may need to be agreed with the case officer.

C.12.1.3 New development should use, or respect and complement, the character, texture and colour of materials locally characteristic to the area, particularly traditional and vernacular buildings, boundaries and surfaces. There may be contexts where the use of new materials is appropriate; in such a case the features in which they are used should be of high quality, well detailed, and appropriate to their context.



Figure 12.1: Traditional and modern materials and building forms are successfully used at Ditchling Museum.

C.12.1.4 Generally, unprepossessing late twentieth century and twenty-first century development in the area should not be used as precedents for material choices in new development.

C.12.1.5 In schemes with several buildings, it is important not to select too many materials viewed together as this can lead to a discordant effect. On the largest of schemes, where different character areas are appropriate, a contrasting palette of complementary materials can be employed to reinforce change.

C.12.1.6 The Authority is also concerned about the environmental impact of construction. **Local Plan policy SD48** requires the use of low carbon materials and further guidance on what the Authority expects is set out in the SDNPA **Sustainable Construction SPD**. The use

of timber from well-managed and, ideally, from local sources for building structures, cladding and external works, is particularly encouraged for environmental and sustainability reasons. Conversely, fake timber effect cladding made from plastic or cement board is generally discouraged.

C.12.1.7 The main building material in the South Downs Area, (particularly in the last two centuries) has traditionally been red brick, with some local variations and a variety of local stones, including flint. A combination of brick and stone is also commonly found. Hanging clay tiles, painted brick, timber cladding and some render have also been used to a lesser or greater extent depending on location.

C.12.1.8 Where a variety of materials are being used on an external wall, consideration should be given to the arrangement of materials in the elevation and how well they complement each other.



Figure 12.2: Galleted flint and stone quoins, red brick are used on a building in Lewes.



Figure 12.3: An example in Petworth of how a variety of traditional elevation materials (hanging clay tiles, timber shingles and local stone) on different buildings is brought together under a consistent use of red clay roof tiles.

Brick

C.12.1.9 The most characteristic bricks in the SDNPA area are red with some darker bricks used for detail in some places.

C.12.1.10 The type of brick, mortar and brick bond should be chosen with reference to other local brick buildings of architectural merit or boundary walls. Stock bricks with a slightly more irregular shape and finish and multi bricks with some colour more closely match traditionally made bricks and should be used in traditionally inspired buildings.

C.12.1.11 Detailing (e.g. string courses, window sills, quoins, lintels etc.) should reflect local character and should generally avoid unnecessary fussiness where not locally characteristic.

C.12.1.12 It is essential that all facing bricks have the same absorption and strength ratios as backing-up bricks used for the construction of the wall.

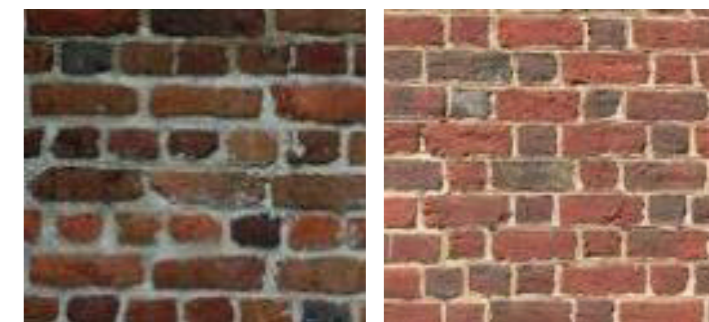


Figure 12.4: English bond (l) and Flemish bond (r).

C.12.1.13 Characteristic brick bonds in the National Park include English and Flemish bonds which are sometimes emphasised with the use of contrasting darker bricks. There are also a variety of other 'garden bonds' for boundary walls. These bonds create a richness of detail which enlivens the brickwork. The standard 'stretcher bond' is more widely used in modern brickwork, but is monotonous in contrast and is unlikely to be locally characteristic.

C.12.1.14 Figure 12.5 shows how mortar has a profound impact on the finished appearance of brickwork and how 'raking' mortar joints can emphasise the shape of bricks.

C.12.1.15 Mortars will need to be carefully selected, specifically, for the brick type. The combination of materials used in the mortar will also affect the colour and its appearance. Incorrect use of cleaners or use of admixtures in mortar can lead to unsightly white staining (Figure 12.6).



Figure 12.5: Mortar coursing has a profound effect on the appearance of brickwork.

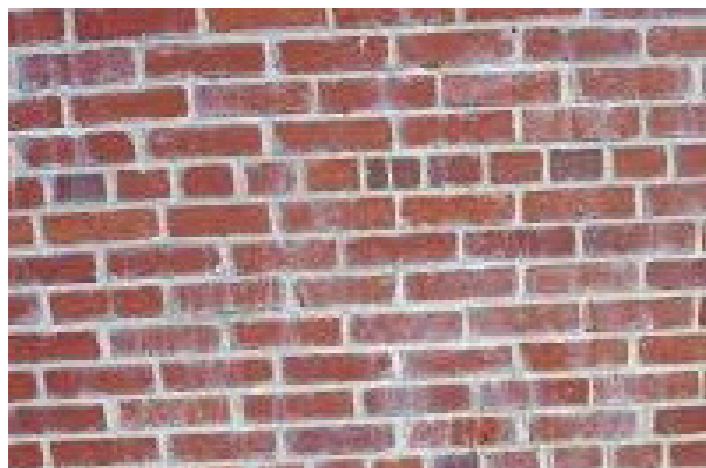


Figure 12.6: Unsightly leaching of new wall.

C.12.1.16 Copings and cappings help protect brick or stone walls from weathering, preventing water ingress but also help provide detail and distinctiveness. Any locally characteristic details should be used in new walls where appropriate. Cappings sit flush with the wall, while copings shed rainwater clear of the face of the wall by projecting out at least 40mm from the face of the brickwork and incorporating a drip on the underside.



Figure 12.7: Two examples of traditional brick copings in Tywford.



Figure 12.8: Traditional tile creasing in brick wall coping detail, in modern Midhurst development.

Stone

C.12.1.17 Where possible, applicants should use locally sourced stone and should reference **Historic England's Strategic Stone Studies**, where relevant. For instance, flint should only be used where it is locally characteristic.

Flint will normally appear cobbled, knapped or galletted. The quality of the workmanship largely depends on the selection of stones in the coursework and the skill in the application of mortar.



Figure 12.9: A well built, new flint wall with masonry piers and coping.

C.12.1.18 The use of blocks of flint panels in walls is discouraged as it is always easy to spot that they are panels and not hand coursed. Because of its irregularity, flint is usually used in combination with brick or worked stone for details such as string courses copings, caps and quoins



Figure 12.10: River or beach cobbles.



Figure 12.11: Knapped, squared flint.



Figure 12.12: Galletted flint (flint shards incorporated into the mortar).



Figure 12.13: Flint building in Stanmer Park.

C.12.1.19 Parts of the National Park area have a tradition of using different local stone reflecting the local geology, such as ironstones and sandstones including the Horsham stone and Horsham stone slate in the Clay Weald area. 'Clunch' or malmstone in combination with brick, is a characteristic feature of building design in settlements situated on or near the Upper Greensand ridge at the foot of the South Downs scarp slope, such as Harting.



Figure 12.14: Sandstone house, Midhurst.



Figure 12.15: Ironstone house, Greatham.

Tile hanging

C.12.1.20 Vertically hung clay tiles are commonly used for external walls and sometimes vertically hung slate tiles.



Figure 12.16: Vertically hung slate tiles in Lewes.

C.12.1.21 A particular product characteristic to the Lewes area is 'mathematical tiles.' They were attached to the exterior of timber-framed buildings as an alternative to brickwork, which their appearance closely resembles.



Figure 12.17: Mathematical tiles being attached.



Figure 12.18: Mathematical tiles at Patcham Place, Patcham.



Figure 12.19: Clay hanging tiles in Alfriston.

Roof materials

C.12.1.22 High quality and where possible, locally sourced, roof materials should be used to respond to the local character of the roofscape. The most characteristic roof material is red clay tiles. From Victorian times natural slate has also been used and there is also a tradition for thatch and some examples of timber shingles.

C.12.1.23 Where buildings have been extended naturally over time they will usually exhibit a range of roofing materials – often in hierarchy. The combination of roof materials can considerably enrich the aesthetic appeal of the roofscape and this character should be respected. See also [Roofs C.13.2](#).



Figure 12.20: A range of roof materials in Lewes.

Plain clay tiles

C.12.1.24 Part of the special character of clay roof tiles is that they traditionally were handmade and the material weathers favourably, mellowing with age. The variations of red and orange colours, through to purple can be enhanced through the firing process to create a brindle effect, which will vary the colour between the outer edge and the centre of the tile. The roof tiles should ordinarily be slightly darker than any bricks or tile cladding used for the elevations below without being too dark.

C.12.1.25 The tiles should be double cambered, with a rough surface, in order to give the roof texture. Clay tiles are expected to meet BS EN 1304 for clay roofing tiles and fittings for pitched roof coverings and wall cladding and lining.



Figure 12.21: Clay roof tiles used successfully at The Weald and Downland Museum.

Natural slate

C.12.1.26 Natural slate should normally only be used as the second roof material in a development of several buildings after plain clay roof tiles. Natural slate needs to be carefully chosen. Welsh slate is ideal aesthetically and is the most sustainable due its relatively local provenance. American slate is generally high quality, Spanish slate is often acceptable, whereas Brazilian and Chinese slate can be poor quality.

Modern roofing materials

C.12.1.27 Fibre cement roof tiles or imitation slates are not supported in the National Park. Roofing systems using aluminium or zinc coverings, green roofs and PV

roof systems may all be acceptable, particularly on more contemporary style buildings and subject to context. Solar panels and tiles which sit flush with and are well integrated into roofs, are a better design solution than panels retrospectively bolted to roofs.



Figure 12.22: A contemporary building with an oxidised steel roof and cladding appropriate in the context of an urbanised river corridor with an eclectic mix of building styles and materials and a history of iron industry.

Render

C.12.1.28 Render has been used traditionally (originally lime render) and is commonly used in contemporary buildings where its ability for a crisp finish is valued. Rough render or lime render can be effective when used in traditionally-inspired buildings, particularly in more rural areas. In new developments in the National Park render should only be used sparingly and where it is locally characteristic.

C.12.1.29 Care should be taken to avoid staining from water run-off, from vents and where close to the ground (splash back), near busy roads (pollution), where there is excessive shade (poor weathering due to damp). A darker plinth is traditional to conceal splash back and wear & tear (see *Figure 12.23*).



Figure 12.23: House in Hambleton showing how render is protected from ground splash back with brick detail.

Timber

C.12.1.30 Internal timber frame buildings have become more prevalent in recent times as they are able to achieve a higher thermal performance than masonry buildings and timber from well-managed sources is inherently a more sustainable material.



Figure 12.24: Locally sourced oak timber frame.

C.12.1.31 There is also a tradition of some timber cladding in residential and agricultural buildings across the National Park, particularly in Hampshire. Care should be taken when referencing a timber cladding tradition to ensure that the style (horizontal or vertical fixing; painted, stained or charred finish) is characteristic of the area.



Figure 12.25: Horizontal timber cladding used in a contemporary building (Ditchling Museum of Art and Craft).

C.12.1.32 Hardwoods such as Cedar (usually imported) or sweet chestnut or oak (UK and even National Park sourcing possible) are suitable for cladding or roof shingles and (unless stained) will all weather naturally to silver grey. This is a traditional approach (together with painted timber) and allows the building to blend into the landscape. Timber cladding on north-facing or shaded locations should generally be avoided to prevent damp staining.



Figure 12.26: locally sourced cedar roof shingles are used on buildings at The Weald and Downland Museum.



Figure 12.27: A contemporary designed new home in rural West Sussex uses dark stained horizontal timber cladding which references a locally common agricultural building material.

External Building Details

C.12.1.33 External building details should generally use materials that are low maintenance and have long-term durability.

C.12.1.34 Materials used for window arches, heads and sills should reference detailing in locally characteristic buildings. The materials selection and detailing, should consider rainwater run-off to avoid staining and damaging external wall materials.



Figure 12.28: Locally characteristic brick window detailing in new East Dean development.

C.12.1.35 Generally, the SDNPA favours rainwater goods visible from the public realm to be manufactured in high-quality powder coated aluminium or steel, in a standard colour, or, on larger developments, to conform to its colour palette. Zinc may also be appropriate in contemporary schemes. The location of downpipes and hoppers should be well considered.



Figure 12.29: Aluminium rainwater goods (Guttercrest).

C.12.1.36 The use of uPVC fascias, soffits or bargeboards is discouraged. Where such features are necessary, timber or metal are preferred. Where the ridge line changes height, allowances must be made for adjacent roofs and for any flashings that will be visible at the interface.



Figure 12.30: Good quality flashings in a roof junction.

C.12.1.37 The use of uPVC and cement-based materials is discouraged as they have environmental drawbacks in their manufacture, are poorly recycled (or not recycled in the case of cement) and their appearance is often alien to the local character. The fact that they do not appear to weather at all, or weather ungracefully, is another dis-benefit.

Gates

C.12.1.38 Field gates, styles and pedestrian gates are a characteristic of the National Park. New field gates should be locally characteristic and should be in timber unless there are other overriding reasons for the use of steel.

C.12.1.39 The relationship between the fence or wall with the gate is also important. In general, the gate should be no higher than the wall or fence and metal gates should match the style and material of railings, if present. In most cases timber pedestrian gates will be the most appropriate material choice in the National Park, although metal gates (wrought iron or mild steel) can be used if that is locally characteristic.



Figure 12.31: Five bar timber field gate, Easton.

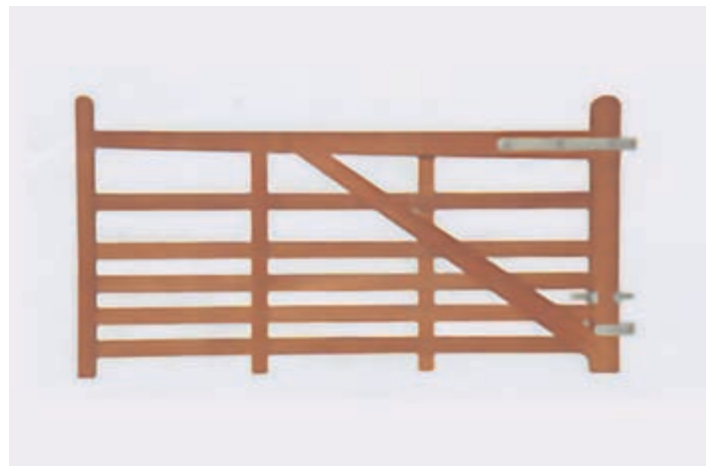


Figure 12.32: A traditional Sussex field gate.



Figures 12.33-12.35: Pedestrian gates in Easton.

C.12.1.40 Side gates and vehicular gates should also be locally characteristic. Gates can be an opportunity for public art (see *Figure 14.3*)

Metal Railings and Fences

C.12.1.41 Metal railings are also characteristic in many settlements in the National Park, both stand alone and in conjunction with brick walls. Traditionally they would have been formed in wrought iron and could have a number of decorative features such as rail heads and post tops. Local examples of these might be used as a reference in traditionally inspired schemes. In more contemporary style developments, simple steel railing designs are more appropriate.



Figure 12.36: Newly built brick and simple galvanised railing boundary structure in a contemporary style development.

C.12.1.42 In specific parkland and other designed landscape settings and rural settings, 'estate railings' may be appropriate. These are elegant but should not be used where they are not locally characteristic.



Figure 12.37: Estate railings Easton.

