Draft Design & Placemaking

Supplementary Guidance
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Introduction

Good design is not only about how the building looks but how it fits into the landscape and integrates with the wider landscape setting.

This Draft Supplementary Guidance part of the statutory Proposed Local Development Plan and supports the delivery of the core Local Development Plan policies. It updates our current adopted sustainable design guidance (2012). Comments are invited on this Draft Supplementary Guidance as part of the consultation on the Proposed Plan between the 18th May and the 29th June 2015.

Our Proposed Plan policies aim to drive up the standards across all forms of development. Our overarching policies set out our strategic principles which are our expectations and requirements for all new development. Your understanding of an appropriate response to the strategic principles should result in the design of new development that will enhance and maintain the distinctiveness of the National Park. This guidance aims to help you understand the principles and what they mean in practice.

The focus is on the process of designing your proposal from assessing the wider setting down to the site and how this inspired the design of your proposal whether it is a small extension to a house or a large holiday park. It focuses in on how to make your proposal sustainable from the siting considerations to how you deal with water, waste and energy in such a way which complements the natural environment. It also provides suggestions on how to use the planning process more effectively by using design statements, involving professionals and how best to present your proposal. It should inspire you to produce a proposal that thinks about where it is – this special National Park – and how it affects the environment.

This guidance is aimed at householders, owners, architects, developers, and businesses, community groups and agencies who are considering designing a new building, infrastructure or extension. It is also for us, as the planning authority, to make design a more transparent and accessible part of the planning process. Development proposals will benefit from early pre-application discussions with our Development Management officers. This will help determine whether a site is identified for development and if development is acceptable - what other planning factors apply.

This document is for:
- householders
- owners
- architects
- developers
- businesses
- community groups
- agencies
Structure of the Guidance

This Supplementary Guidance is structured into three main sections. **Section 1** provides an overview of the planning process and our strategic principles, as well as an introduction to the varied landscape and buildings within the National Park. **Section 2** goes on to cover the core design principles to help you design your proposal – these apply to all development types. **Section 3** then provides more detail and specific guidance for the most common types of development we see in the National Park. The sections are outlined in more detail below.

1. **How to approach designing your proposal**
   This gives an overview of the process and what professional advisors we recommend you should involve. It outlines the requirement for design statements to support proposals and what content should be in them. It then goes on to describe the ecosystems approach which should be used as a basis for considering your design. Finally, it gives a broad introduction to the 'sense of place' of the National Park; the main landscape settings and the character of the build environment of the National Park. You should read this part of the Guidance when developing your development brief and design approach.

2. **Design principles**
   Once you are ready to design your proposal this part of the guidance provides the design principles whether it is a single building in a rural setting; an expansion of a town; or infill within a village. It is split into three sections:
   2.1 **Site and Area Appraisal**
      How to analyse the wider setting and the site - landcover, landuse and development patterns, building lines, access and recreation, biodiversity, cultural heritage and visual and scenic qualities, setting within the landscape, wind and sun analysis, water environment. It also includes siting examples – good and bad.
   2.2 **Spaces between the buildings**
      How to design the spaces between buildings and the buildings themselves. Firstly streets and the green network, designing car parking and entrances, boundary treatments, planting, water conservation and management.
   2.3 **The building details**
      This section of the guidance covers building massing, proportion, scale, materials and construction details including guidance on energy conservation. It also includes good and bad examples.

3. **Building types**
   A look at design considerations in the most common types of development proposals in the National Park area, including good and bad examples.
   3.1 **Holiday developments**
   3.2 **Extensions**
   3.3 **Outbuildings**
   3.4 **Agricultural buildings**
   3.5 **Conversions to traditional buildings**
How to approach designing your proposal

Section 1
Achieving exemplar design

Your approach to achieving good looking, sustainable design should consider these elements.

How to achieve Sustainable Design

Apply for planning permission

Prepare design statement
Include 3D visualisations, models

Discuss with National Park Planners
You should make a pre-application and consider:
• Development briefs
• Masterplans
• Site constraints
• Involving the community
• Environmental Impact Assessment requirements

Appraisal of site
Undertake assessments to meet Planner and stakeholder requirements:
• Landscape
• Historic
• Habitats
• Species
• Flooding
• Access
• Topography
• Ground contamination
• Trees

Appropriate skill – Design team
Develop a shared vision - brief and engage professional skills:
• Planning
• Architecture
• Conservation
• Landscape
• Engineering
• Hydrology
• Ecology
Overview of the process

This is a checklist, a list of steps, to consider when designing your proposal. It highlights what professionals to involve and at what stage.

Site selection - reuse an existing building, or previously developed or underused site within towns and villages rather than developing a new site in the countryside

Look at key views into the site – take photographs, think outside the boundary

Work with sunlight, wind direction and shelter

Work with existing site features/topography rather than against them

Create a design that fits with the surrounding buildings and/or landscape – and appropriate to the proposed use

Consider site features and assets (ecosystems approach) – water environment, habitats, trees, species, archaeology, flooding, road access, paths, listed buildings, conservation area

Look at the best aspects of nearby buildings for inspiration for design

Consider existing building lines, create breaks in building and roof lines and add features to emphasise entrances and add character

Acknowledge the scale, mass and spirit of nearby buildings but steer clear of mimicry and pastiche

Who to involve at what stage

1. Planning Consultant
2. Landscape Architect
3. Architect
4. Engineer
5. Ecologist
6. Flood engineer
7. Roads Engineer
8. Archaeologist
9. Arboriculturalist
10. Energy Specialist
11. Landscape Designer
Design the vegetation and boundary treatments holistically considering buildings and site features.

Design innovative ways of handling sewerage and surface drainage by reducing grey infrastructure and use the green infrastructure solutions.

Your design should withstand and adapt to potential impacts of future climate change, such as hotter summers, wetter winters, and an increase in extreme weather events.

Design buildings that will reduce energy costs for residents and minimise public water usage (e.g. reuse roof water for gardening).

Consider the details – doors, windows, porches, flues, gutters, pipes, etc individually and how they come together to form a whole.

Choose the right materials that fit harmoniously with the surroundings – colour, texture, grain and reflectivity all support harmony.

Create a layout that encourages people to walk by increasing and improving connections to nearby places, paths, streets and open space.

Ensure areas of new public spaces are high quality, appropriate to needs to the local community, integrated to the development and link to existing street, paths and wider green network.

Streets should consider place before movement i.e. experience over function.

Distinguish between public outdoor space and private space.