Post and Wire

C.12.1.43 Post and wire fencing can be simply one or two lines of wire fixed to timber posts, which may denote a property boundary or be used temporarily to help protect a hedge during establishment. The addition of stock netting can make the fence animal proof, with sections of the netting buried or the fence set at a minimum height depending on the animals to be deterred.

Timber fences

C.12.1.44 The two-rail cleft post and rail fencing is very common in the National Park and its use, where appropriate, will be encouraged.



Figure 12.38: Chestnut cleft post and rail fencing with wire mesh animal proof fencing attached.

C.12.1.45 Please refer to [Chapter C.11 Boundaries](#) for further guidance on the appropriateness of the use of timber in different boundary scenarios.

C.12.1.46 Timber also has a lower embodied energy (as wood is a recyclable resource) than other materials, such as brick and so may also be appropriate in more private locations.

C.12.1.47 Where timber fences are used, for instance between gardens, and where native hedges are not appropriate, well-dimensioned closeboard fencing (*Figure 11.1*) is preferable as it is more robust than relatively flimsy lightweight, horizontally lapped panel fencing (as in *Figure 11.2*) which has limited life and lacks robustness.

Security Fencing

C.12.1.48 Various forms of security fencing, including steel palisade fencing, chainlink, or weldmesh are discouraged (due to their unattractive appearance), where they are visible from the public realm. In some locations, and for specific types of development, they may be appropriate, however.

LANDSCAPE-LED HINT

Establish what the locally characteristic materials are to inform new development.

The characteristic materials in this Buriton street (malmstone, flint, red brick, some painted render and clay roof tiles, metal pedestrian gates) should influence the material choices of any theoretical new development nearby to help successfully integrate it and make it visually belong to Buriton.

**C.12.2 SURFACE MATERIALS****KEY DESIGN PRINCIPLES**

- New development is expected to respond to local character by using materials and detailing that best match those used traditionally in the locality, to reinforce local distinctiveness.
- Ground surface materials should follow the principles set out in the document **Roads in the South Downs'**.
- High levels of durability and appropriate craftsmanship in the use of materials and good levels of finishing will be expected.
- Over busy material palettes should be avoided.
- The selection of materials that have low embodied energy, low general environmental impacts, including the re-use and recycling of materials and the use of locally sourced materials is encouraged.
- Natural materials, which weather better than concrete products, are likely to be preferred.

C.12.2.1 The importance of surfacing materials to the character and quality of spaces and to good place-making is as critical as the materials used for buildings.

C.12.2.2 Surface materials proposed for footways, cycle ways and vehicle highways are expected to be robust and durable for the street type proposed.

When specifying ground surface materials, applicants are expected to use materials that will not impede those of limited mobility, or those who need visual assistance when moving from a safe space to one where they might encounter bicycles or vehicular traffic.

C.12.2.3 When specifying ground surface materials, applicants are expected to use a simple palette of robust surface materials that are fit for purpose and that relate to those most commonly used in the area and contribute to local character, taking reference from local design guides, where relevant.

C.12.2.4 Some materials need to be selected for their permeability as part of SuDS systems, such as gravels, permeable blocks (with nibs to retain gaps) or porous asphalts (made porous by building with open-graded friction coarse aggregate). The latter can be surfaced with bonded aggregate, using locally sourced aggregate to provide a more rural finish.

Rural Roads and Paths

C.12.2.5 Outside of town centres, surface materials for roads and paths should be selected to reflect the rural character of the South Downs and need to accord with the document **Roads in the South Downs**.

C.12.2.6 The simplest of routes, such as a footpaths or bridleways across fields, need no constructed surface at all although they may need some reinforcement or constructed sections e.g. at gateways or on slopes, to avoid erosion, compaction, rutting and to cope with anticipated wear and tear. Minor roads in villages often have no tradition or real need for separate footways. Main streets in villages may have pavements with a variety of paving surfaces.

C.12.2.7 Tarmacadam is usually the most characteristic road surface in rural areas, its appearance improved by the use of locally characteristic stone surface dressings. Resin-bound surface dressings are more likely to withstand heavy wear and retain their appearance for longer. Outside of settlements, rural roads should bleed into the surrounding verge, hedge or other landscapes without the need for hard kerbs or upstands (see *Figures 7.1 and 7.6*).

C.12.2.8 In small settlements and side streets, natural stone blocks, setts or brick paviors may also be employed to enhance the appearance of the road, street or lane, or provide an appropriate transition or edge detail, depending on the prevailing local character and the function of the space. Limited courses of these units can be used to indicate junctions in a more subtle way than a wholesale change to a contrasting material, which can create an unwelcome 'suburbanising' effect.



Figure 12.39: Courses of granite setts create an appropriate and robust edge between a rural road and a private, stone-surfaced drive, near Owlesbury.



Figure 12.40: Reinforced grass paving used in Buriton to visually narrow the road while allowing for occasional wide vehicles.



Figure 12.41: Appropriate, low key, streetscape design in Buriton.



Figure 12.42: Centurion Way between Chichester and West Dean is a good example of a rural cycle (and pedestrian) route with a very simple construction using local materials. (A self-binding limestone dust over a 'Type 1' graded stone sub-base with no edge details or kerbs).

Urban Roads and Paths

C.12.2.9 More urban locations (in towns and certain larger village centres) may require higher standards of paving craftsmanship where changes of level and designing around service covers and street furniture need high quality detailing and workmanship. Where pavements are provided, they should use a material that complements the road surface. Towns and some villages have distinctive paving materials that should be matched, where possible.



Figure 12.43: Distinctive brick footway in Alfriston.



Figure 12.44: A simple design of Stone setts with central channel and blue, clay paver side detail make a beautiful place in a Petworth pedestrian street. The uneven texture may cause problems for some users.



Figure 12.45: Stone footway in Selborne.



Figure 12.46: Concrete block pavers (here 'Tegula' in Petworth) are widely used in more urban contexts. This can lead to an 'anywhere' character whereas local stone or clay pavers are preferable as they reinforce local character.



Figure 12.47: Resin bound aggregate surfacing in West Meon subtly indicates to motorists they are entering the village centre.

C.12.2.10 Materials accommodating sustainable drainage systems (SuDS) such as gravel or permeable paving blocks may be required where more multi-functional SuDS cannot be accommodated.



Figure 12.48: Permeable block paving on a private drive is designed with nibs to keep gaps between blocks open to allow water infiltration.

Edge Details

C.12.2.11 Some smaller streets and lanes of the South Downs do not have any road markings, using instead their scale, or surfacing changes to indicate priorities.

C.12.2.12 In rural locations outside settlements, pre-cast concrete blocks, or kerbs, or kerbs with an upstand

should generally be avoided in favour of edges that allow verge side grasses and plants to soften the edges of rural roads. Verges can also be designed to accommodate services and utilities.

C.12.2.13 Kerbs should only be used where there is a specific highway or drainage requirement and more appropriate alternatives such as 'conservation kerbs' should be used in such cases.

C.12.2.14 Edge details can signify a change in ownership or function of a space or a transition from across a route hierarchy. Channels can also be part of the road or path design, both conveying surface water and adding visual detail (See Figure 12.44).

C.12.2.15 'Conservation' or 'countryside' kerbs are more rural in character with a rougher appearance and a higher stone content than standard road kerbs. They are therefore more appropriate in rural locations when kerbs are necessary and can be laid at an angle to provide a flush connection between access way and verge.



Figure 12.49: Conservation kerb, Cheriton.



Figure 12.50: Setts are used to define the footway in Selborne.



Figure 12.51: Timber edge detailing (Midhurst, left) has a more low-key visual impact than concrete pin kerbs (Cheriton, right). Timber can be more appropriate in rural contexts or where a more 'natural' approach is called for.



Figure 12.52: Steel edge details can also describe elegant curves in a subtle way and are more robust and long lasting than timber. Compacted stone footpath in Hampshire park.

Parks and Play Areas

C.12.2.16 Play areas often require 'safety surfacing' to make them safer for children falling off equipment. Proprietary rubber crumb solutions can be quite 'urban' in appearance while more natural solutions, such as sand or wood bark or chippings may still be appropriate and are more acceptable in rural contexts. These loose materials may need more management to keep them clean and may require dog-proofed fencing to prevent dog-fouling.



Figure 12.53: Easebourne play area rubber surfacing in subtle natural colours.



Figure 12.54: Bark surfacing.



Figure 12.55: Sand surfacing in dog-proofed play area, Southampton Common.

C.12.2.17 Pathways through **public open spaces** in rural areas should use hoggin⁶ or compacted stone (see *Figure 12.56*), preferably matching a local stone. In more urban areas resin bound gravel on tarmac is an attractive solution where use is expected to be high.



Figure 12.56: Hoggin footpath being repaired with fresh material and prior to compaction, Hampshire.



Figure 12.57: Resin bound aggregate footpath.

Making Good

C.12.2.18 Making good after works, such as for repairing or laying underground utilities, should always use matching or compatible materials. In paved areas, tarmac or concrete repairs will rarely be acceptable and care should be taken to re-use existing high quality/value materials such as stone or clay brick paving. Traditional stone kerbs should be retained wherever possible.

LANDSCAPE-LED MINI-CASE STUDY

Road design in new development on the edge of a village should retain a rural character

A recent residential development in Cheriton Large junction areas paved with concrete blocks is a common suburban design solution which is inappropriate in a place with rural character



Elsewhere in the development a combination of a simple tarmac road and a gravel private shared access route, separated by conservation kerbs, is a more appropriate, low key solution in a rural context. An even better solution would have avoided the need for kerb upstands



C.13 ARCHITECTURAL DETAIL

C.13.1 ARCHITECTURAL STYLES AND PROPORTIONS

Architectural Styles

C.13.1.1 The South Downs National Park does not prescribe the architectural style suitable for new development throughout the National Park.

The main consideration is the specific local context within which the proposed development is to be set, the need in almost all instances to show respect for existing local character, the successful achievement of a landscape-led approach for the development of the site – and of course the quality of the design itself.

C.13.1.2 Both contemporary and traditionally inspired architectural styles may be valid depending on local circumstances.



Figure 13.1: Existing traditional river warehouse buildings converted sympathetically for residential use. The new buildings in Figure.13.2, on the same river, reflect a similar scale and form.

C.13.1.3 The first three **National Design Guide** characteristics of good design quoted in the **Introduction** (see *Figure 2*) relate to context, cultural heritage and character. These requirements apply with even more force in the case of the National Park, and it needs to be understood that reference to 'existing local character and identity' does not imply that there is one character and identity which applies across the whole National Park. One of the characteristics of the National Park is

the considerable variety of local building and settlement styles to be found within it.

C.13.1.4 Development in the National Park is not necessarily expected to be carried out in one or other historically-based local style – there may be circumstances and locations within the Park where innovative and modern designs could be appropriate and acceptable.

C.13.1.5 Nevertheless, for any new development, anywhere in the National Park, applicants for planning permission will be expected to demonstrate that they have considered and responded to the requirements of national legislation and guidance. In particular the need to conserve and enhance the cultural heritage of the National Park, and to respond to existing local character and identity.

C.13.1.6 Where a traditionally inspired architectural style is proposed for a new building, careful controls on form, materials and detailing should be expected, in order to avoid an unsatisfactory finished appearance. This does not however mean that an over-rigid approach will be applied, so as to prevent architecture inspired by vernacular local tradition from ever incorporating new or adapted forms. Excellent buildings have been produced in the past by architects 'moving on' in design terms from a base of vernacular tradition.

C.13.1.7 Some general expectations for traditionally inspired buildings are set out in the sections for **Roofs, Windows, Entrances and Doors** and **Chimneys** in this chapter.

C.13.1.8 In most situations involving listed buildings or work in conservation areas, development will be required to meet even higher, authentic standards of architectural design and detail.

See **C.3** Development in Conservation Areas.

C.13.1.9 There may also be rare situations where scholarly reproduction of some specific past design is what is called for. Examples would be where (for instance) an individual building within a formally composed terrace design had been damaged or destroyed (e.g. by fire), or had previously been demolished and replaced (or significantly altered) in an aesthetically damaging way. In circumstances such as this, scholarly reproduction of the 'original' design for the site may be the only acceptable approach, subject to issues of practicality and modern safety requirements.

Proportions

C.13.1.10 The proportions of a building depend on the relationship between different elements when viewed from outside. They will have an important impact on the overall composition of the building, and how successfully the building relates to its context.



Figure 13.2: A scheme in Lewes which uses locally characteristic scale, urban grain and some gable forms in a contemporary way.

C.13.1.11 The proportions in locally characteristic buildings or the particular local building style that the new building is referencing should inform the proportions of that building.

C.13.1.12 When proportions are right, the various elements of the building will appear harmonious and elegant. It is important to consider where the building will be viewed from when considering the proportions. Deep plans tend to create very inelegant proportions, especially if the side elevation is clearly visible.



Figure 13.3: The dormers in this new development at the Goodwood Estate demonstrate dormers in perfect proportion to the rest of the roof and the building.



Figure 13.4: The southern elevation of King Edwards VII Sanatorium, Easebourne, demonstrate arts and crafts proportions.



Figure 13.5: Houses from the middle ages or Tudor period are characterised by elevations with random proportions (Eastham).



Figure 13.6: Georgian elevations, in contrast, are characterised by their symmetry and regularity (Lewes).



Figure 13.7: Gilbert White Museum successfully marries refurbished listed buildings with a contemporary style extension.



Figure 13.8: A traditionally inspired new build, Cocking.

C.13.2 ROOFS

KEY DESIGN PRINCIPLES

For traditionally-inspired buildings:

- The form and pitch of the roofs and the roofing coverings used should reflect the best prevailing forms in the area and should include well-detailed eaves and ridges.

For all building styles:

- The above local precedents should be considered first unless there are good design reasons to depart from them.
- In most cases, uninterrupted horizontal ridge lines of more than a domestic scale will not be acceptable.
- Green roofs and solar collection will be encouraged unless there are clear built heritage or other design concerns.
- Fascia boards should only be used sparingly in non-residential, traditionally-inspired or multiple home developments and alternative approaches should be considered.
- In most residential cases, roof sizes greater than domestic scale will not be acceptable.

C.13.2.1 Roofs in their various forms, materials and detailing make a significant contribution to the character of settlements in the South Downs National Park. Roof design and detailing is particularly relevant for prominent buildings, such as corner buildings or where views from above are likely.

Roof pitch

C.13.2.2 Pitched roofs are overwhelmingly the norm in the UK. Traditional roof forms that are found in the National Park and are appropriate for traditionally-inspired new buildings, are shown in *Figure 13.12*.

C.13.2.3 While, historically, the depth of a roof span was restricted by the lengths of available timber, modern house plans are often deeper and these greater spans, combined with traditional pitches, can produce over large roofs.

C.13.2.4 The minimum pitch of the roof is a function of how well the material sheds water. Slate and clay tiles generally require more than 35 degrees in pitch (and thatch even more). Modern products can work on lower pitches but will produce an unconvincing appearance in traditionally-inspired schemes.

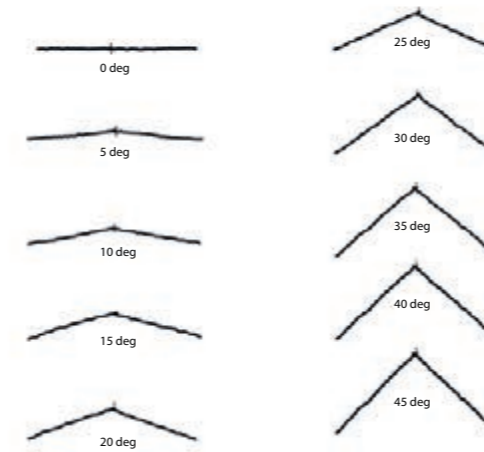


Figure 13.9: Roof pitches.

Eaves and ridges

C.13.2.5 These junctions and edges are also important in creating attractive traditionally-inspired roof forms.