Who to involve at what stage:

1. Planning Consultant
2. Landscape Architect
3. Architect
4. Engineer
5. Ecologist
6. Flood Engineer
7. Roads Engineer
8. Archaeologist
9. Arboriculturalist
10. Energy Specialist
11. Landscape Designer
Design statements

Even though it will involve additional work to present your ideas and thinking, in many cases it can be achieved simply...

When do we require a design statement?
You may wish to submit a design statement even if your proposal does not require (see ‘When a design statement legally required?’ section adjacent) one as it will help your application. Generally, we would require a design statement to accompany applications for sensitive or large scale applications. A sensitive proposal is one that needs to be carefully designed i.e. in a prominent location, within the grounds of a listed building or in a conservation area. A design statement is not limited to housing development and is valuable for projects involving commercial, retail, agricultural buildings, extensions and infrastructure. In some instances we may require the submission of a Masterplan and this is indicated on the maps within the Proposed Plan.

What should a design statement include?
The statement should be proportionate to the scale and sensitivity of the proposal. You may be able to write the design statement without any professional input but for a larger development a multi-professional team would need to be assembled. These are things we would expect a Design Statement to include depending on the type of proposal and the nature of the site:

Site details
- **Introduction** – Description of site, location, planning history, photographs of site, site history. If you have undertaken an options appraisal to help select the site then it should be included here.

Brief
- **Brief and inspiration** – aims for the project – social, economic, environmental and design. Social could be “to create a family home” or “to extend my house to provide additional space for a growing family” but Design aim could be “to use modern building materials” or “to integrate it in the local landscape”. You may have aims that may be either/or if you are undecided but it shows your thinking. Also where have pulled your inspiration from – locally, Scotland wide etc.

- **Public and professional involvement** – who has been involved in the design process, professionals such as architect, developer, advisors and any involvement or consultation with the community. You may not have involved anyone in the design of your proposal so you may wish to state this.

When is a design statement legally required?
They are required to be submitted, as set out in legislation, for proposals in a:
- National Scenic Area
- Historic Garden or Designed Landscape
- Site of a scheduled monument
- Conservation Area

Exclusions apply to the list above such as alterations and extensions to existing buildings. If you are in any doubt if you are required to submit a statement then please contact us. National and major category applications require a design and access statement.
Site and area appraisal

- **Architectural / Historical/Landscape context** – Photographs of wide landscape setting and buildings of note nearby, if within a town or village then context within the street and village/town.

- **Site Features** – Vegetation, Water, Wildlife, and Boundaries etc – Photographs of the trees, shrubs, site features such as walls, fences, rivers, culverts, historical etc and key points about the wildlife referring to any other studies taken place.

- **Connectivity** – access details both pedestrian and road, details of travel options, core paths, facilities in the vicinity that are in walking distance.

- **Orientation and Topography** – Description and details of slopes, sun path, prevailing winds. For some sites we will expect an analysis of local landscape character.

- **Views in and Views out** – This could be a selection of photographs showing the views in and out of the site and identification of the key views that need to be considered and why. For larger scale proposals we would expect a Landscape and Visual Impact Assessment of the landscape and visual baseline; landscape character, visual amenity and landscape experiential qualities.

Design solution

- **Option appraisal** – details of the various options considered for the project i.e. the iterative design process, sketches. Your reasons for discounting them. Remember these do not need to be polished drawings. This will cover your ideas of siting within your selected site, form and massing options landscape design concepts for integration but also layout options for larger proposals. This could be shown in a basic set of drawings showing movement, buildings, private and public open space.

- **Materials** – this could be the materials you are thinking about using and photographs of them, if available. You should describe them in terms of their appearance, durability, embodied energy, recyclable.

- **Energy and Zero and Low Carbon Technology** – details of how the building has been designed in terms of scale to reduce need for energy to heat, light, encouraging natural daylighting, insulation, renewable energy, home-working, adaptation and renewal, designing for climate change.

- **Travel** – your ideas of how the proposal will connect into the existing core paths, contribute towards green network.

- **Wildlife, landscaping, boundaries, green network** – what features are worthy of protection or enhancement, what landscaping is required, both hard and soft, to address the landscape integration requirements, maintenance details. Your plans for building wildlife and biodiversity into the design.

- **Water and Waste** – using green infrastructure to deal with flooding (e.g. de-culverting), surface water drainage, foul drainage. Also how you will deal with storage of bins, recycling, construction management, pollution etc.

The existence of a design statement does not guarantee planning permission. It supports a planning application - it does not replace it.

For further information see the Scottish Government’s Planning Advice Note 68: Design Statements. The Advice Note gives examples of using models, artist’s impressions, computer-generated images, sectional drawings that may help you decide what is appropriate to your proposal. We are looking for illustrations that are easy to understand.
What is an ecosystem approach to design in the National Park?

There are three main principles and this is how they could apply to your proposal:

- **Understand how nature works for your site** – your proposal is likely to be at a local scale so you should be considering hydrological flows and habitat networks. In a coastal environment, the impacts on natural processes of erosion and build up of sediment may need to be considered. These impacts should include cumulative effects if there are a number of similar projects close together.

- **Value nature’s services and harness the benefits** – you need to consider your proposal in a holistic way in terms of how it affects clean water (wastewater management) and productive soils (allotments, food production), how it affects floods in terms of climate change and carefully consider the quality of life of the people who will use your proposal for work, living or leisure (amenity, recreation, public health).

- **Involving people** – a local level of consultation will often be appropriate but for a medium to large scale proposal you should go beyond consultation. You should get people in the local community to participate in the design process for your proposal. We will notify neighbours of your application and they will get a chance to comment comment - but this is only a basic level of consultation.

The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

(The Convention on Biological Diversity, 1993)
Why should you adopt an ecosystem approach to your design?
There are increasing pressures on ecosystems due to climate change, population increase, changing consumption patterns and increase in living standards. Developers that incorporate an ecosystem services approach will add value to the overall development and ensure a sustainable development. We want you to better understand what the environment can do for you.

Green infrastructure underpins the ecosystem approach as it is a shared vision of the green spaces around a development encompassing character, beauty and multi-functionality. If you identify the natural and cultural assets that define the character of the area they can be effectively integrated into the design. It is cost-effective and sustainable, reduce visual impact, improvement flood management and reduce long term maintenance as grey infrastructure is replaced. It is the differing combinations of landform, watercourses, waterways, vegetation and buildings that will result in a sense of identity for a place and its uniqueness.

Examples in practice from a small site to a large site:

- **Features** – a boundary wall, a group of trees incorporated into the design.
- **Water management/flood management** – adaptive measures such as deculverting to restore a natural watercourse which increases amenity and biodiversity, rainwater harvesting to use in gardens and landscaped areas, rain gardens (shallow basins or planter boxes attractively planted that collect rain from roofs), bioswales, green parking – permeable and planted, green roofs.
- **Green streets** – incorporating all the green water management ideas to make an attractive street and trees to provide shade in the summer.
- **Food production** – considering garden areas for growing food or allotments
- **Recreation/Wellbeing** – Greenspaces (open space) including playparks, areas along watercourses, and edges of walkways can provide places for people to spend time, socially interact and enhance the wildlife/biodiversity.
- **Diffuse pollution/waste** – this could be incorporation of reed ponds to deal with waste providing for wildlife.

The removal of a culvert (a pipe for a watercourse to pass through underground) and return to a natural watercourse
Sense of place

If somewhere has no sense of place then it has no special relationship with the place in which it is located. You are working within an internationally important landscape so your understanding of sense of place is central to making a proposal fit within this stunning National Park.

Definition

It has been used in many different ways but to us a sense of place is... how the landscape, its form, qualities, historical development pattern and type and the relative importance of these and how they combine to and contribute to ‘a sense of place’.

"The Park's landscape, both its special landscape qualities and landscape character, alongside its distinctive architecture and local materials contribute to the sense of place." Landscape character types reflects the variation in landform and topography, patterns of vegetation, landuse and built development and describes forces for change in those. The character types provide the day to day backdrops, focus and skylines to everyday life and experiences through the wide variety of scenery they support.

Of the character areas in the Park it is the highland summits in the north and north east that are the most visually distinctive landmarks with rugged rocky ridgelines creating a strong sense of place.

These along with steep sided ridges and hills such as the Cowal and Luss Hills provide the backdrop to upland glens with steep-sided hillside with moorland, rough grazing, woodland (including forestry). These places are interspersed with small highland towns and villages, farms and single buildings with strong rural character which take second place in the dramatic landscape. The main road and rail routes to the west of Scotland weave through the landscape contributing to the sense of place, particularly the rail route with its dramatic Victorian viaducts. In order to retain the predominantly rural character development should be well integrated into their landscape settings.

Crianlarich in Strath Fillan, sitting on the Strath Floor at a main transport junction.
It is the straths and glens, including those with lochs, coastal fringe, Loch Lomond basin are character areas that people mainly live and work. Similarly the parallel ridges to the south of the Park provide the backdrop to the moorland and rolling and river valley farmland. These landscapes have larger towns and villages with a more structured layout and there are also a number of mansion houses and castles with parklands and designed grounds. Throughout the whole National Park there is a clear distinction between town and countryside but this is particularly noticeable in these areas. These landscape settings are complemented by the various towns and villages, each of which has its own identity.

See the Proposed Plan for detailed town and village descriptions.
Sense of place

These are a small selection of the typical building types, features and materials found within the National Park. Across the park there is a contrast between large Victorian Villas and small estate, farm and forestry houses.

- Luss, Estate Cottages
- Kilfinnan, Victorian Villa
- Loch Etive, painted rubble walls, slate roof
- Craignie, red sandstone
- Ardenlinny, Forest Houses
- Tyndrum, terraced cottages
- Bridge of Dochart, Coloured carved
- Glenbranter, Timber Cladding
- Arrochar, Victorian Villa
- Port of Menteith, Gabled Farmhouse
- Callander, Carved gable
- Callander, puddingstone
Landscape setting

There is a diverse range of character across the Loch Lomond & The Trossachs National Park. Development is most likely to be focused in towns and villages within one of these five settings. These are usually surrounded by the dramatic hills and mountains which make the Park special.
Site and area appraisal overview

A site appraisal should be prepared at an early stage to inform the proposal preferably prior to or during pre-application discussions. At application stage it would normally be presented in a report and on a site plan. The appraisal should include some or all of the following:

**Context of site** – a three stage approach (as seen on page 20) to appraising the context of the site, views in and out of the site, along the street, links between paths, open spaces and nearby facilities and surrounding land uses.

**Features and vegetation within the site** – walls, structures, paths, hedges, areas of grass, shrubs and trees.

**Site drainage and flooding** – natural drainage including all water courses, ponds, wetlands and field drainage, pipes, culverts and any sewers that might affect the layout of proposals. A flood risk assessment may be required and there may be opportunities for adaptive measures such as opening up existing culverts. You should check with us.

**Wildlife and nature conservation inc. Trees survey** – see page 22-24 on ‘Habitats and species’.

**Aspect** – you should appraise the sun path and wind direction to ensure your building can capture the sun and are not directly located in the prevailing wind, and use orientation and shelter to reduce the impact of wind.

**Archaeological survey** – this would be required if you are in an archaeological sensitive area and you can check with us.
Three staged approach

These sketches illustrate the staged site appraisal you must take of the wider setting, the localised view and then the site itself.

1. Wider landscape assessment
   Considerations – How will the scale and nature of the development fit in the wider area? Have you considered landscape capacity or cumulative issues? How will the development relate and respond to its surroundings in the wider landscape and visual context?

2. Local character and the community
   Considerations – How will the development integrate into the local area visually and functionally? Have you considered; circulation, land-use, networks, approaches, sense of arrival, roof and skylines and the overall composition? How will the development respond in terms of boundary treatments, watercourses, open space, access, landscape features and key views?

3. The site itself – i.e. site appraisal
   Considerations – How does the development confirm the relationship, response and integration of the first two stages. How will the development respond in terms of details, materials, spaces, landscaping (soft and hard), drainage, biodiversity and green infrastructure?
Detailed sun path and wind analysis

One of the best ways to reduce energy use in a new building is to consider the building orientation to ensure the building is sheltered from prevailing winds either by design, orientation, landscaping (including hedges and trees), other buildings or landform. Passive solar design should be incorporated into the design of your proposed building to increase natural energy sources for heating the building.

Further information on passive design can be found in the energy section later on in this guidance. This applies to all proposals, even extensions on an existing building.

Your design statement should illustrate your analysis of the sun path and prevailing winds. This is relevant for sites both within towns and villages and in a rural setting. Where there are other built considerations such as existing building line, road frontages then they need to be balanced with considering orientation for the sun and wind.

• House sited to rear of the site behind existing trees to capture solar gain on rear elevation but also to avoid tree removal. Note: deciduous trees could be used to south to give summer shade and winter light.
• North facing front elevation with limited windows.
• House orientated to face road but side on to the wind, with garage on gable end, to reduce effects of the prevailing wind.
• New landscaping to provide shelter from prevailing wind.
Habitats and species

We aim to maintain and increase biodiversity in Loch Lomond and Trossachs through Wild Park (our Local Biodiversity Plan). A proposal should, where possible, make a positive contribution to the natural environment including a net gain in biodiversity. As a starting point for understanding the ecology, a preliminary desk-based study should be undertaken to collect all existing ecological data about the site, followed by an Extended Phase 1 Habitat Survey. It will help identify what habitats are present, the protected species that they may support, further survey requirements, site constraints and potential mitigation. This information will then inform the site design.