Figures 13.10 and 13.11: Traditional roof ridge detail and parapet and secret gutter.

Fascia boards

C.13.2.6 Fascia boards were sometimes used historically and may occasionally be appropriate but they are much over used in modern developments.

Two alternative and attractive, approaches are

- to leave the rafter feet exposed (*Figure 13.13*).
- where the building has gables, create a parapet in the brickwork and run the roofing material up to it. (*Figures 13.11*). This also allows the creation of a secret gutter alongside the parapet, beneath the roof covering.

Roof forms

C.13.2.7 Traditional roof forms in the National Park will need to be used in traditionally-inspired buildings and can also be referenced in more contemporary style

buildings as a way of enhancing local character, albeit in a modern way.

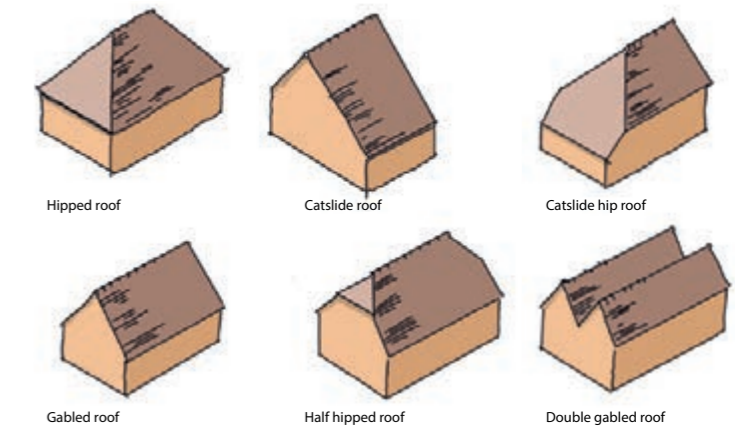


Figure 13.12: Traditional roof forms.

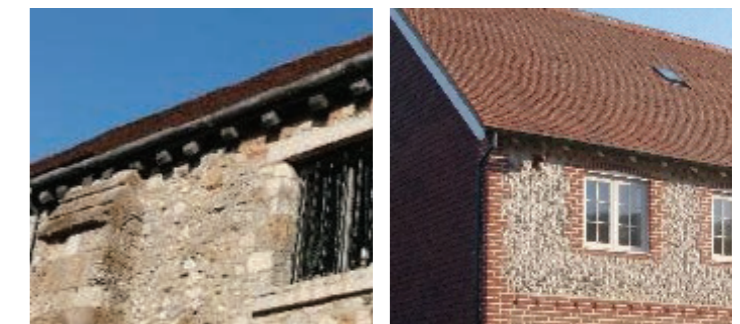


Figure 13.13: Exposed rafter feet with eaves ventilation between them on medieval building in Southampton and in a new development in East Dean.

Rooflines

C.13.2.8 Although rooflines are not always visible as a whole, they form an important element of the street and can have a harmful effect if not carefully designed and constructed. Where there are level changes in and around site, the way in which roofs are seen can change. The visual impact of roofs and chimneys is increased where these are overlooked from elevated public vantage points (see photo of Lewes in landscape-led hint).

- Rooflines should complement surrounding development.
- Symmetry should be achieved for semi-detached pairs and each end of a terrace.

C.13.2.9 Long, uninterrupted horizontal ridge lines risk creating unacceptably monotonous roofscapes alien to the South Downs character which features domestic scale variation in height, form and scale, with articulation through the use of **chimneys**

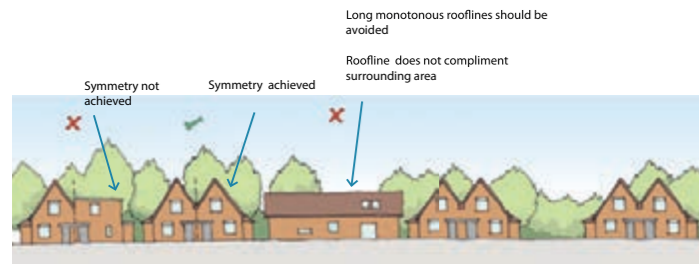


Figure 13.14: Rooflines need to complement surrounding development.

Green roofs

C.13.2.10 Green roofs (see **C.9.4**) can be appropriate, particularly in more contemporary style developments and have many environmental benefits. Ancillary buildings, such as bike and bin stores and car barns are particularly suited to green roofs. The strength of roofs may need to be increased to accommodate the extra weight of the green roof structure.



Figure 13.15: Green roof (Zinco) Figure 13.16: Solar tiles (www.solarguide.co.uk).

Solar collection

C.13.2.11 Increasingly, solar collection via photovoltaic (PV) panels, tiles or solar water heating is being installed on the roofs of new development to help mitigate climate change. New development is required by the SDNPA **Sustainable Construction SPD** to reduce CO₂ emissions by at least 20% via on site low/zero carbon energy generation. Less reflective, matt black panels set flush with the roof finish are preferable to bolt-on panels.

C.13.2.12 In more visually sensitive locations, solar tiles integrated into the roof will be preferred to panels and in the most sensitive locations, such as roofs in conservation areas prominent from the public realm, such solar collection may be inappropriate altogether. Ground or outhouse mounting may be a solution in sensitive locations.

See also **C.12** Materials.

LANDSCAPE-LED HINT

Locally characteristic roof materials should inform future design choices

In the towns with railway access from the nineteenth century, slate, originally from Wales, became commonly used as well as the more locally traditional red clay tiles. The use of natural slate in towns in particular is therefore locally characteristic and a good alternative choice together with clay tiles.



Natural slate roofscape in Lewes

C.13.3 WINDOWS

KEY DESIGN PRINCIPLES

For traditionally inspired buildings:

- Timber frames with a painted finish, rather than aluminium or plastic is preferred as these can achieve a more authentic character.
- When using casement windows, it is preferred that the opening frame fits flush with, or slightly recessed from the main frame and storm proof joinery is not used.
- When using sash windows, the opening frames should slide up and down and top-hung casement sash-effect windows are discouraged.
- Windows and individual glass panes should be taller than they are wide unless this is not locally characteristic.
- If glazing bars are felt to be required, slim line glazing bars of no more than 20mm width, as viewed externally, are preferred.
- If glazing bars are being used on sash windows, consider whether it is appropriate to incorporate horns on the upper sliding frame.
- Depths of window reveals should ideally be at least 100mm as this is more characteristic and helps protect the timber window from the elements.
- Where there is a tradition of arched brick lintels these will require timber curved window frames to fit. Plastic infills will not be acceptable, but straight lintels may be.

For contemporary style buildings:

- Building reveals creating shadow lines will still be preferred in most cases.
- Casements flush with their frames will always be expected.
- If glazing bars are required, these should be true glazing bars separating panes of glass rather than externally fixed to the glass.

C.13.3.1 Windows (fenestration) contribute so much to the composition of elevations that particular care is needed in designing their proportions and how they are detailed. Windows also enliven the street with active fronts (see **C.1.7**), which with repetition, provide rhythm and natural surveillance (see **C.7.5**) of the street and public realm.

C.13.3.2 The appropriate amount and type of fenestration must take into account the **dark night skies** policy of the National Park. Guidance on this and issues such as roof lights and built in blinds is provided in the **Dark Night Skies TAN**.

The main difference in how fenestration will be assessed in new development depends on whether the applicant has chosen to design in a traditionally inspired or a modern, contemporary style.

Window design principles for traditionally inspired buildings

C.13.3.3 Windows are very important elements in successfully designing a building of traditional appearance and it is important to make the right choices and be clear which tradition is being referenced.

C.13.3.4 Arts and crafts buildings typically feature varying window size and asymmetrical arrangements, (see *Figure 13.17* while Georgian buildings generally involve symmetry and consistent window proportions (see *Figure 13.18*). Whatever the tradition being referenced, consistency is key.



Figures 13.17 and 13.18: Arts and Craft building near Fernhurst and Georgian house at Lewes.

C.13.3.5 Traditional windows fall into two main types:

Sash windows which have two frames which slide up and down within the main frame; and **casement windows** which have one or more frames which are hinged on the side or top and which open outwards (or occasionally inwards). The opening frames should always close flush with, or slightly set back from, the main frame.

C.13.3.6 Glazing bars are used in both sashes and casements to sub-divide the opening elements into smaller panes of glass. Traditional windows and their individual glass panes were nearly always taller than they were wide.

C.13.3.7 In both cases, the windows were made of painted softwood and, if properly maintained, windows made this way last longer and cost less over their total lifespan than alternatives.

C.13.3.8 The use of dark-coloured window finishes on buildings where the other building materials are themselves of a medium to dark hue can produce a sombre appearance. The use of white or cream coloured finishes for the fenestration can often produce a more satisfactory overall look.

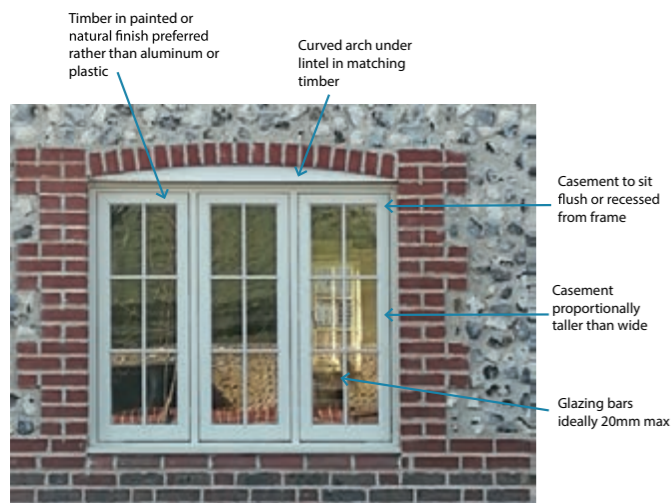


Figure 13.19: Acceptable detailing for traditionally inspired casement windows.

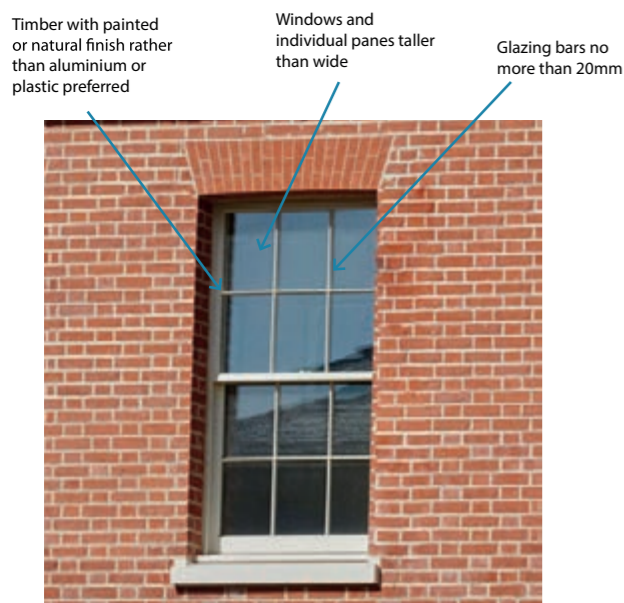


Figure 13.20: Acceptable detailing for traditionally inspired sash windows.

C.13.3.9 When dealing with listed buildings and some other important traditional buildings, it is likely that windows which are very faithful to traditional forms

will be required unless the case can be made that well designed alternatives, including the use of double or triple glazing, are appropriate and do not have an adverse impact on either the appearance or fabric of the building or on any features of architectural or historic interest.

C.13.3.10 Where building design is in a contemporary style there is more freedom, both in terms of materials, (where, aluminium or composite metal, timber and may be acceptable while even high quality painted uPVC is not encouraged, due to its environmental impacts) and window dimensions and their arrangement in elevations. Shadow lines are still preferred, casements flush with their frames will always be expected as will true glazing bars separating glass panels, when these are used.

It is expected that increasingly; triple glazing units will feature as they contribute significantly to improving the energy efficiency of buildings.



Figure 13.21: A good example of well-proportioned and crisply detailed windows in a contemporary design building, Selborne.

LANDSCAPE-LED HINT

Locally characteristic use of windows should inform design choices.



Street in Lewes showing local tradition of projecting bay windows at ground and first floors.

- 1 Bay windows
- 2 Oriel windows

It would be appropriate for new development design in this area to respect this character.

C.13.4 ENTRANCES AND DOORS

KEY DESIGN PRINCIPLES

For **traditionally inspired** buildings:

- a. Modern versions of board doors often incorporate a frame but this is not historically accurate and should be avoided.
- b. uPVC doors are discouraged in traditionally-inspired buildings.
- c. Good quality composite doors, which combine a number of materials, will be acceptable as they more successfully emulate traditional timber doors.

For **contemporary style** buildings:

- d. More flexible use of non-traditional materials is appropriate but uPVC doors are discouraged due to their long term environmental impact.

For **all building** styles:

- e. Buildings with a civic function should have appropriately significant main entrance design.
- f. The route from the public realm to the main entrance of any building should be made safe, accessible and attractive.
- g. Non-residential buildings should make main entrances evident through architectural design.
- h. Where possible, service or emergency access doors, where unavoidably unattractive, should be discreet or hidden from the public realm.

C.13.4.1 Doors and entrances are the natural focus for the visitor and should provide an attractive, clear welcome to the building as well as contributing to an area's legibility (see C.1.5). Along a street their repetition can create a pleasing rhythm which adds to the human scale of a development, while providing opportunities for expressing the character of the building's purpose or its occupants.

C.13.4.2 Rhythm and legibility can be successfully reinforced by use of pedestrian gates lined up with front doors.

C.13.4.3 On larger schemes, introducing a colour palette for doors and windows will be encouraged as it aids identity and helps create visual harmony between properties.

C.13.4.4 In practical terms the route to any entrance from the street should be safe and accessible for all.

Traditional doors

C.13.4.5 It is impossible to faithfully reproduce a traditional door in uPVC and this material also has higher environmental impacts than other materials. Traditional doors were made of wood, usually painted and largely fall into two types:

C.13.4.6 Panelled doors (Figure 13.22) usually have six or four panels set within a frame. Six panels were the norm in the Georgian period, and four panels in Victorian times. At the same time, glass started to be used in upper panels, sometimes with attractive diamond-cut patterns.

C.13.4.7 Board doors are a simpler type of door construction, usually used on more modest, cottage dwellings, and on less prominent elevations (Figure 13.23). On the inside face of the door are horizontal timber boards called ledges and braces, which hold the boards together. Externally, only the vertical boards are visible and these are often given some visual definition with a small butt-and-bead moulding (Figure 13.24).



Figure 13.22: 6 and 4 panelled doors.

Figure.13.23: Board doors, both faces.

Figure.13.24: A butt-and-bead section.

C.13.4.8 In the past, higher status houses may have had doorcases which surround the door. These combined a number of elements from classical architecture – pilasters, cornice, pediment – to create a visual frame giving greater prominence, and perhaps a little shelter, to the door. (Figure 13.25).

C.13.4.9 Traditionally inspired doors, using classical elements from architecture should only be used on larger houses and should be true to their classical origins with proper well-defined mouldings.



Figure 13.25: A good example of a doorcase on a house in West Meon, with the gate reinforcing the entrance experience.

Porches

C.13.4.10 It is possible to create a porch within the foot-print of the building (Figure 13.27) and this was a common feature in housing of the 1930s to 1950s. Porches can also be added to the front wall of the house. (See Figure 13.26).

C.13.4.11 The status of the house should generally be reflected in the porch, with modest houses having very simple ones, perhaps a simple monopitch supported on brackets, and larger houses having larger, more detailed and possibly enclosed porches. Porch design in traditionally inspired buildings should be consistent with the character of the whole building and should avoid over-complication.