Designing wildlife into your proposal
You should ensure that wildlife habitats are enhanced or you create new wildlife habitats. This could be through support of key species (such as bat, bird boxes, bat bricks and tiles), linking populations through habitat corridors, green networks.

Invasive non-native species
The four worst offenders in the Park are Rhododendron Ponticum, Japanese Knotweed, Himalayan Balsam and Skunk Cabbage. Where any of these species are found on site you may be required to submit a strategy for their treatment or removal.

Trees
Trees bring considerable benefits to a finished development. Even one or two mature trees can greatly enhance the character and interest of a finished development. Trees also reduce noise and air pollution, provide a variety of wildlife habitats and help reduce carbon dioxide in the atmosphere.

Where your development is in close proximity to trees you should undertake a tree survey in accordance with ‘British Standards 5837: Trees in relation to Design, Demolition and Construction’ for all trees with a stem diameter of 75mm or more. Using this information you should design an initial site layout and identify areas for new planting.

You should then prepare a Tree Constraints Plan including root protection zones and details of the methods for construction work. Generally you should not be constructing or storing materials in the root protection zone but a no-dig method may be agreed to in some instances for a path or driveway. For further information speak to our tree officer or visit our website and click on trees under the planning section.
**Water**

The water environment includes burns, rivers, lochs, wetlands, groundwater and reservoirs. The water environment should be left in its natural state avoiding culverts, watercourse diversions, bank modifications where possible. Developments should be designed to avoid engineering activities in the water environment. Opportunities for adaptive measures e.g. deculverting, balancing ponds should be explored for multiple benefits; landscape/visual amenity and commercial benefits, access etc. as well as flood prevention.

You need to demonstrate how the layout and design of your proposal including any hard standing has avoided impact on wetlands. Ecosystem is a type of protected wetland. They should also be considered.

**Protected species including birds**

For individual species the levels of protection varies but for most species it is illegal to kill, injure, disturb or take such species from the wild. We must determine if protected species would be affected by the development before issuing a decision. If you fail to submit protected species survey information then this may delay your planning application.
It is also an offence to disturb breeding birds so any tree or scrub removal work should be undertaken outwith breeding season or where you must remove trees in the bird breeding season then a bird survey would be required.

Where retention, creation and enhancement of a habitat is required to mitigate the effects of a proposal then we would secure this via a condition or legal agreement. You may be asked to prepare a management plan as part of a legal agreement. Further information on Site management plans can be found in the Visitor experience planning guidance.

If you want information on what habitats are a priority for the National Park then contact the National Park Ecologist. There are also links to detailed publications on individual species within the final section of this guidance.

**Timing and seasonal constraints to surveys**

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**Tips**
- Always use a suitably qualified person to undertake the survey.
- Give yourself plenty of time (sometimes species hibernate or plants are not detectable in winter).
- Be prepared to accommodate species into your proposals.
Town and village setting introduction

If the site is within a town or village then you have to assess the town setting rather than the landscape setting. Within towns and villages in the National Park, the local character is dependent on the way in which individual buildings and their plots relate to each other and to the pattern of access road, streets within which they sit.

Building line — traditionally denser and more urban developments in the National Park share a similar building line with minimal step-backs. Where new development does not follow a similar relationship to the street as its neighbours, it can look out of place.

Urban grain — A distinctive identity can be achieved from a variation in density and development footprint based on consideration of successful adjacent development patterns. Most successful developments have some buildings which have windows and entrance facing onto streets, shared spaces so that spaces feel safe and overlooked.

Gartmore, the Trossachs
- Common building line unites different buildings
- Repetition of eaves dormers brings rhythm to the street
- No clutter to front such as bins or parking

Killin, Breadalbane
- shops on ground floor ensuring active street frontage
- varying heights adds character
On the main street in Callander the rhythm of the street has been broken by this infill development:

- Building line is not maintained
- Large setback from road
- Scale of infill development is different to neighbours
- Different materials are used to adjacent buildings
- Massing and elevation treatment has nothing in common with neighbouring buildings

**Impact on character**

**Large Villas** — set back in larger individual plots tend to be found in villages or edge of towns but respect given to building line.
In many locations in the National Park, the land cover and topography directly adjacent to a development makes a significant contribution to the way in which it is perceived. Landscape setting, features and topography often controls the scale of development of a town or village for example the edges of small towns are often where the gradient becomes too steep or where development meets the flood plain. New developments should have a landscape character framework of their own.

The integration of any development in any given landscape setting should be led by consideration of the landscape design and informed by concepts or a landscape strategy for the site. This does not mean the hard and soft landscaping that is often an afterthought at the end of a project.

This means including landscape integration as a key consideration in every design brief and a shared and agreed vision for the site.

It is recommended that you consider carefully the members of the project design team required and their skills and competencies. Seeking advice as early as possible could save time in consultation with planners at pre-app and ongoing as using the expertise of a landscape designer or landscape architect to add a landscape component to the brief will most often result in the landscape integration we are looking for. Landscape design is carried out by both Landscape Architects and Landscape Designers. The use of either or both depends on the nature and brief for a development, and the qualification and skills of the appointed agents.

Landscape designers tend to be more individual site focussed considering both the integrated landscape layout of for example; gardens, open spaces, common areas, yards as well as the design and specification of hard and soft landscaping for the site including all the landscape elements and plants within it. They would produce documents and drawings including; details, specifications, full plant schedules, landscape maintenance and landscape management plans.

Landscape design considerations at the site scale should consider artistic composition, craftsmanship, horticultural finesse and expertise, and detailed site involvement i.e. from initial concepts at pre-application to on site role at construction.
Landscape considerations

Landscape integration - Ensure that the site is located in the landscape and not on it

Landscape design principles to ensure your development is sympathetic to its surrounding area.
- Attempt to fit or nestle your proposal within the landscape
- Consider how the site relates to its surrounding and land-cover
- Consider scale, proportion, colour, reflect site character, retain site features in the design
- Consider impacts of lighting and noise in tranquil areas

Use existing site contours – keep cut and fill to a minimum; avoid heavily engineered platforms, mounding, artificial raised platforms and sloping land - choosing the most appropriate location within your site can reduce earthworks, footprints and overall visual impacts e.g. impacts of tracks, driveways and car parking areas, under-build.

Use existing natural and site landscape features and integrate these where possible in the design:
- Be guided by existing boundary treatments; these should be assessed as part of the wider site considerations. Set a development against a backdrop or make a rocky outcrop, burn or woodland a feature.
- For example use existing vegetation e.g. woodland, hedgerows, planting and watercourses to your advantage when siting the development. Where trees/hedgerows etc. exist they should be maintained wherever possible, with care taken to protect the root area from development.

Ledereich Lodge, Balquhidder
- consideration of wider setting
- good selection of materials and consideration of colour
- good use of the slope
- appropriate naturalistic planting
- ‘tucked in’ lying into existing woodland
- building appears to nestle into the landscape
Siting a single building in the countryside

Within the countryside, buildings are set within the landscape to make best use of sunlight, shelter, views and access. In the National Park single buildings are set in and are separated by large areas of landscape - woodland, hillside, farmland, loch and lochside.

**Bad**
- Exposed site with no trees and not sitting in contours
- Platform created to build the house makes building look prominent
- Inappropriate suburban parking area to front
- Intrusive visible access road
- Sitting high not in the building line of neighbouring properties

**Good**
- Development does not dominate its setting
- Planting integrates the development into the setting
- Located within contours of the hills and ridges
- Does not intrude above the skyline
Siting in a small rural community

The communities of Balmaha, Balquhidder, Brig ‘O Turk, Milton of Buchanan, Kinlochard and Port of Menteith have developed because of the area’s topography and the way that the land was used by its occupants. They are rural in character without formal urban elements such as streets, squares with significant amounts of pavements and street lighting.

**Bad**
- Typical suburban cul-de-sac approach.
- Ignores its setting
- Faces inwards on itself
- No existing trees and hedges so exposed to prevailing winds and prominent in landscape
- Spacing between buildings does not fit with existing development pattern

**Good**
- Respecting the existing development pattern
- Respect building typology, massing and scale
- Density similar to existing
- Integrated with the landscape, relates well to wooded riverside setting
Contemporary courtyards and mews

Within towns and villages of the Park you will find common design details such as continuous building lines, density that is area specific and consistent boundaries and landscaping. The emphasis should be on creating a sense of place and a community friendly environment with good access to local facilities.

**Good**
- Based on a steading courtyard concept
- Maintains existing setbacks, landscaping and boundary treatment of the area
- Alternate orientation of properties allows for rural courtyard arrangement
- Parking well integrated in courtyard
- Simple rural boundary treatment defining shared and private space
- Broken massing of properties reflects topography

**Good**
- Shared surface lane is main axis for development
- Houses face onto the lane
- Parking areas grouped off the courtyard
Siting at the edge of a town or village

In the National Park town and countryside are distinct from one another. In contrast to more built-up areas (such as those found in central Scotland) there are very limited areas of suburban development. This differentiation between town and country is an important contributor to the distinctive character of the National Park. Development at the edge of built up area needs to be controlled in order to maintain a clear definition between towns or villages and the countryside.

**Poor**
- Significantly different development pattern
- Different orientation, inward facing
- Standardisation with standard demarcated front and back gardens and road layout

**Good**
- Grows out of existing town with appropriate development pattern respecting existing
- Integrated with landscape
- Outward looking
- Linked relationship with setting – footpaths, structured landscape, public realm link
- Non-standardised road layout and parking
Small towns within the National Park have development patterns which accommodate and integrate a diverse range of neighbours in a way that makes attractive streets. The National Park has attractive towns and villages based on a typical pattern with a denser centre, sometimes arranged around a public square. Many have long thin strips of development based on the traditional ‘feu’ pattern. There are also many large plots with Victorian holiday villas alongside small traditional cottages.

**Good**
- New development is built behind existing property
- It is smaller in size and a different orientation to appear like an outbuilding.
- Consistent setback and boundary is retained at street frontage
- Original access and planting is retained

**Good**
- Massing proportions, building line and orientation of new plot in keeping with existing, shared access

**Good**
- Reduced proportions to be subservient to main building, alternative orientation to minimise impact, shared access

**Poor**
- Sits at front of plot detracting from streetscape
2.2 Spaces between the buildings
Spaces between the buildings overview

If you have followed the advice in the previous pages you should have assessed your site and you are ready to sensitively locate your proposal within the development pattern and setting, taking account of distinctive local character. You will also be ready to incorporate features into your proposal including wildlife, landscape, water environment and green infrastructure to ensure the proposal will be a sustainable development.

The first part of this section is examples of siting design solution and it helps you consider your site in the wider setting.

It then goes down to the site's design solution, helping you utilise your site assets; landscape, water, wildlife including the links to wider green infrastructure and the connections to other places. It then covers issues associated with access and parking, defining public and private spaces, landscape framework and design, entrances, gateways, boundary treatments, gardens and planting.
Designing streets

The main aim is to designing streets with character is to consider place before movement i.e. how it looks and feels before function of roads and pavements. New development should avoid suburban ‘could be anywhere’ development based on standard roads layouts. It should use the existing site features – trees, shrubs, boundary walls – in the design.

- Introverted, ‘Could be anywhere’ design
- Boundary treatment of cul de sac detaches development from adjacent village
- Landscaping is replaced by hardstanding
- Scale and proportion of space does not relate to surroundings
- Waste bins storage are not designed into the proposal

- Large areas of high boundary fencing facing onto streets
- Blind gables and blank walls
- Large ‘leftover’ development setbacks
- No designed connection to adjacent village or neighbourhood

- Inappropriate - open plan – boundary treatment
- Building line is not maintained
- Parking dominates the frontage
- Landscaping is replaced by hardstanding
- Scale is not contextual
- Different materials and character used from surrounding buildings

Polnoon, Eaglesham
Award-winning placemaking with generous landscaping and priority for pedestrians over cars, creating an attractive place for everyone
Creating a new landscape

Creating a new landscape – in towns and villages and in a rural site

Inherent in the approach to creating a new landscape should be a commitment for landscape mitigation and in addition identifying opportunities for enhancements for example; boundary repairs, gapping up of hedgerows, repairs to gates, tree guards, estate fencing.

In any development design the scope and appropriateness to create ‘new landscape’ should be considered at an early design stage be that public realm, green spaces, recreation areas, private space, a yard, community allotments and gardens with consideration of views from them to focal points and landmarks as well as the views to the site.

Naturalistic planting integrates rural houses and their setting

To assist in the integration of development into the landscape and make a successful finished building:

- **Soften the edges of a development**, incorporate well thought out boundary treatments and approaches.
- **Create or add to backdrops and settings** using planting and/or fencing/walls for effective screening i.e. breaking up elevations of buildings, walls, fences etc
- **Take advantage of opportunities for amenity and ecological enhancement** i.e. use local, native species which will blend with the surroundings and provide wildlife habitats e.g. along existing watercourses or where opportunities for de-culverting exist.
Plant structural tree planting for aesthetics, settings and placemaking including groups of trees, blocks of woodland, hedges and field boundary trees, parkland trees, informal and formal shrub planting, avenue trees etc. Planting may appear incongruous in some open landscapes. Consider potential size of any tree. Avoid large expanses of manicured lawn.