Figure 13.26: Repeated porches on a row of simple terraces in Easton, reinforce entrances and provide a pleasing rhythm.



Figure 13.27: Internal porch, Midhurst.

Garage doors

C.13.4.12 Garages should not dominate the ground floor elevation (with the exception of some mews- style development) and so garages are generally best recessed from the main building. The doors can nevertheless have a significant visual impact and so their design should be carefully considered as part of the wider composition of the building and the street.

C.13.4.13 Where garages are used, the style should reflect that of the main building. Some glazing is beneficial to reduce the need for electric lighting and to create visual interest.



Figures 13.28 and 13.29 mid twentieth century and 21st century garage doors.

Non-residential buildings

C.13.4.14 Non-residential buildings should have their main entrances facing the public realm, where possible, and their function should be obvious through architectural design without depending on signage (Figure 13.30). Conversely, unavoidably utilitarian doors, such as service or fire exits, should be as discreet as possible when viewed from the public realm. Civic buildings, such as community buildings should have entrances that reflect their elevated public status as shown in Figure.13.31.



Figure 13.30: Main entrance at the Depot, Lewes is emphasised by flint door frame and external works.



Figure 13.31: Lewes Town Hall's main entrance is emphasised architecturally © Karl Schultz.

Multi-residential buildings

C.13.4.15 Where development requires the use of joint accesses to the rear of dwellings their security can be compromised. If it cannot be avoided the use of security gates for residents could be considered.

LANDSCAPE-LED HINT

Entrance design can be informed by local cultural associations

This recent housing development in Midhurst identified a pedestrian route to the town centre which led across the adjacent SDNPA office car park.

The gate responds both to the movement network function identified and to a cultural association with the site.



C.13.5 CHIMNEYS

- Where possible, ensure the chimney serves a real purpose, such as a flue or for ventilation.
- Chimneys should be built of bricks to match the main building unless local character dictates otherwise.
- All chimneys need to be visually convincing when viewed from the ground with sufficient visual presence and good detailing.

C.13.5.1 Chimneys are an important design component in traditionally inspired designs. They add interest to roofscapes, provide vertical emphasis, 'bookmark' different buildings and break up monotonous ridge lines. These same benefits can also apply in modern architecture. They should form part of the design process from the start rather than being added as an afterthought.

Chimneys in traditionally inspired buildings

C.13.5.2 There are three main issues that need to be considered to achieve a convincing appearance in traditionally inspired buildings: position, size and detailing.

C.13.5.3 Most chimneys should be placed on the ridge of the roof. Where exactly they are placed on the ridge should be dictated by the rooms that would have been heated by open fireplaces had the internal plan been traditional.

C.13.5.4 The key to understanding this is the relationship with the front door. *Figure 13.32* shows three variations of a terrace with the front doors in a variety of positions.

- All three houses share the same plan with the front door on the left hand side of their front elevation. This implies that the heated rooms are to the right and this is where the chimneys are positioned. In the other examples, two of the three houses are 'handed' and this affects the positioning of the chimneys.
- There are still three chimneys of the same size but they are spaced out in a different way to the first example.
- There are only two chimneys but one is double the width of the other because it serves two properties.

C.13.5.5 To achieve the aesthetic purposes described above, chimneys need a visual presence that requires size. Normally a minimum of 10 brick courses above the ridge line will be required.

Finally, detail can be used to reinforce the visual impact of a chimney. This could include the use of one or more over-sailing courses, perhaps in a contrasting brick, and a closing course (*Figure 13.33*). Chimney pots can also provide both variety and size.



Figure 13.32: Three versions of a three house terrace showing the variations in chimney positions.

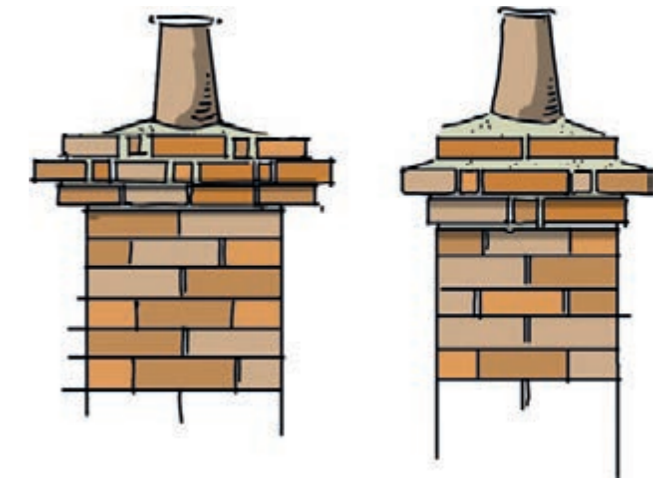


Figure 13.33: Chimneys showing over-sailing and closing courses plus pots.

Chimneys in buildings of contemporary design

C.13.5.6 Chimneys not serving open fires in contemporary homes should, if possible, serve another function such as for a stove flue or vent. In many cases they are not needed and it is possible that if the roof articulation is still desirable, this can be provided in other ways.

C.13.5.7 Where chimneys are provided they should not be restricted to traditional designs and materials but should seek to work with the style of the house while respecting the character of the area.

C.14 SOCIAL AND ENVIRONMENTAL SUSTAINABILITY

C.14.1 PLACE MAKING

KEY DESIGN PRINCIPLE

Applicants should ask themselves and seek to demonstrate how their proposals deliver beauty and inspire joy.

C.14.1.1 Place making is the process of creating quality places that people want to live, work, play and learn in. The National Park is already a fantastic place due to its high quality landscape (including townscape) but new development must build on this creating new high quality places as part of new housing or other development.

C.14.1.2 High quality places are more likely to be achieved where the guidance in this document is followed, the principles of the **National Design Guidance** are fully taken on board and the knowledge of local people is respected, through consultation or via **Village Design Statements** where available. In Conservation Areas, **Conservation Area Appraisals** should also be informative.

C.14.1.3 The UK Design Council 'Built for Life' assessment method sets out the ingredients for good quality place making in residential development

C.14.1.4 Successful places work through a combination of the positive psychological impacts on people and their functional value.

C.14.1.5 Development that respects and enhances the existing local character (see **C.2**), with good architectural, urban and landscape design, using high quality **materials (C.12)**, can deliver beauty and inspire joy. The **Landscape-led approach to design** ensures that new development speaks of its place, which resonates with people and inspires a sense of belonging.

C.14.1.6 In larger developments, sensitively chosen and well-placed public art can be a good medium for distilling local community ideas and interests and

celebrating the cultural history of a place, while also helping to increase distinctiveness.

C.14.1.7 Good place making achieves distinctive, beautiful and well-functioning neighbourhoods which feel rooted in the surrounding landscape.

C.14.2 PUBLIC ART

KEY DESIGN PRINCIPLES

All new development:

a. Should consider whether and how public art could enhance distinctiveness and sense of place.

New public art should:

- celebrate something special about the site's character, such as its history;
- be complementary and appropriate to the landscape character (including townscape where relevant);
- be informed by local public consultation (if of community scale significance);
- should have a robust management and maintenance plan.

C.14.2.1 Public art can be an integral part of good place making, can act as a community focus at both design and post installation stages and is a way of celebrating what is special about a place. It can also be a showcase for local traditional and modern skills of artistry and craftsmanship and in the use of traditional materials. However public art is not always appropriate or acceptable, particularly in more sensitive locations.

C.14.2.2 Artists could be selected by design competition to a brief agreed by the applicant with input from the Authority and the local community.

More information on selecting artists, commissioning public art and project managing public art projects, can be found on the **Public Art Online** and on **New Rules for Public Art websites**.

C.14.2.3 Public art takes many forms and can often be integrated into a more conventional part of the development, such as in windows, railings, doors and gates or in the main building fabric, such as in special brick detailing.

Schemes across a larger site might take the form of a trail which helps to provide orientation along routes.

C.14.2.4 If the public art commission is of a significant community scale, it is very important to use this as an opportunity for community engagement. This is valuable in itself, but also makes the likelihood of community support and protection of the finished product more likely.

C.14.2.5 The management responsibilities of any public art installation should be clear from the start, and a plan for management and routine maintenance and its funding should be agreed and provided by the applicant, which takes account of the need for public liability insurance, the likely lifespan and de-installation where relevant.



Figure 14.1: An art installation in a Manhattan park.



Figure 14.2: Sussex Wildlife Trust member and Heathlands Reunited volunteer at the 'Sheeppig', Graffham.



Figure 14.3: SDNPA car park, Midhurst.



Figure 14.4: Part of sculpture trail, Grizedale Forest.

See also Local Plan policy **SD21**: Public Realm, Highway Design and Public Art

C.14.3 INTERNAL SPACE AND ACCESS STANDARDS

KEY DESIGN PRINCIPLES

All new residential development:

- a. including conversions of existing buildings, is expected to meet the Nationally Described Space Standards;
- b. of 10 dwellings and above should have at least 50% of dwellings designed to meet Part M4 Category 2 standards for Accessible and Adaptable Dwellings;
- c. of 50 dwellings and above should have 5% of dwellings designed to meet Part M4 Category 3 standards for Wheelchair Accessible Dwellings.

C.14.3.1 The quality of the internal living environment for occupants is a key planning issue. The provision of minimum internal space standards and, in larger development schemes, a proportion of dwellings that are designed for wheelchair access (or can be adapted in the future) are important design objectives that help achieve this.

Internal Space Standards

C.14.3.2 In 2015 the Government published the **Nationally Described Space Standards** (NDSS) which set out the minimum internal space standards for new homes which are considered to allow for adequate social and family life and these will be expected to be complied with. Ideally, the National Park would prefer internal space standards to be at least 10% higher than these minimum standards, across the board.

Table 1 - Minimum gross internal floor areas and storage (m²)

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *			1.0
	2p	50	56		1.5
2b	3p	61	70		
	4p	70	79		2.0
3b	4p	74	84	90	
	5p	86	93	99	2.5
	6p	95	102	108	
4b	5p	90	97	103	
	6p	99	106	112	
	7p	108	115	121	3.0
	8p	117	124	130	
5b	6p	103	110	116	
	7p	112	119	125	3.5
	8p	121	128	134	
6b	7p	116	123	129	
	8p	125	132	138	4.0

Figure.14.5: Table 1 from the NDSS document. (NB Consult full document for notes and definitions).

Access Standards

C.14.3.3 Part M(4) of the Building Regulations has 3 categories of accessibility for new homes.

Category 1 – VISIBLE dwellings

Category 2 – Accessible and adaptable dwellings

Category 3 – Wheelchair user dwellings

- All homes must meet Category 1 nationally.
- Category 2 housing needs step-free access to the front door. In sites with slopes greater than 1:12 this will require special designs allowing for ramped access. Where ramps would require safety details, such as railings, the visual impact will be considered. Category 2 housing also has implications for the size of car parking spaces. Internally, there will be a set of minimum dimensions to allow for future adaptation.
- Category 3 homes generally have additional cost implications as they are in effect already adapted for wheelchair users from day 1.

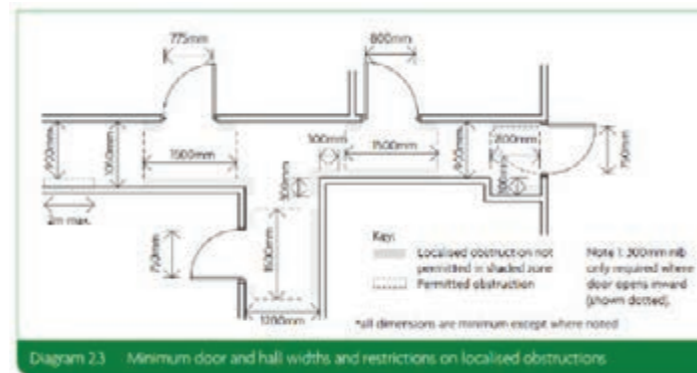


Figure 14.6: Extract from Part M for Category 2 internal dimensions.



Figure 14.7: A wheelchair accessible home.

See also Local Plan policy **SD27: Mix of Homes**.

C.14.4 ENVIRONMENTALLY SUSTAINABLE DESIGN

KEY DESIGN PRINCIPLES

- a. All relevant development types to meet the requirements as set out in the **Sustainable Construction SPD**;
- OR
- b. Extensions not covered by the Sustainable Construction SPD, should still strive to maximise their environmentally sustainable credentials.

C.14.4.1 In August 2020 the **Sustainable Construction SPD** was adopted by the SDNPA. This provides guidance on the sustainability standards that are expected for different types and scales of development from a single house to major development. The Sustainable Construction SPD does not apply to household extensions although measures to help mitigate and adapt to climate change are still expected.

Mitigating climate change

C.14.4.2 The design implications of some mitigation measures will be mostly invisible from the outside as buildings improve the efficiency of their fabric. Low/zero carbon measures vary in their design impacts. For instance, ground source heat pumps are largely underground but they do neutralise areas of open space and prevent tree planting; air source heat pumps require a unit similar in size and appearance to an air conditioning unit to be located somewhere outside the building. For the latter, locations less visible from the public realm should be prioritised.

C.14.4.3 Solar collection, such as photovoltaic (PV) panels or tiles and solar water heating, are potentially visually prominent, depending on roof design and orientation. PV can be designed to integrate with roofs, rather than appear 'bolted on'. In sensitive sites, such as in conservation areas, tiles may be more appropriate than panels. In the most sensitive locations, PV may need to be restricted to roof pitches away from the street or on lower ancillary buildings or at ground level.

C.14.4.4 Electric vehicle (EV) charging points may be relatively discreet when on plot but are potentially more visually intrusive when in car parks and so their design and location will need care.

See **C.8.2 EV Charge Points**.

C.14.4.5 The use of low carbon materials, such as local and certified well-managed timber, the re-use of existing buildings or the recycling of building materials also have design implications.



Figure 14.8: Solar tiles and 14.9: An air source heat pump.



Figure 14.10: Car park EV charge point and 14.11: 'Grown in Britain' timber.

Adapting to climate change

C.14.4.6 The design implications of adapting to climate change are manifold. They include sustainable drainage solutions (see **C.9.3**) and enhancing green infrastructure⁶ (GI) (see **C.9**) including the planting of trees (see **C.9.2**) and the requirement for 10% of roof area to be green roof (see **C.9.4**) for larger developments. These all have visual impacts, which should be positive in most contexts, as well as providing opportunities to enhance wildlife. Sufficient space for some elements of GI on site is needed, such as green setbacks to countryside or sustainable drainage systems and street trees in developable areas for urban GI (see **C.9**). Reducing water consumption can usually be achieved using best practice fittings and appliances in the building, and so are unlikely to have external visual impacts.



Figure 14.12: Rain garden and street trees help adapt streets to predicted climate change.

C.15 DARK NIGHT SKIES

KEY DESIGN PRINCIPLES

- Wherever possible, new development should avoid the installation of new external lighting and excessive amounts of glazing.
- If new lighting is required, steps must be taken to avoid any adverse impacts on the International Dark Sky Reserve.
- Measures to reduce spill from internal lighting in new development, including appropriate mitigation measures, will be expected to be in accordance with the **Dark Night Skies Technical Advice Note**.
- Proposals should take due consideration of the overall visual impact that any external lighting will have on the landscape in accordance with the **Dark Night Skies Technical Advice Note**.

C.15.0.1 In May 2016, the South Downs National Park became the world's newest International Dark Sky Reserve (IDSR)



Figure 15.1: A view of the Milky Way from the Dark Night Sky Reserve.

C.15.0.2 The South Downs Local Plan: policy **SD8**, criterion 2, sets out a hierarchy for new development in the IDSR.