Adopt rural standards by avoiding urban standards and materials, such as tarmac street, lighting and concrete kerbs and aim to be as sensitive to the landscape as possible. Carefully sourced hard landscaped materials. Consideration should be given the use of appropriate materials to assist in providing sustainable drainage solutions eg. adaptive measures such as de-culverting to re-establish more natural channel courses.

Use soft engineering techniques where possible i.e. use new innovative re-engineering solutions e.g. de-culverting, and avoid significant earthworks; bioengineering e.g. designs which rely wholly on plants coir pallets, coir rolls and bio-structural designs with hard structure e.g. vegetated gabions.

You need the best advice in developing landscaping proposals that will meet with our approval. A suitably qualified landscape architect can help you to deal with these issues and create a landscape plan.

A directory of Landscape Consultants can be found at Landscape Institute
www.landscapeinstitute.org

A landscape plan should include:

Soft landscaping – details of existing trees to be retained and proposed trees, shrubs, planted beds and grass areas. The details should include planting densities (plants per sq metre), the botanical name and stock size.

Hard landscaping – details of layout of hard landscaping and proposed materials for hard surfacing e.g. paths, parking areas, patios.

Surface drainage – details of the proposed SUDS and how it is incorporated into the above hard and soft landscaping e.g. rain gardens, permeable surfaces, swales, ponds, de-culverting solutions etc.

Boundary treatment – details of location, design and details of finish e.g. stain, paint, natural stone etc.

In larger cases it should also include:

Topographical details – a plan with contours showing existing and proposed levels and cross-sections to accurately illustrate proposed changes in ground level.

Ground preparation – details of areas of topsoil or subsoil to be stripped and re-used, soil storage arrangements, specifications of breaking up areas of soil compaction, cultivation, grassing and planting, inc chemical spraying, fertilisers.

External lighting – details of lux levels, illumination splays, type, wattage and location of lights.

Play provision – details of play provision for family housing or large tourism.
Boundaries, walls and gates
Boundary treatments with a National Park character

St. Fillans, Privet hedge
Lochearnhead, Rubble wall
Luss, Dry stone wall
Callander, Metalwork

Breadalbane, Post and wire fence
Callander, Rubble wall and hedge
Loch Lomond, Dry stone wall
Strone, Rubble wall and arch

Callander, Post and wire fence
The Glessert, Boundary wall
Aldochlay, Metal estate style fence
Arrochar, Timber fencing

Poor quality boundary treatments
Brick boundary walls tend to look more suburban in character

Standard High timber fencing is too prominent and uniform creating ‘could be anywhere’ character
Access and parking

Poor parking and access arrangements detracts from local distinctiveness. Parking should not dominate the front of properties nor overwhelm their garden or street setting. Parking should be screened and where possible located to the side or rear of properties. Larger development could include shared car-parking courtyards, which can be attractive if small in scale. These can be screened effectively with landscape, topography and contours. Where there is no alternative, large parking areas should be sub-divided with strong, high quality structured landscape.

Good example of rural parking
- Screened by landscaping
- At side of property
- Garage is detached from property
- Material/colour is sympathetic

Poor example of rural parking
- Directly in front of property
- Not screened from road
- Integral garage increases mass of building
- Hardstanding is of obtrusive material/colour

Street lighting - Standard street lights should be avoided in rural areas as they are urban in character and a source of light pollution. More rural alternatives should be incorporated e.g. Route marking; Bollard lighting; property floodlights. Any lighting should be designed to avoid glare.
Water management

**Surface Drainage**

Surface drainage should not be treated as waste and simply flushed down pipes into overloaded sewerage systems. In order to reduce the impact of a development the aim is to ensure the water goes back into the natural systems i.e. the immediate ground rather than down pipes. Sustainable drainage solutions will help us adapt to climate change – rising temperatures and increasingly extreme weather events but also it is a great way to provide for wildlife and local people.

The aim is to integrate drainage considerations into the design from the outset. Surface water runoff and attenuation must not be an afterthought and must be handled sustainably. You may be asked to submit a drainage plan or drainage assessment with your application but ideally should be incorporated into the design statement.

Solutions should be sustainable and green not grey utilising the existing site features and integrating with existing habitat networks. This benefits people and wildlife. This is known as green infrastructure such as green roofs and ponds/wetlands/rain gardens/planter boxes to capture rainwater and includes adaptive measures such as de-culverting rather than hard surfaces such as engineered swales, cells or modules and soakaways. Grey solutions allow surface water to be stored underground and dissipate into the ground and offer no benefits to people or wildlife. Solutions such as de-culverting on the other hand offer multiple benefits for landscape/visual amenity, recreational, access, biodiversity and commercial; i.e. attractive, lower maintenance and flood prevention.

You could also consider a rain garden or retention pond. Retention ponds are permanent pools of water and have more amenity benefits for local residents than a reed pond. A rain garden would be planted with flowering water loving plants rather than reeds and is suited for a single house.

**Permeable paving**

Can store and release surface water into the environment in a controlled manner but they are not a green solution.

**Reed pond**

The reed pond is a detention pond as it stores and releases water from the roof back into the environment and does not have permanent water. It provides a habitat for wildlife and makes an attractive landscape feature.
Rainwater harvesting
It may seem strange to incorporate rainwater harvesting into your design in Scotland but saving on the use of treated water from a private or public system is beneficial to the environment as it saves on energy to provide a development with treated water. The water collected does not have to be treated if it is not for drinking.

On a small scale, water butts can be used to collect and store water for re-use in a garden, a simple form of rainwater harvesting.

This timber house near Oban incorporates a system for the collection and use of rainwater as the sole source of domestic water and has a reed-bed filtration system which treats sewerage.

Foul drainage
Foul drainage needs to be treated to remove contaminants; raw sewage can no longer be directly discharged into the sea or watercourses. In most instances foul drainage will be discharged to the main sewage pipes which go to a public treated system but where this is not available a private waste treatment system is required. In the first instance a reed bed system should be considered to enhance the biodiversity if the space is available. Other options include a septic tank (biodisc system) that discharges to a soakaway on the land rather than a watercourse.

De-culverting
You should consider the removal of an existing culvert, ditch realignment or ditch re-profiling to enable better integration of natural watercourses in a development proposal as part of the sympathetic design process. This will not only protect and enhance the quality of the watercourse but provide recreational opportunities and wider benefits.

These measures should be considered where physically possible and would not damage ecological or historical interests. The benefits include reducing flood risk by re-establishing a more natural flow regime and improved watercourse profile. The local environment would be enhanced significantly by a more natural profile i.e. landscape/visual amenity, local biodiversity and naturalness qualities.

Swales
Direct the water flow whilst slowing down the transfer of water into the ground. Vegetated swales are preferred over gravel or stones and they could be planted boxes not just grass ditches.

Water Pollution
Developments should implement measures to prevent pollution to surface and ground water such as drain interceptors and bunded areas.
Travel and green networks

We need to reduce the reliance on the private car and encourage the use of more sustainable modes of transport, as currently transport accounts for a fairly high percentage of Scotland’s green house gas emissions. All developments should be in a sustainable location that promotes and encourages walking, cycling and the use of public transport. Green networks play an important role for wildlife but also have a role to play in encouraging social interaction by providing access to paths and provision of facilities.

In order to reduce the reliance on the car you should:

• Develop the street layout based on Designing Streets guidance to ensure we have an attractive space to move through.

• Connect the proposal with the wider neighbourhood through attractive safe pedestrian routes that encourage walking and cycling i.e. a green network e.g. along watercourses, woodlands, field boundaries, landscape features.

• Decrease the amount of space for vehicles and maximise space for pedestrians.

• Provide links to the core paths network to allow for recreational activities.

• Provide bicycle racks, shelters, storage areas that are safe.

• Link to bus stops and where necessary contribute to providing a new bus stop.

• Provide home office space within housing to help reduce commuting.

• Design with safety and security in mind to encourage people to walk and cycle i.e. ensure open spaces and paths are overlooked and social housing is not segregated.

These guidelines apply to all types of developments – tourism, housing, commercial.

Active travel plans

An Active Travel Plan should be submitted with larger developments describing how new and proposed pedestrian routes to and from the proposal will be created or enhanced. The routes should link to facilities, core paths, long distance routes, open spaces and bus stops.
2.3 The building details
The building details overview

This section then goes on to the details of your building, the massing proportion and scale, and the roof, window and wall details including the source and type of materials. Successful development proposals in the National Park should be designed to relate to the surrounding built, take as their starting point good quality local buildings. Nevertheless, this guidance does not suggest that designers provide copies or pastiches of adjacent buildings, rather that their proposals are a contemporary expression of an evolving, high quality way of building and designing.

Construction details should reflect the building type i.e. small scale rural buildings should feature robust unfussy construction details which emphasis their simple proportions and rural character. Within towns and villages carefully designed and detailed bespoke features such as bargeboards, porches and entrance doors can compliment local character.
Massing, proportion & scale

Building form, mass and scale
The three dimensional form of a building (height, width and depth) can be described as the building mass and scale. Where newer properties exhibit different heights, widths, roof pitch, and massing that differs to the architecture in the surrounding area they can appear out of place. The aim therefore is to avoid this and retain the best characteristics and qualities of traditional housing found in the National Park’s towns, villages and countryside such as the steeply pitched roofs.

The best examples of contemporary building are based on this ‘sympathetic’ approach and in general, well proportioned buildings will be the most appropriate in the Park. This approach includes:

- **Simple well proportioned building** - A narrow plan is preferred over a deep plan which tends to generate an overly dominant roof. Deep plan houses can be attractive but only with good proportions for example, the large Victorian villas in the Park.

- **Sympathetic massing** – larger houses can be successfully broken up into smaller elements using lean-to additions, or having a ‘L’ or ‘T’ shape plan.

- **An appropriate scale** - minimise internal ground floor levels- this can be achieved with the use of a concrete floor rather than a suspended timber floor; minimise floor to ceiling heights by offsetting low ceilings with large open plan areas; introducing double height spaces and using larger full height windows.

- **Simple and straightforward roof shapes** – avoid large heavy dormers which compete visually with the roof of which they are a part; use appropriate materials for any detailing e.g. concrete tiles do not work as substitutes for slate in most features.

![Diagram showing examples of different building forms and massing](image)

- Single storey
  - Deep plan

- Double pitch, well proportioned, reduced height and gable width

- ‘L’ shape plan, space provided to rear

- Long 2 storey with lean-to and single storey element to break up massing.
Massing, proportion & scale

**Window and door arrangements**
The size, shape and positioning of windows significantly influences scale and proportions of a building. In the older rural buildings around the Park, the size and shape of the windows has been kept small for climatic reasons where no construction or technological solutions existed, restricting daylight and views. Victorian windows tend to be larger but the traditional window to wall ratios, elevational rhythm and symmetry is retained. Today, windows are highly insulated and engineered giving you the opportunity for larger openings making the most of solar gain and the beautiful views of the National Park.

You should follow the following principles when designing your window arrangement:

- Keep the range of opening sizes to a minimum so the building does not appear cluttered.
- Get the right balance between wall and window with eaves as low as possible. If there is too much space between the windows and eaves the building will look out of balance.
- Keep the arrangement simple, observing the central axis generated by the shape of the wall. Windows should be on the axis or purposefully off the axis.
- Dormers and rooflights generally should be aligned with ground floor windows and should not be bigger than the lower windows.

![Diagram of window arrangements](image)
### Appropriate massing and proportions Scottish rural

- **Breadalbane**: Typical 3 bay farmhouse with eaves dormers
- **Trossachs**: Simple narrow plan crofter’s cottage
- **Argyll Forest**: Typical 3 bay 1.5 storey cottage
- **Loch Lomond**: 1.5 storey cottage with attic dormers

### Appropriate massing and proportions Victorian villas

- **Breadalbane**: Gothic style villa with turret feature
- **Trossachs**: Gable fronted stone villa
- **Argyll Forest**: 3 bay rendered villa
- **Loch Lomond**: Gothic farmhouse villa

### Appropriate massing and proportions twentieth century types

- **Breadalbane**: Contemporary infill development
- **Trossachs**: Contemporary housing development
- **Argyll Forest**: Contemporary country home
- **Loch Lomond**: Cottage extension

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**LIVE Park**

Design & Placemaking Supplementary Guidance

DRAFT
Materials and construction methods

The materials that you select in the construction of your proposal are very important visually in the National Park context, and in terms of their contribution to lower carbon emissions. New buildings and their surrounding spaces should use a limited palette of high quality materials and the choice should be based on materials and details which feature in good quality existing development in the local area and elsewhere if it reflects the character of the National Park area.

Key considerations when deciding on your materials are:

- **Appearance of the material and detailing** – high quality materials and detailing offer a more attractive finish. The materials need to relate to the context both the landscape and the built environment.