C.15.0.3 Development proposals must demonstrate that all opportunities to reduce light pollution have been taken, and must ensure that the measured and observed sky quality in the surrounding area is not negatively affected, having due regard to the following hierarchy:

- The installation of external lighting is avoided;

- If lighting cannot be avoided, it is demonstrated to be necessary and appropriate, for its intended purpose or use;
- Any adverse impacts are avoided; or
- If that is not achievable, then adverse impacts are mitigated to the greatest reasonable extent.

C.15.0.4 The following design guidance is supplementary to the advice contained within the Local Plan and that found in the **Dark Night Skies Technical Advice Note (TAN)**. Specialist advice may need to be obtained and for planning permission, technical proposals on lighting design and controls submitted for approval.

C.15.0.5 In all cases, new development is required to follow the best practice principles set out in the TAN. The TAN is a good resource for all aspects of lighting design, it sets out specific technical design guidance for a range of different developments – there are examples of best practice shown in section 6.3 of the TAN.

C.15.0.6 Lighting design in the National Park

Applicants are expected to demonstrate that they have explored all options to reduce light pollution. Wherever possible, new development should avoid the installation of new external lighting.

Designing for internal lighting

C.15.0.7 The spill of light through window openings can create significant amounts of light pollution. In general, glazing will cause light to spill horizontally and, where roof lights are proposed, directly upward. Roof lights can be the most damaging of light spills

- Applicants are expected to use low transmittance glazing or smart glass technologies; these offer an effective and controllable option for reducing light spill.
- In some cases, the glazing specification will need to be supplemented with electronically timed blackout blinds and shutters – applicants should refer to the TAN for further information.

Designing for external lighting

C.15.0.8 Proposals should take due consideration of the overall visual impact that the lighting will have on the landscape. This may include ground surface reflectivity, the number of lights, the daytime intrusion, and the general overall footprint of the lighting. The applicant will need to determine the existing lighting environment of their site and survey the surrounding night environment; identifying what dark zone your site is in and if there are any critical viewpoints, particularly from viewpoints in accordance with **Policy SD6: Safeguarding Views**.

C.15.0.9 If new lighting is unavoidable, steps must be taken to avoid any adverse impacts on the IDSR by ensuring that it has been intelligently designed, taking into consideration the direction of lighting and the number of lumens being emitted.

For example:

- a) development with external lighting will need to meet or exceed the Institute of Lighting Professional guidance for the environmental zone in which the development is being proposed
- b) upward spill of light should always be avoided – it is the worst contributor to ‘sky glow’
- c) lighting installations should design an upward light ratio (ULR) appropriate to the environmental zone, The Authority would expect the applicant to achieve a zero ULR which eliminates all upward and side spill
- d) direct visibility of lights should be minimised
- e) lights should be installed correctly, to reduce the light spill beyond that of the immediate area
- f) only in exceptional circumstances will buildings need to be lit to emphasise architectural structures – in such cases, the lowest power lighting should be used
- g) any building or structure that requires illuminated advertising should refer to the Technical Advice Note and the Institute of Lighting Professional Guidance (ILP) for further advice
- h) domestic flood lighting should not exceed 1000 lumens and should be installed correctly, so that the fitting is directed downwards

C.15.0.10 In some cases, the adverse impacts of lighting will need to be mitigated – for example, by installing timing restrictions and ensuring that the light emitted is of a colour that does not disturb eco-systems.



Figure 15.2: The Depot in Lewes uses external blinds to mitigate the effects of large windows at night.

APPENDICES

APPENDIX A: KEY DESIGN PRINCIPLES

This appendix brings together and repeats all the key design principles given in this document in the blue boxes in each section of Part C, for ease of reference.

1.1 LANDSCAPE STRATEGY

- a. The landscape strategy should help determine the capacity of the site and hence the appropriate developable area for the development.
- b. All layout or landscape plans for multiple unit or large building developments should have accurate contour plans and information about surface water flows.
- c. Single dwelling proposals should have levels on the site and contours for the site context clearly shown on relevant plans.

1.2 ACCESS AND PERMEABILITY

- a. Opportunities for enhancing movement networks for people and wildlife should be maximised following identified desire lines and landscape character.
- b. Access should prioritise provision for non-motorised user movement over access for vehicles; and the ease of access for people with pushchairs, wheelchairs and disabilities etc. should also be considered.
- c. Opportunities for improving access to public transport should be taken where possible.
- d. The character and treatment of all vehicular access points and roads should aim to reduce adverse impacts on the landscape and avoid highway dominated character.
- e. Access roads and routes should be in accordance with the guidance document **Roads in the South Downs**.
- f. The location of access routes through the site should ensure that there is space within the developable areas for viable development blocks.
- g. Where possible, larger residential developments (20 homes and above) should have more than one

vehicular access to avoid large cul-de-sacs and to improve permeability.

- h. Good permeability needs to be balanced with the need for security and crime prevention.
- i. Permeability should take account of the need for the quality of routes and for natural surveillance.
- j. The routes and the amenity of existing public rights of way should be protected or enhanced.

1.3 ORIENTATION

The orientation of buildings and streets should take account of:

- a. what is locally characteristic;
- b. microclimate;
- c. the need for natural surveillance;
- d. solar collection;
- e. key views and vistas;
- f. topography and significant existing features.

1.4 DENSITY

Development density should aim for efficient use of land while also:

- a. integrating new development by using a similar grain and density to that which is locally characteristic or is appropriate to the site's location;
- b. considering scale, height, volume, site coverage and distance from and effect upon, adjacent buildings;
- c. not being at the expense of: privacy, good internal space standards, sufficient private garden or communal open space and adequate access;
- d. enhancing GI, providing multi-functional SuDS (where possible) and avoiding the loss of environmental quality or significant existing landscape features;
- e. Animation can be enhanced with balconies in apartments and oriel windows above the ground floor projecting out into the street.

1.5 LEGIBILITY AND STREET HIERARCHY

Development should promote good legibility in the following ways:

- clear route hierarchy;
- strong and logical building layout and massing;
- consistent choice of materials;
- architecture reflecting building use and emphasising main entrances;
- use local landmarks and key views;
- retention of key distinctive features.

1.6 PERIMETER BLOCKS

New developments should aim to respect existing or achieve new perimeter block layouts unless not feasible or not locally characteristic.

1.7 ACTIVE FRONTAGES

- Active frontages and particularly ground floor elevations, should address streets and spaces.
- Buildings on corner plots should be active on both sides.
- Blank walls or elevations with only non-active room windows should not face the public realm if possible.
- Residential streets should have: frequent doors and windows from active rooms; bay windows; porches; front gardens (unless not locally characteristic).
- Animation can be enhanced with balconies in apartments and oriel windows above the ground floor projecting out into the street
- Non-residential development can enliven street elevations with: generous fenestration (unless this conflicts with dark night skies policy); entrances; pavement terraces; shop windows.

1.8 THE COUNTRYSIDE/SETTLEMENT EDGE

- A new settlement edge should reflect the best locally characteristic examples of settlement edges with the countryside.

- Repeating unsympathetic twentieth century development settlement edge character should be avoided.
- New development should generally be set back from the countryside edge, allowing a GI buffer (unless this conflicts with local character).
- Where possible, new development should address the countryside directly and not turn its back onto it, unless this is not locally characteristic.
- Where new development cannot front onto countryside, low key rural character boundary treatments will be expected.
- Good quality development should not need to be screened from rural views but rather should aim to become an attractive part of the landscape.
- Screening may be required for unavoidable development that could cause visual harm both inside and outside the National Park.
- Green infrastructure links from the countryside into the new development and, where appropriate, across it, should be accommodated.
- New settlement edges need to look both ways, responding to the countryside while also knitting into the existing fabric of a settlement.

2.1 ENHANCING LOCAL CHARACTER

- The character of a place should be identified and described. New development needs to conserve and enhance this character.
- The use of standard house types that take no account of local character, bad imitation of traditional design or simply replicating mediocre design in the locality will not be acceptable.

2.2 RESTORING POSITIVE CHARACTER

- Opportunities for new development to enhance character should be taken.
- Understanding of the landscape character (including townscape) of the site and beyond, needs to be demonstrated. The character of the development should be clearly informed by this.

- In larger developments the design should avoid inappropriate repetition and the feeling of 'an anywhere place'.

3. DEVELOPMENT IN CONSERVATION AREAS

Development proposals should:

- Preserve or enhance the character and appearance of the conservation area.
- Avoid massing or building height which is overly dominating for the site and its context.
- Relate or respond positively to the built heritage predominating in the Conservation Area, so that the new development can properly be seen as preserving or enhancing the character and appearance which led to the area's designation.
- Respond to key views into, through and out of the Conservation Area.
- Reference the building traditions of the settlement and, where appropriate, fit sympathetically into the existing streetscape.
- Avoid the use of uPVC windows, fascia cladding or other assertively synthetic materials, even if attempts are made to emulate traditional details.
- If traditional materials are proposed, observe local craft traditions and avoid, short-cuts, such as flint-block construction.
- Where possible, remove buildings or structures whose aesthetic appearance are harmful to the overall character and appearance for whose protection the area was designated.
- Minimise the negative impacts on heritage assets, including conservation areas, listed buildings, historic parks or gardens or scheduled monuments and their setting.

4.1 ROOF EXTENSIONS TO EXISTING RESIDENTIAL BUILDINGS

- Dormers may not always be appropriate facing the street where this is not already locally characteristic.
- A dormer should not dominate the roof, but should complement the existing features of the house, and roof in particular, in terms of proportion, form, size, position and detailing.

- Dormers should normally line up with the existing windows, and be kept away from the ridge and edges of the roof in order to provide a visual frame.
- Roof lights should not protrude significantly from the roof profile and should be evenly spaced. They should not dominate the roof.
- The Dark Night Skies policy may make roof lights difficult to accept in certain locations but if acceptable, mitigation measures in line with the **Dark Night Skies TAN** will be expected.

4.2 FRONT, SIDE AND REAR EXTENSIONS TO EXISTING RESIDENTIAL BUILDINGS

- Single or two storey side or rear extensions should be in scale and balance with the whole of the house.
- All extensions should comply with the BRE Daylight and Sunlight best practice guidance to avoid harming a neighbour's daylight and sunlight provision.
- Extensions should be subservient to the main building.
- Side extensions should normally be set back from the main building to retain its dominance; avoid a mismatch of new and old materials; and (for semi-detached houses) maintain the original main building symmetry.

5.1 SINGLE DWELLINGS

New dwellings should contribute positively to the local settlement pattern, then respond to its built context.

5.2 FARMSTEAD DEVELOPMENTS

- A **Farmstead Assessment** should be undertaken to determine a site's sensitivity to change.
- The character of the farmstead (its spaces, routes and buildings) should be considered before deciding upon the most appropriate use.
- The development should strive to enhance the farmstead character.
- The proposed use should be compatible with public access and shared spaces where they exist.
- Over-domestication of historic farmsteads will not be supported.

- f. All new development using a farmstead typology should reflect the essential characteristics of traditional local farmsteads.
- g. The shared working character of spaces should be conserved and key open spaces should not be divided or uncharacteristically enclosed.
- h. Where possible, the visual impact of car parking should be minimised, and the design of parking and access areas should respect the farmstead character.

5.3 NEW AGRICULTURAL BUILDINGS

The design of New Agricultural Buildings should:

- a. Be of a scale necessary for the proposed function.
- b. Reduce visual impacts by careful siting, taking into account existing farm buildings, topography, views and existing vegetation.
- c. Integrate with the landscape by considering scale and form, including relative scale to neighbouring buildings; roof pitch; the cumulative impact of extensions, breaking up roofs and walls with servicing details and apertures.
- d. Integrate with the landscape by careful selection of materials and colours reflecting context and practical uses and favouring dark colours associated with built form.
- e. Re-use existing tracks and spaces serving them and minimise extent and visual impact of new access tracks.
- f. Use locally characteristic landscape elements to help integrate them into the landscape, while avoiding screen planting solely to hide new buildings.
- g. In historic farmsteads, be demonstrably informed by following the Historic England **Farmstead Assessment Framework** to ensure a landscape-led approach is taken.

5.4 RURAL HOLIDAY ACCOMMODATION

- a. The design of holiday accommodation should be rooted in its location, using the established local character and referencing characteristic materials and/or building styles.
- b. The holiday accommodation proposal must include a thorough understanding of the potential servicing,

lighting, car parking and other associated indirect impacts.

5.5 SHOPFRONTS

New shopfronts should:

- a. Consist of a frame with a top, bottom and sides.
- b. Be in proportion to and pay due regard to the rest of the building.
- c. Consider colour choices carefully and use them to help emphasise the frame.
- d. Have signage designed as part of the whole, for ease of maintenance and attractive future replacement.
- f. Consider appropriateness of lighting as a principle and, if used, in its detail.

5.6 NON-RESIDENTIAL DEVELOPMENT

- a. Large non-residential buildings will need to use design techniques to reduce the building mass, or apparent mass, to integrate them successfully into residential areas characterised by more domestic scale buildings.
- b. Non-residential buildings should contribute positively to the public realm where possible.
- c. Non-residential development should maximise opportunities for GI and SuDS while minimising servicing and car parking impacts.
- d. Public buildings need to reflect their community function in positive ways.

5.7 MULTI-RESIDENTIAL DEVELOPMENT

- a. Large multi-residential⁶ buildings may need to use design techniques to reduce the building mass, or apparent mass, to integrate them successfully into residential areas characterised by more domestic scale buildings.

Multi-residential development should:

- b. Have good visual and physical connections with attractive outdoor space from within the building.

- c. Take particular care with how the buildings are serviced, minimising the visual impact on the public realm.

- d. Integrate well into the wider community (such as providing publicly accessible facilities or spaces).

Sheltered accommodation should:

- e. Have a minimum area of usable open space of 20 sqm per resident (which can include balconies).
- f. Follow nationally recognised dementia-friendly guidance for the design of usable open space where serving older people specifically.

6.1 GRAIN

- a. For a new development to integrate well with its context it needs to take account of the grain that is characteristic of the settlement that it is a part of, without necessarily trying to replicate it.
- b. Where the development forms a new edge to a settlement, some loosening of the grain as part of the transition to the countryside will normally be expected, unless this is contrary to the best of local character.

6.2 MASSING

- a. New development needs to be sensitively related to the scale and massing of neighbouring development and spaces.
- b. New development should generally not be more than 1 storey higher than neighbouring buildings where it directly adjoins existing residential development.
- c. Orientation, topography, and the character of the surrounding area will also need to be carefully considered as they will affect the perception of the massing and scale.
- d. Techniques for reducing the perceived massing may need to be employed for larger buildings.

7.1 RURAL HIGHWAY DESIGN

New development should:

- a. Conserve and enhance the character of rural lanes and routes and in accordance with **Roads in the South Downs**.
- b. Use existing access points wherever possible

- c. Follow the locally characteristic relationships of roads to other landscape elements:

- Contours and water
- Woodlands and trees
- Field boundaries and settlements.

- d. Keep new roads as narrow as possible. Consider not necessarily building to adoptable standards and where this occurs provide suitable management arrangements.
- e. Minimise visibility splays.
- f. Avoid signage and remove existing clutter wherever possible.
- g. Slow traffic by enclosing built form, by landscape design and (limited numbers of) on street parked cars rather than through road engineering measures such as raised tables, humps or rumble strips on new roads.
- h. Adhere to a road hierarchy, with a main axis or thoroughfare and subsidiary routes.
- i. Design roads to create safe crossing points.

7.2 STREETS

- a. New development should enhance the surrounding streetscape or create new streetscapes that enhance the character of the area.
- b. Development should aim to create animated streets.
- c. Streets should be designed for easy access for all.
- d. Vehicle parking should not visually dominate the streetscape.
- e. Streets should integrate with existing and future movement networks (especially non-motorised) and create attractive and continuous streetscapes, knitting in visually and functionally with existing development.
- f. Where possible street clutter should be avoided.

7.3 PUBLIC OPEN SPACE (POS)

- a. The nature of the POS should be informed by the identified landscape character of the area and the needs of local people.
- b. POS should strive to be multi-functional, well-located, overlooked, accessible for all and should serve the whole community.

- c. On larger schemes, fewer, larger open space areas are generally more appropriate than more numerous small areas.
- d. Opportunities for sustainable drainage and biodiversity functions should always be maximised where appropriate.
- e. The POS should form part of a wider connected GI network and locally native plant species should be prioritised.
- f. Opportunities for public art to celebrate the cultural associations of the site should be taken, where appropriate to the nature of the surroundings.
- g. Surfaces, structures and furniture in POS should be robust and have high quality materials and finishes.
- h. A scheme for the ongoing maintenance and management of the POS will need to be provided.

7.4 PLAY SPACES

- a. Children's play areas should be located in accessible places that, where possible, are well overlooked but do not risk unacceptable disturbance to neighbours (following FIT guidance).
- b. The visual impact should be assessed and the design should be appropriate to the local landscape character.
- c. A scheme for the maintenance and management of the play space and any equipment and surfaces will need to be provided.
- d. Where appropriate, opportunities for play should be integrated into the street and other public realm places.

7.5 NATURAL SURVEILLANCE

All new development should provide, and if possible improve, natural surveillance of new and existing public realm spaces and routes.

8.1 PARKING

- a. Car parking design should be well integrated, with good landscape treatment and should avoid a public realm dominated by cars, hard standing, too many materials and associated clutter.

- b. All parking design should be landscape-led with layout and materials responding to the landscape character of the place.
- c. Car parking areas and cycle parking should maximise opportunities for enhancing green infrastructure and sustainable drainage.
- d. Development layouts and detailed design should minimise the opportunities for anti-social car parking on pavements and green spaces.
- e. All residential car parking should be safe, conveniently located for the dwellings they serve, overlooked and accessible for all.
- f. Cycle storage for residents and users of non-residential buildings should be safe and convenient to use, secure and sheltered from the elements.
- g. Garages which are designed to accommodate bicycles should meet minimum dimensions to ensure they can be removed comfortably without the need to remove vehicles.
- h. Large rear car parking courts serving houses should be avoided where possible.
- i. Car parking should not obscure clear and direct routes between the front door and the street.
- j. Car parking design should accommodate EV charging points either on plot or in adjacent car parks to conform with **Policy SD22** and the **Sustainable Construction SPD**.

8.2 SERVICES AND ANCILLARY STRUCTURES

- a. All underground services should be incorporated in shared trenches with common ducting where possible. They should be considered at an early stage in the design layout and should be designed to be compatible with GI and SuDS.
- b. All service apparatus, overground and underground services and access covers should be integrated into overall external works / landscape design and not be fitted as afterthoughts.
- c. All new developments should be served by gigabit-capable full fibre broadband at the point of occupation unless this is not feasible due to remoteness.

- d. Best endeavours should be made to ensure all new cable services are underground and, where feasible, existing overhead services are rerouted underground.
- e. External lighting should be minimised and its dark night skies and day time impacts reduced as much as possible.
- f. Meters, vents and flues should be as discreet as possible and not be presented as a design afterthought.
- g. Bin storage should be well integrated, accessible, discreet, safe and secure and aligned with the local Waste Authority collection service.
- h. Routes from bin storage to bin collection points should be direct and as uncomplicated as possible.
- i. Energy infrastructure should be discreetly located and any landscape screening locally characteristic.
- j. Metal support poles, columns, brackets and housings for signage, lighting, services and other infrastructure, should be painted black to reduce the visual impact and provide uniformity of appearance in the National Park, unless there are sound design reasons for alternative finishes.

9.1 CONSERVING AND ENHANCING GREEN AND BLUE INFRASTRUCTURE (GI AND BI)

- a. Conserving, enhancing and creating GI and BI should be a fundamental part of a development's Landscape Strategy response to a site's opportunities and constraints.
- b. A palette of locally appropriate GI and BI components should be generated through the landscape-led approach.
- c. GI and BI should be designed at the masterplan stage to create a network of joined up elements for people and nature within and outside the site. The GI elements can be a wide range of scales and sizes.
- d. GI and BI should be as multi-functional as possible.
- e. New development should make best use of GI and BI to deliver **Ecosystem Services** and biodiversity net gains.
- f. New development should consider the full potential for urban GI and BI within developable areas and be well integrated into buildings and spaces.

9.2 TREES

The design of development proposals in respect of trees, woodlands and hedgerows should:

- a. Be in line with British Standard 5837 and other relevant national tree guidance;
- b. Take into account that all trees are a material consideration in the planning system and should be considered from the start of the design process;
- c. Be informed by an on-site survey and (for larger or sensitive sites) specialist advice from a qualified arboriculturist;
- d. Retain existing trees wherever possible, unless there are sound justifications for removal;
- e. Demonstrate a precautionary approach to construction activity close to trees or hedgerows;
- f. Where characteristic, replace all trees lost through development on or near the site (and where not physically possible, provide financial compensation);
- g. Maximise opportunities for substantial increases in tree canopy, unless there are sound justifications not to;
- h. Demonstrate the right plant for the right place and the right reason, following a landscape-led approach;
- i. Favour locally native species, unless non-natives are more appropriate;
- j. Maximise multiple ecosystem services benefits;
- k. Demonstrate the highest standards for planting and aftercare.

9.3 SUSTAINABLE DRAINAGE

- a. Drainage approach and design should be informed by, contribute to and ensure proposals are coherent with the surrounding landscape in a drainage strategy.
- b. The drainage approach and design should ensure multifunctional benefits wherever possible, i.e. enhancing water attenuation and quality and providing biodiversity and landscape amenity.
- c. Drainage schemes should manage all sources of surface water, protect people and property from flooding and should not create additional flood risk beyond the site.

- d. Drainage schemes should be designed to match greenfield discharge rates & volumes and follow natural drainage routes as far as possible.
- e. Source control elements should be maximised, whilst engineered solutions (e.g. pipes, tanks and large steep-sided basins) minimised.
- f. Surface water not collected for use should be discharged according to the following hierarchy:
 - To ground,
 - To a surface water body,
 - A surface water sewer, highway drain, or another drainage system
 - To a combined sewer where there are no other options, and only when agreed with the relevant sewage undertaker.
- g. Surface water discharges should not adversely impact the water quality of the receiving water bodies, both during construction and when operational. Interception of small rainfall events should be incorporated into the design of the drainage system.
- h. The design of the system must account for the likely impacts of climate change and likely changes in impermeable area over the design life of the development.
- i. A maintenance plan for construction and operational stages should be prepared. This should cover: a schedule of activities, practicable access (for people and any necessary machinery), health and safety, outfalls and any other considerations, such as biodiversity.
- j. New homes should be provided with water butts wherever possible and appropriate.

9.4 GREEN ROOFS AND WALLS

- a. Green roofs should be designed to meet specific benefits and landscape strategy objectives and should incorporate suitable management plans.
- b. Minimum soil depths of 100mm will be required.
- c. Green roofs should be implemented in accordance with the **GRO Green Roof Code (2014)** or subsequent update.
- d. Proposed green roofs and walls can be considered as part of the landscape strategy for a development.

9.5 ORNAMENTAL PLANTING

- a. Ornamental planting schemes should be restricted to areas close to buildings, including front and rear private or communal gardens.
- b. The exception to the above is where ornamental planting is an integral part of parkland or historic or contemporary garden design.
- c. In other cases, planting selection and design should enhance what is already locally characteristic to the area.

10.1 PRIVATE GARDENS

- a. Houses with 2 and more bedrooms should usually have a private amenity space of at least 60% of the internal floor space of the house.
- b. Where north-facing gardens cannot be avoided, they should generally be extended to avoid excessive overshadowing.

10.2 COMMUNAL GARDENS

Communal residential gardens should generally consist of at least 20m² of usable open space per dwelling and where possible incorporate multifunctional GI and SuDS.

10.4 PRIVACY AND DAYLIGHT

- a. All new development should consider the private amenity and daylighting of new and existing residents.
- b. Overlooking distances for rear windows between existing and new homes should be at least 22m and 20m respectively.
- c. Good daylighting in dwellings and non-residential buildings should be maximised (subject to dark night skies requirements).

11.1 RESIDENTIAL BOUNDARIES

For rear garden boundaries:

- a. New residential development should minimise rear garden boundaries exposed to the public realm including shared car parks.
- b. Where rear garden boundaries exposed to the public realm are unavoidable, public realm garden boundaries should avoid timber close board fences.

For front garden boundaries:

- c. Front garden structures with pedestrian gates will be expected where locally characteristic.

For all garden boundaries:

- d. All property boundaries visible from public realm should be enhancing the established local character, using traditional materials, designs and styles. Close board or panel fences are unlikely to be appropriate.
- e. Where possible and appropriate, rear, front and inter-garden boundaries should include locally native hedges and trees and allow for wildlife movement.

11.2 EDGE OF COUNTRYSIDE BOUNDARIES

- a. New settlement boundaries with the countryside should respond to landscape character and enhance the natural beauty and cultural heritage of the National Park.
- b. Boundaries should seek to be understated and, where appropriate, use locally native tree and hedge species.

11.3 PUBLIC BOUNDARIES TO NON-RESIDENTIAL DEVELOPMENT

Non-residential boundaries in the public realm should be locally characteristic and reflect the functions of the building while providing as many public realm benefits as possible.

11.4 PUBLIC OPEN SPACE BOUNDARIES

- a. New POS boundaries should be locally characteristic and reflect the nature of the POS.
- b. Boundaries should protect the space for its proper use.

12.1 BUILDING MATERIALS

- a. New development is expected to respond to local character and be inspired by vernacular building, boundary structures and ground surfaces by using materials and detailing that best match those used traditionally in the locality, to reinforce local distinctiveness.
- b. In those instances where 'contemporary architecture' is acceptable (having regard to local character, context and heritage), locally traditional materials

should still be used where possible. Modern materials should only be used where they are of high quality and appropriate to their context.

- c. Building techniques, decoration and styles that enhance the appearance of materials in new buildings should be employed; including attractive use of texture, colour, and patterning.
- d. Brick bonds and detailing (such as copings) will be expected to respect local traditions.
- e. High levels of durability and appropriate craftsmanship in the use of materials and good levels of finishing will be expected.
- f. Over busy material palettes should be avoided.
- g. The selection of materials that have low embodied energy, low general environmental impacts, including the re-use and recycling of materials and the use of locally sourced materials is encouraged.
- h. Sample panels on site for key materials and workmanship (such as brick or flint walls, etc.) are likely to be required for approval.

12.2 SURFACE MATERIALS

- a. New development is expected to respond to local character by using materials and detailing that best match those used traditionally in the locality, to reinforce local distinctiveness.
- b. Ground surface materials should follow the principles set out in the document **Roads in the South Downs'**.
- c. High levels of durability and appropriate craftsmanship in the use of materials and good levels of finishing will be expected.
- d. Over busy material palettes should be avoided.
- e. The selection of materials that have low embodied energy, low general environmental impacts, including the re-use and recycling of materials and the use of locally sourced materials is encouraged.
- f. Natural materials, which weather better than concrete products, are likely to be preferred.

13.2 ROOFS

For traditionally-inspired buildings

- a. the form and pitch of the roofs and the roofing coverings used should reflect the best prevailing

forms in the area and should include well-detailed eaves and ridges.

For all building styles

- b. the above local precedents should be considered first unless there are good design reasons to depart from them.
- c. in most cases, uninterrupted horizontal ridge lines of more than a domestic scale will not be acceptable.
- d. green roofs and solar collection will be encouraged unless there are clear built heritage or other design concerns.
- e. fascia boards should only be used sparingly in non-residential, traditionally-inspired or multiple home developments and alternative approaches should be considered.
- f. in most residential cases, roof sizes greater than domestic scale will not be acceptable.

13.3 WINDOWS

For traditionally inspired buildings:

- a. timber frames with a painted finish, rather than aluminium or plastic is preferred as these can achieve a more authentic character.
- b. when using casement windows, it is preferred that the opening frame fits flush with, or slightly recessed from the main frame and storm proof joinery is not used.
- c. when using sash windows, the opening frames should slide up and down and top-hung casement sash-effect windows are not encouraged.
- d. windows and individual glass panes should be taller than they are wide unless this is not locally characteristic.
- e. if glazing bars are felt to be required, slim line glazing bars of no more than 20mm width, as viewed externally, are preferred.
- f. if glazing bars are being used on sash windows, consider whether it is appropriate to incorporate horns on the upper sliding frame.
- g. depths of window reveals should ideally be at least 100mm as this is more characteristic and helps protect the timber window from the elements.
- h. where there is a tradition of arched brick lintels these will require timber curved window frames to fit.

Plastic infills will not be acceptable, but straight lintels may be.

For contemporary style buildings:

- i. building reveals creating shadow lines will still be preferred in most cases.
- j. casements flush with their frames will always be expected.
- k. if glazing bars are required, these should be true glazing bars separating panes of glass rather than externally fixed to the glass.

13.4 ENTRANCES AND DOORS

For **traditionally inspired** buildings:

- a. modern versions of board doors often incorporate a frame but this is not historically accurate and should be avoided.
- b. UPVC doors are not encouraged in traditionally-inspired buildings.
- c. good quality composite doors, which combine a number of materials, will be acceptable as they more successfully emulate traditional timber doors.

For **contemporary style** buildings:

- d. more flexible use of non-traditional materials is appropriate but uPVC doors are not encouraged due to their long term environmental impact.

For **all building styles**:

- e. buildings with a civic function should have appropriately significant main entrance design.
- f. the route from the public realm to the main entrance of any building should be made safe, accessible and attractive.
- g. non-residential buildings should make main entrances evident through architectural design.
- h. where possible, service or emergency access doors, where unavoidably unattractive, should be discreet or hidden from the public realm.

13.5 CHIMNEYS

- a. Where possible, ensure the chimney serves a real purpose, such as a flue or for ventilation.
- b. Chimneys should be built of bricks to match the main building unless local character dictates otherwise.

- c. All chimneys need to be visually convincing when viewed from the ground with sufficient visual presence and good detailing.

14.1 PLACE MAKING

Applicants should ask themselves and seek to demonstrate how their proposals deliver beauty and inspire joy.

14.2 PUBLIC ART

All new development:

- a. Should consider whether and how public art could enhance distinctiveness and sense of place.

New public art should:

- b. celebrate something special about the site's character, such as its history;
- c. be complementary and appropriate to the landscape character (including townscape where relevant);
- d. be informed by local public consultation (if of community scale significance);
- e. should have a robust management and maintenance plan.

14.3 INTERNAL SPACE AND ACCESS STANDARDS

All new residential development:

- a. including conversions of existing buildings, is expected to meet the Nationally Described Space Standards;
- b. of 10 dwellings and above should have at least 50% of dwellings designed to meet Part M4 Category 2 standards for Accessible and Adaptable Dwellings;
- c. of 50 dwellings and above should have 5% of dwellings designed to meet Part M4 Category 3 standards for Wheelchair Accessible Dwellings.

14.4 ENVIRONMENTALLY SUSTAINABLE DESIGN

- a. All relevant development types to meet the requirements as set out in the **Sustainable Construction SPD**;

OR

- b. Extensions not covered by the Sustainable Construction SPD, should still strive to maximise their environmentally sustainable credentials.

15. DARK NIGHT SKIES

- a. Wherever possible, new development should avoid the installation of new external lighting and excessive amounts of glazing.
- b. If new lighting is required, steps must be taken to avoid any adverse impacts on the International Dark Sky Reserve.
- c. Measures to reduce spill from internal lighting in new development, including appropriate mitigation measures, will be expected to be in accordance with the **Dark Night Skies Technical Advice Note**.
- d. Proposals should take due consideration of the overall visual impact that any external lighting will have on the landscape in accordance with the **Dark Night Skies Technical Advice Note**.

APPENDIX B: OTHER IMPORTANT DESIGN GUIDANCE

Applicants, developers and individual home builders need to be aware of other important national and local guidance that should inform their scheme designs and may influence how they are assessed by the planning authority.

THE NATIONAL PLANNING POLICY FRAMEWORK

The **National Planning Policy Framework** (NPPF) sets out that achieving high quality places and buildings is fundamental to the planning and development process. Paragraph 130 of the NPPF states that permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions. Paragraph 172 requires 'great weight' to be given to conserving and enhancing landscape and scenic beauty in National Parks. The NPPF is supported by a suite of planning practice guidance that is relevant to both design quality and quality in delivery.

There are a large number of design guides for specific issues which have been referenced throughout this document.

National guidance is evolving all the time with a growing emphasis on design matters in recent years e.g. the 2019 '**Building Better**' report published by the Government's Building Beautiful Commission.

National Design Guide

Planning practice guidance for beautiful, enduring and successful places



Ministry of Housing, Communities & Local Government

In 2019 the Government published the **National Design Guide** and the **National Model Design Code**. While it is not expected that single house builders would need

to be familiar with this document, it would be expected of multiple house builders, or at least their design consultants and those advising other larger developers.

The National Design Guide says: '*Well-designed places have individual characteristics which work together to create its physical Character. The ten characteristics help to nurture and sustain a sense of Community. They work to positively address environmental issues affecting Climate. They all contribute towards the cross-cutting themes for good design set out in the National Planning Policy Framework.*'

CONSERVATION AREA APPRAISALS

Conservation Area Appraisal and Management Plans (CAAMPS) are an objective analysis of the elements which together define an area's special architectural or historic interest. These elements will be largely physical, both man-made and natural, but will also include more ephemeral considerations, such as spaces, views and uses. The appraisal seeks to describe and map these elements to inform everyone involved in the planning process. Appraisals also consider those elements and issues which currently are neutral or detrimental to the special character of the conservation area.

See **C.3 Development in Conservation Areas**.



VILLAGE DESIGN STATEMENTS

Village Design Statements (VDS) are created by communities who want to influence the design of future development in their town or village. In April 2022 there were 7 no. adopted VDS with more in progress. They

are used to ensure that applications contribute to local distinctiveness, and ensure local materials and design are incorporated into new development.

Applicants are strongly advised to check whether their site is covered by a VDS and to ensure that the guidance found there is used to demonstrate an understanding of the local character which must be the first stage of the 'landscape led design approach'.

OTHER SDNPA GUIDANCE

The Authority has a series of guidance documents published on the SDNPA Planning website which have design implications. These include **Supplementary Planning Documents (SPDs) and Technical Advice Notes (TANs)** and **The South Downs Character Assessment (SDLCA)**

Subjects include Affordable Housing, Sustainable Construction, Ecosystem Services, Dark Night Skies and Extensions and Replacement Dwellings.

SPDs are adopted by the Authority and so have weight in planning terms and are a material consideration in planning applications.

See also **Roads in the South Downs** which is guidance agreed with the three Highway Authorities.

DEVELOPMENT BRIEFS

Development Briefs (DBs) are documents prepared in advance of an application for development being submitted. They are generally only prepared on larger, more complex sites. DBs should set out clearly and simply the kind of place that should be created, based on the analysis of the evidence collated on the site and its context. It is unlikely to stipulate detailed design solutions but rather set out clear design principles.

DBs can be written by applicants in collaboration with the Authority, or in some cases by the Authority itself. DBs supported by the Authority are a material consideration in determining planning applications. Currently there are **SDNPA development briefs** for four significant sites which have been identified as suitable for housing in the South Downs Local Plan policies. These are: **SD64**, Land South of London Road, Coldwaltham; **SD78**, West Sussex County Council Depot and Former Brickworks, Midhurst; **SD79**, Holmbush Caravan Park, Midhurst; **SD85**, Land at Pulens Lane, Sheet.



MASTERPLANS/DESIGN CODES

Masterplans are a high-level response to development briefs – setting out principles of design proposals including development layout, land uses, access and landscape areas. A more common understanding is of a site layout plan showing a general arrangement of access, buildings and open space. In the National Park, masterplans need to be a development of the agreed landscape strategy for the site.

A design code is a set of written and graphic rules that establish with precision the two and three dimensional design elements of a particular development or area – and how these relate to one another without establishing the overall outcome.

The Commission for Architecture and the Built Environment (CABE) published a **manual on Design Codes**.

DESIGN & ACCESS STATEMENTS

A design and access statement (DAS) is a report accompanying and supporting a planning application which should be in proportion to the scale of the development. They provide a framework for applicants to explain how a proposed development is a suitable design response to the site and its setting, and demonstrate that it can be adequately accessed by prospective users.

The Design Council has published a **manual on DAS**.

CONDITIONS & RESERVE MATTERS APPLICATIONS

Paragraph 130 of the NPPF requires planning authorities to ensure that the quality of development is not materially diminished between planning permission

and completion. Conditions are detailed requirements that are attached in a decision notice by the Authority to a planning permission, including for design details and materials, elevational treatments, landscape design and management, sustainable construction etc. These conditions need to be discharged by the applicant at a specified stage in the development process. The discharge of conditions is where a lot of design work may be needed and where high design quality should be achieved.

OTHER LOCAL DESIGN GUIDANCE

The guidance in the documents listed here is provided for reference and is not necessarily endorsed by this Authority:

- [Petersfield Town Design Statement 2009](#)
- [Petersfield Planning Guide 2019](#)

- [Lewes Shop Front Guidance](#)
- [Lewes – Dormer Windows: Friends of Lewes Planning Advice Note](#)
- [Lewes Garden Rooms – Friends of Lewes Guidance Note](#)
- [Sussex Bat Special Area of Conservation Planning and Landscape Scale Enhancement Protocol](#)
- [Planning Noise Advice Document: Sussex](#)
- [Portsmouth Water development guidance for groundwater protection](#)

DESIGN REVIEW PANEL

The Authority’s [Design Review Panel](#) (DRP) provides design assessments and recommendations for a range of significant schemes in the National Park at both pre-application and application stages.

APPENDIX C: BACKGROUND TO DESIGN PROCESS FOR LARGER OR MORE SENSITIVE DEVELOPMENTS

This appendix expands on the suggested design process outlined for larger developments in Part B of this document. Larger developments could be ten or more residential units or a non-residential development of around 1000 sqm of floor space or more. Sensitive developments could be in locations where their character is most sensitive to change, such as: conservation areas; sites highly visible from the surrounding landscape; sites with particularly sensitive built heritage; sites with specific biodiversity sensitivities.

1. EVIDENCE GATHERING

The net should be cast widely to gather evidence about each aspect of landscape for the site and its context.

Landscape Elements

As set out by Natural England, landscapes are easier to understand as a series of elements see *Figure a*

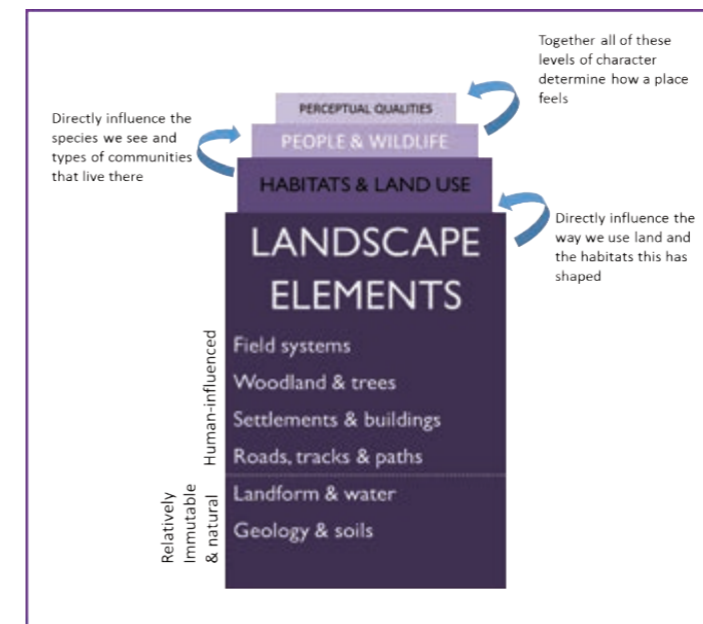


Figure a: Landscape is formed through people and nature.

Landscape character

The Natural England definition of Landscape Character is:

“A distinct, recognisable and consistent pattern of elements that make one landscape different from another, rather than better or worse.”

Landscape elements are the same all over the country. It is their patterns and the relationship between them that are different and change our experience of place. For instance, the Fens and the South Downs are made up of many of the same elements which have different patterns and relationships. (See *Figure b*)

The [South Downs Landscape Character Assessment](#) gives a sub-regional overview of landscape character.

History

Changes to landscape elements leave a memory in the landscape called ‘time-depth’. These layers of change, contribute to the character we experience today.

South Downs



The Fens

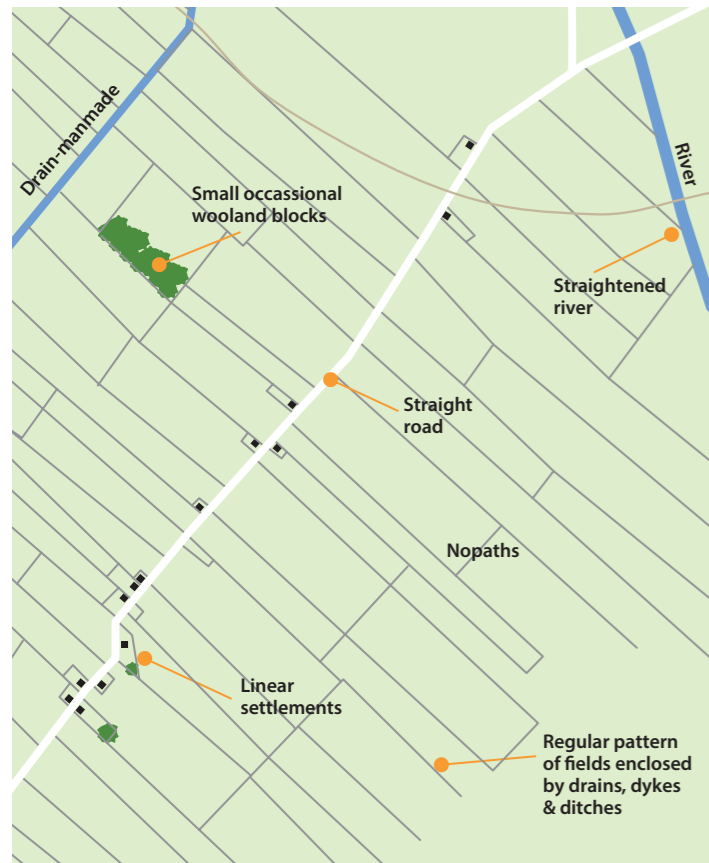


Figure b: The contrasting landscape character of the South Downs and the Fens.

Applicants should conserve and enhance these layers of time-depth. Consultation with a Historic Environment Record is essential to ensure the identification and preservation of protected heritage assets are part of any development proposal.

2. ANALYSIS

Perceptual Qualities

Analysing evidence begins with understanding how landscape elements combine on the site and its context to produce:

- Perceptual qualities – tranquillity, dark night skies, intimate or exposed landscapes, sense of history, cultural associations etc.
- Views and Visibility – describe the *character* of views, and identify key views that speak of the site or context.

Assigning Value

Understanding each element’s value helps organise decisions about change. The more ‘values’ a landscape element contributes to, or has the potential to contribute to, the more reason to retain these elements on site. For example, a veteran, species-rich hedgerow which marks a surviving medieval field boundary and supports protected species is of more value than a recently planted, single species windbreak along a recently created field boundary.

Some methods for valuing landscapes are already set out in best practice (GLVIA). But it may be helpful to consider the following, for *each* landscape element within a site and its context:

Character

We expect all landscape elements that support character both within the site and beyond to be valued, retained and enhanced. This includes urban design aspects such as studies of local materials and detailing, urban grain, massing, orientation of buildings and routes, street hierarchy, building forms, the nature of spaces between buildings etc. which should all be part of the assessment of the character of the place. *Figure c* highlights how landscape character should be influencing a whole planning application.

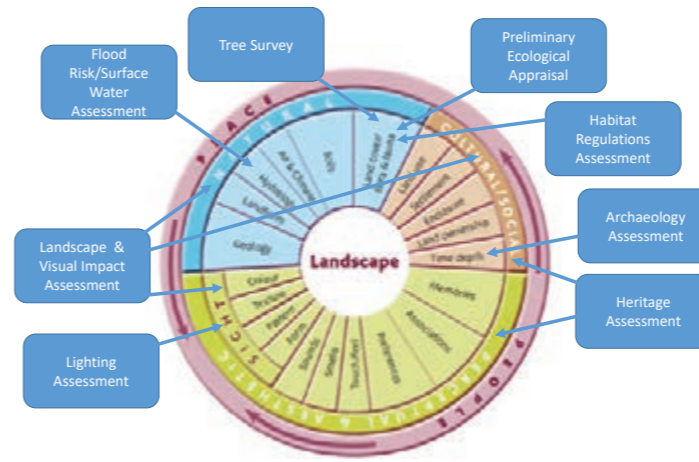


Figure c: Landscape character.

Landscape History

- *Time-depth* – a landscape element that demonstrates time-depth e.g. a Roman road whose pattern (straight line between key settlements) fundamentally remains unchanged.
- *Antiquity* – a surviving medieval field system, ancient woodland, or track or road.

Ecology

If a landscape element supports key or characteristic species, such as a hedgerow supporting a dormouse population. This knowledge will help the scheme to achieve a net gain in biodiversity. (See **Local Plan Policy SD9** and **background doc** and **Technical Advice Notes**).

People

How are elements, associations or whole landscapes valued by people?

Ecosystem Services

If a landscape element is providing existing benefits for people and wildlife, e.g. flood attenuation – we expect these to be valued, retained and enhanced. Some of these services may help us as a society better mitigate or adapt to a changing climate. (See **Local Plan Policy SD2**)

Green Infrastructure⁶ (GI)

If a landscape element currently or potentially contributes to existing GI or connects to it beyond the site, these elements should be retained and enhanced. (**Local Plan Policy SD45**).

Designations

These help us value landscape elements or groups of elements. Designations for cultural heritage, protected species, habitats, buildings and views of local importance. Consider the setting to any designation and how the site can contribute positively to this. Some designations are highly characteristic of their landscape – e.g. bronze-age barrows on the open downs, or floodplain habitats within wide valley bottoms.

Context, Coherence & Relationships

The elements need to be looked at *together* in order to gain insight into;

- how typical is the site of its contextual landscape character;
- how coherent the landscape is over time and space, and;
- the relationships between elements;
- a whole place, as it is experienced.

Surviving landscape elements help determine the coherence of a site and its context. Where characteristic landscape elements have strong relationships and/or survive from a particular period in history, these contribute to their shared value and sensitivity. Producing a narrative description can be a helpful demonstration that the landscape has been understood.

Opportunities and Constraints

As the earlier stages of analysis are undertaken, opportunities and constraints for the site will emerge.

3. LANDSCAPE STRATEGY

Applicants must avoid the tendency to concentrate first on the building development and leave the landscape for a later stage. As the design process continues a more detailed landscape strategy will be expected. The landscape strategy must inform all subsequent stages of the design process which need to refer back to the landscape strategy principles.

Initial Landscape Strategy

The initial Landscape Strategy sets out the key parameters for the site and its context, which can be depicted graphically in a Landscape Framework Plan.

A landscape strategy plan or ‘framework plan’ might show for instance:

- access to site
- biodiversity net gain
- response to topography
- spaces to support functions of SINC^G, hedgerows and TPO trees for example
- incorporation of Blue Infrastructure^G
- capitalisation of vista of e.g. church spire
- maximisation of characteristic views, such as views of hills
- incorporation of steep area for nature
- inclusion of set back from busy road or from archaeology on site
- provision of central public open space focus for community
- layout of roads to respect contours
- green infrastructure links across the site
- connections with movement network
- retention of white space which becomes the 'developable area'

Detailed Landscape Strategy

The Landscape Strategy should be updated throughout the scheme's design development providing appropriate, more detailed mitigation measures that are characteristic for the location.

The landscape strategy can be expressed as a combination of written design principles and graphics. This could be a standalone document or (for smaller developments) as part of the Design and Access Statement.

The following provides some examples where the landscape elements have profound layout implications. Inevitably these will be different on every site.

Geology and soils

The site's underlying geology and the soils it produces will have helped determine the local historic land use and settlement patterns. One example is how traditionally, homes have arranged themselves on the edge of heathland. This characteristic loose settlement edge bordering heathland should inform future development layout patterns in such areas.

Topography

In many places in the South Downs National Park settlements and field patterns are determined by their response to topography. One example is how a settlement like Liss is characterised as a 'hidden village' which 'hunkers down' in the valley between the hills, with streets and buildings following contours.



Figure d: Good example of buildings following contours in Lewes.

Other settlements, such as in parts of Lewes, are characterised by ridge top development and streets and buildings often range across contours (see Figure d).



Figure e: East Meon is a good example of a valley side settlement, © Anne Purkiss.

Generally development should work with the site contours, particularly when considering surface water management and the layout of a schemes roads and buildings etc. to avoid an over engineered approach, and work with the landscape character, unless there are other good reasons for significant earthworks.

Water

Flood risk areas, and providing sufficient space for multifunctional SuDS strategy will pose layout constraints to development.

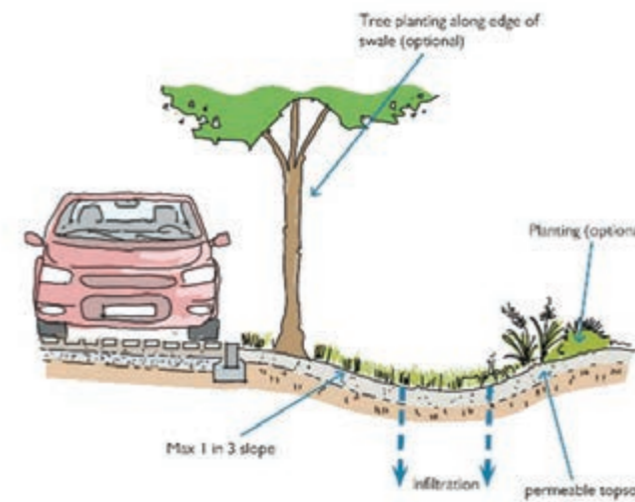


Figure f: Space for SuDS such as swales need to be designed in at an early stage.

History and built heritage

The history of a site and its setting, visible or archaeological remains and important buildings in the townscape or landscape will all contribute to the landscape strategy.

Landscape elements might include a historic route across the site; views of historically important buildings, such as churches; characteristic field patterns, all of which should influence the site layout.



Figure g: Historic map of Syngenta site showing river now culverted and characteristic wooded field boundaries has informed the design of the new development.

Ecology

The ecological evidence collated and analysed will have informed the landscape strategy. This might include important biodiversity assets that need to be conserved on the site and so incorporated within a layout, such as hedgerows or particular trees or water features. The landscape strategy will also contain areas of the site which are reserved for enhancing the wildlife within the

site or making connections across the site. One example of this might be creating green infrastructure which incorporates a bat corridor or creating areas of species rich grassland or heathland to complement what is found beyond the site boundaries.

Movement networks: routes and nodes

The landscape strategy will take account of the likely access points into the site as well as connection points for both people and wildlife beyond the site boundaries. See C.1.2 Access and Permeability.



Figure h: Pipistrelle bat.

Settlement pattern and edges

The landscape strategy will begin to suggest settlement pattern based on what works for the site and is characteristic of the area. This includes ideas for how the settlement edge should work, for instance creating a transition from the more urban part of a site to the countryside edge if this applies. Buffers to countryside and to significant areas of open space will need to be incorporated in the landscape strategy where relevant.

Perceptual Qualities

How users of the area, the site and the new development perceive the landscape should influence the landscape strategy, with potential layout implications.

Key views, vistas and gateways to settlements need to be considered as part of the overall layout.

The existing landscape character needs to be conserved and enhanced where possible, taking care to understand how the user feels in the environment. This might result in conserving the sound of running water or birdsong, the scent of honeysuckle in the hedgerows or a certain microclimate, such as a sheltered suntrap, all of which have an effect on the layout of the development.

Environmental health issues such as significant noise sources may need to be mitigated and/or certain types of development (such as residential) may need to be set back from such sources (e.g. from a busy road).

Similarly, ground pollution will affect possible land uses unless this can be effectively mitigated and air pollution (again, most likely from busy road traffic) may need to be mitigated with e.g. vegetation, or setbacks from those sources of pollution.

In all such cases space for these measures will need to be incorporated.

Utilities

Existing underground or over ground utilities, such as sewers or power lines, represent site constraints which (unless rerouted, if this is financially feasible) the layout needs to accommodate. New utility infrastructure on larger sites, such as electricity sub stations, should ideally be located discreetly while maintaining operational integrity.

VISION

The earlier design stages should be used to develop a vision for the site. This should be drawn up in consultation with key stakeholders.

The vision is a critical tool setting out the development's main aims and objectives and an expression of what kind of place is being created.

The vision needs to consider key questions, such as:

- How will the design conserve and enhance the identified character of the area?
- How will the development speak of the place in which it sits?
- How will landscape design meet/exceed needs of users and add value?
- How will the design build in robustness and the ability to adapt to both societal change and the predicted effects of climate change?
- What contribution to mitigating for climate change will this development aim to achieve?
- How will the design enable non-human movement?
- Are the known aspirations of the existing community included?
- What will this place feel like in 20 or 50 years?
- How can the vision be tested and delivered?

At the beginning of 2021, the UK Government was proposing changes to the **National Planning Policy Framework** to place greater emphasis on beauty and place-making and these aspirations should be part of the vision for all new development.

4. CONCEPT

Landscape Elements

The concept plan builds on the initial landscape strategy. Points to consider include:

- Retain characteristic landscape elements (e.g. valuable trees, important views, historical routes);
- Embed characteristic mitigation measures in response to the development impact (identified in the LVIA);
- Restore landscape elements or enhance (e.g. hedgerows or ponds) following identified established patterns in the landscape;
- Use protection measures for sensitive landscape elements and management to enable the continued function of landscape elements;
- Renew landscape elements and restore character, ensuring good place making and enjoyment of the National Park;
- Adapt to climate change and employ future proofing measures.

Developable Areas

As a result of undertaking detailed landscape analysis, approximate developable areas can now be identified.

Vehicular Access

The potential primary access points can be identified both into and across the site.

Connections

Concept plans must show how the proposals connect the site to the wider movement network for all users and incorporate obvious desire lines.

Connections which serve biodiversity (e.g. bat foraging corridors or linked habitats, such as woodland or heathland) also need to be shown.

Primary Frontages

How development aims to achieve robust frontages should be presented at the concept stage. Principles for addressing public spaces, main streets and areas of

open space should show how they have achieved natural surveillance, a sense of enclosure and that they are located where public activity is focussed.

5. SKETCH DESIGN

Once one particular concept is demonstrated to provide the best design response to the analysis of the landscape evidence and is likely to achieve the vision for the development, this is developed in more detail in the sketch design.

6. MASTERPLAN

A great deal of information can be collated on one plan. To ensure that design proposals are achievable, multidisciplinary information such as landscape design and engineering details such as lighting and services should be shown together to eliminate the potential for conflict.

7. MANAGEMENT AND MAINTENANCE

Management proposals and mechanisms (e.g. responsibility for communal areas, public realm, etc.) and maintenance of soft landscape elements is crucial to the establishment, growth, survival and functional performance of organic plant material and delivering the intended design objectives. Other communally managed elements such as non-adopted roads, play areas, street furniture and hard spaces and boundaries, sustainable drainage systems and communal plant and energy systems will also need management plans showing clear responsibilities and maintenance regimes.

For all such areas, a management plan, including locations, descriptions, design objectives, identification of responsible bodies and resources, together with relevant maintenance operations and schedules, should be submitted and approved. The documentation required may be quite simple in the case of a parking area or planted verge but may be both complex and comprehensive, for example where a historic landscape is to be restored or a nature reserve-created.

8. DESIGN REVIEW

Post Construction Design Review

SDNPA officers undertake annual reviews of completed schemes, concentrating on the larger schemes. The design review is valuable as a way of:

- demonstrating best practice.
- focusing on what design failings have led to problems in finished developments
- Allowing officers and Members to learn and apply knowledge to future applications.

Post Occupancy Evaluation

Major developments, as defined by **local plan policy SD3**, are required to meet even higher standards of sustainable performance than other development in the National Park. As part of this, post occupancy evaluation (POE) studies will be expected at a point in time when at least a large part of the development proposal has been occupied for at least a year. The brief of the POE would need to be agreed with the Authority.

As with the post construction design reviews, the value of the POE is to provide feedback to inform the scheme designers and SDNPA officers and Members when assessing the design of subsequent schemes.

More information on POE can be found on the **BRE website**.

APPENDIX D: QUALITY OF ROUTES

New or existing routes and networks of routes should aim to achieve the following standards of quality (from “[Shaping Neighbourhoods](#)” by Barton et al, 2021):

Connected

- The network should be comprehensive, serving all significant desire lines.
- It should provide good permeability, i.e. a choice of routes filtering through an area allowing pedestrians to go which way they want.
- Easy, direct access to public transport facilities is vital.
- Green spaces should be linked into the network and allow for round walks, and;
- Where possible, ‘green routes’ to major centres of activity.

Convenient

- Pedestrian routes should be as direct as possible in order to reduce distance to be walked and increase the pedestrian catchment of facilities.
- They should avoid steep hills, unnecessary barriers, steps or kerbs that might inhibit less agile people and those with pushchairs or wheelchairs.
- Where new routes are planned they should follow the contours, even where this does result in some route deflection. Direct routes can also be provided for the energetic/more able bodied. Choice is important.
- Routes should be linked by safe and convenient crossings, with minimum diversion.

Comfortable

- Footways should be wide enough to allow easy passing and overtaking, without being pushed out into traffic – especially on heavily used roads where long vehicles on bends may be intimidating.
- Routes should be overlooked by nearby properties, giving a sense of surveillance and safety.
- Resting places (benches on long routes, stages/benches on steep routes).

- The route should be well lit and feel safe, without dark corners or featureless, unconnected sections which can be intimidating.

Convivial

- Minimum width of footway (for two abreast).
- Routes should be places where people can meet casually and talk in comfort, free from excessive noise or fumes.
- They should be designed for aesthetic enjoyment, giving pleasure by the variety of prospects, spaces and landscapes.

Conspicuous

- Main routes should be easy to ‘read’, distinctive, and clearly signposted. Landmark features (e.g. mature trees, public art) can help give a sense of place.

GLOSSARY

Biodiversity Net Gain (BGN)

Biodiversity Net Gain is the name given to a process of biodiversity offsetting whereby any habitat loss caused by a new development is mitigated to ensure an overall increase in biodiversity post-development. As part of initial development plans, developers are increasingly required to demonstrate that biodiversity loss is mitigated. To establish the best way to protect the habitats on-site, a metric is used. To achieve biodiversity net gain, a development must show evidence that a development will increase the biodiversity value of a site by at least 10%. This statistic is presented in the value of a biodiversity net gain metric called ‘biodiversity units’.

Biodiversity Opportunity Area (BOA)

BOAs are areas where there are substantial opportunities to make positive changes for biodiversity, and should be used to inform conservation strategies and place planning.

Blue Infrastructure (BI)

Blue infrastructure refers to water elements, like rivers, canals, ponds, wetlands, floodplains, water treatment facilities, wet ditches, SuDS features etc. Sometimes BI is included as part of Green Infrastructure.

BREEAM

Building Research Establishment Environmental Assessment Method Link.

Capital Asset Value for Amenity Trees (CAVAT)

CAVAT provides a basis for managing trees in the UK as public assets rather than liabilities. It is designed not only to be a strategic tool and aid to decision-making in relation to the tree stock as a whole, but also to be applicable to individual cases, where the value of a single tree needs to be expressed in monetary terms.

Density

Gross (dwellings/hectare (dph))

- Includes: housing plots plus all roads, pavements, open spaces, landscaped areas – neighbourhood scale of area

Net (dwellings/hectare (dph))

- Includes: housing plots plus site specific roads, pavements and incidental spaces in the layout block scale of area

Desire Lines

An unplanned route or path (such as one worn into a grassy surface by repeated foot traffic) that is used by pedestrians in preference to or in the absence of a designated alternative (such as a paved pathway) There is a concept in landscape architecture called a desire line which also predicts where people are likely to want to go and by which route through the landscape, e.g. from a residential area to a facility such as a school or a general food shop across an open space.

Developable Areas

The areas of a site which are developed for buildings and associated hard and soft landscape, roads and gardens etc., but excluding larger areas of open space and green infrastructure.

Grain

The grain of an area is an expression of the pattern of development. This is best illustrated by ‘figure ground’ plans (*Figures w-z*). This includes the size and shape of building footprints as well as how they are spaced and aligned and the spaces in between.

Green Infrastructure (GI)

Green Infrastructure planning incorporates natural solutions to deliver a wide range of benefits for both people and wildlife. GI includes parks, open spaces, playing fields, woodlands, wetlands, river and canal corridors, allotments, public rights of way, hedgerows, building integrated habitats such as bat or bird boxes, green roofs and walls, GI can be thought of as creating a “people and nature network” (PANN). Sometimes GI can be described as also including Blue Infrastructure.

HER

Historic Environment Records are information services that provide access to comprehensive and dynamic resources relating to the archaeology and historic built environment of a defined geographic area.

Hoggin

A mix of gravel, sand and clay that binds firmly when compacted, yet allows water to drain through it.

LAP, LEAP, NEAP

The Fields in Trust/National Playing Fields Association Standards have 3 categories of equipped play areas. These are local areas for play (LAP), local equipped area for play (LEAP) and neighbourhood equipped area for play (NEAP).

Landscape and Ecological Management Plan (LEMP)

A Landscape and Ecological Management Plan provides instructions and processes for the management and operations of a site. The instructions in this site-specific document are provided to ensure the protection and enhancement of the ecology and biodiversity on, and around a development site.

Livability/Liveability

The sum of the factors that add up to a community's quality of life—including the built and natural environments, economic prosperity, social stability and equity, educational opportunity, and cultural, entertainment and recreation possibilities.

Multi-Residential

A BREEAM term referring to development such as Older-People's Accommodation or Student Halls of Residence which have a significant amount of shared facilities.

People and Nature Network (PANN)

The People and Nature Network (PANN) brings together a range of partner organisations, stakeholders, communities and businesses to use good design sense and robust evidence to achieve the greatest possible benefits for both people and nature.

Site of Importance for Nature Conservation (SINC)

SINC's (or Wildlife Sites) are sites of substantive nature conservation value. Their designation is a non-statutory one but they are vital for enabling the planning system to recognise, protect and enhance special sites.