- **Embodied energy** – energy components are derived from both manufacturing and transport so natural, locally sourced or recycled materials have the lowest embodied energy.

- **Durability** – the longer lasting the lower the environmental impact.

- **Reusable/recyclable** – if a material can be reused or recycled then it has a lower environmental impact.

The following pages detail materials and construction methods from throughout the National Park which, when used in the correct location, will add to the diverse character of the National Park. Some of these material choices are derived from the wide range of construction technologies which are already used in the National Park; others are chosen because they continue the National Park’s way of building - using sustainable local technologies which reflect their special location. New technology and materials are constantly evolving and we are open to considering newly developed techniques, materials. The lists below are therefore not exhaustive.

Low embodied energy materials

Embodied energy is the energy used to extract, process and transport building materials and to construct the building.

The traditional buildings built in the Loch Lomond and Trossachs area tend to have low embodied energy as they have involved minimal processing (stone, slate) and are sourced locally (from local quarries). Local and reclaimed materials reduces the need to transport over long distances.

Manufacturing process should be considered, e.g. steelmaking uses higher levels of energy than a timber sawmill. You should aim to:

- Recycle or reuse waste materials from another site or the proposed site.
- Use of materials that are environmentally friendly e.g. non polluting, biodegradable, low embodied energy.
- Building, hard landscaping and planting materials sourced locally.
- Timber sourced from sustainably managed sources (FSC certificate).

Minimise, re-use and recycle materials

The minimisation of waste, from both the construction and use of a building should be a major consideration of any new development. On larger scale developments it would be expected that a site waste management plan is produced and would include ways to minimise and recycle waste. Waste separation is key to ensuring that materials do not all end up in landfill. On smaller developments it would be expected that building materials are re-used locally such as selling of natural slates.

Key considerations:
- appearance of the material and detailing;
- embodied energy;
- durability;
- reusable/recyclable

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Walling materials

**Stone walling**
Most local building stones are no longer quarried in the National Park. Sandstone can be sourced in Scotland as can granite and other materials. The use of stone can add texture and depth to your design and it is a natural durable material. The source of the stone is a key consideration and the appearance in terms of how it fits with the context of the site, both landscape and built. Walling slate is not a common material found in the National Park but it offers a high quality finish. Recycled stone is also a good option.

**Render walling**
Newer, generally 20C properties are are often harled, rendered or painted on concrete block. Smooth white render has become a popular modern material. Render can be a mix of various materials, although natural materials, such as lime and stones, are preferred. A wet dash harl is preferred to pebble dash on new proposals. Concrete block should be sourced locally.
Timber cladding and frames
Almost all new building now use a timber frame and timber cladding has become increasingly popular. It works well on both modern and traditional schemes. There are a number of newer timber clad houses within the Park area and these are generally stained. However, if the timber is left to weather naturally and fade to grey there is less maintenance, it is more environmentally friendly and gives a rustic/rural feel which works well in the Park’s landscapes. However it is recognised that some timber needs treated due to risk of fungi and insects and treated timber may also be the preferred appearance in some instances. You should give careful consideration to aspect, exposure and treatment of the timber (i.e. moisture content). Timber can perform perfectly satisfactory in Scotland if installed correctly. Timber should be sourced locally and from a certified sustainably managed forest. Larch and Oak cladding can be sourced from Scotland and Scottish Oak and Douglas Fir can be used for timber frames.

Further information is available within Timber Cladding in Scotland – see Section 4, Sources of information.
Roofs

**Traditional roofs**
Historically roofs would have been thatched, however there is only one example in the National Park and this is a restored cottage at Lochearnhead. Roofs in the National Park were traditionally slatted using slates from Luss and Aberfoyle however there are no longer any functioning slate quarries in the National Park area. Local slate is laid in diminishing courses and is usually random widths which add depth and character to a building. There are a few buildings with corrugated metal roofs.

**New roofs**
*Slate* is still the predominant, preferred roofing material in the National Park on new development given its durability and attractive appearance. It naturally weathers and has a thin profile. Imported slates can be at odds with the colour and texture of traditional roofs and also have higher embodied energy due to the transportation. Locally sourced second hand slates is often the first choice for proposals in conservation areas, conversions or listed buildings. For new buildings, appropriate British slates, i.e. right colour, texture and European such as Spanish are an option. There can be differences in durability of slate depending on the source and this is a consideration.

*Concrete tiles* – there are few occasions where concrete tiles would be appropriate in a National Park context as they often create an unattractive finish and are not as sustainable as slate.
Zinc/lead/steel/copper/iron – metal can be successful on contemporary designs or on extensions to buildings. The embodied energy and durability of the metal should be considered. Metal can be recycled.

Clay – this is not a common material in the National Park and often has the appearance of unattractive concrete tiles. However, clay may be successful in some new proposals given its high green credentials. It is a natural rock with low embodied energy and it can be sourced from the UK; it also has a lifespan over >60 years.

Wood shingles – this is not a common material in the National Park but it can provide an attractive finish, particularly on garages and outbuildings and if sourced from a sustainable local forest it has high green credentials.

Green roofs or ‘living’ roofs are attractive and help insulate a building, slow water runoff and create a habitat for wildlife. They may not be suitable in all locations or buildings.

This list is not exhaustive and other roofing materials may be considered. If your proposal is an extension to a listed building or in a conservation area then see our planning guidance on this topic.
Windows

Windows are an important element of a new building. We support the use of double and triple glazed windows to reduce heat loss from buildings and therefore cut down on carbon emissions. We also encourage the use of timber and aluminium window frames over PVC-U for the following reasons:

**PVC-U window frames**
(i.e. plastic windows) There are few occasions where PVC-U window frames would be appropriate in a National Park context as they often create an unattractive finish and are not as sustainable as timber. We recognise that slim-line windows, sculptured and bevelled detailing that appears like timber is available, and some are better than others. We recognise the positives such as their energy efficiency rating, security, sound reduction, fire safety and low maintenance. However, they are made using plastic which comes from the petrochemical industry. They cannot be repaired if broken and there is no market for degraded PVC-U frames so ultimately they either end up being landfilled or incinerated, rather than being recycled. Additionally, the production and disposal of PVC-U windows can lead to the release of hazardous chemicals.

**Timber windows**
This is the common material found in the National Park and modern versions can be high performance, double glazed and do not necessarily cost more than PVC-U equivalents and offer many of the same benefits. Timber is a sustainable resource as long as the timber is sourced from properly managed forests (FSC certified). Factory finished timber windows need not be repainted or re-stained for up to eight years. The advantage of timber windows is that they can be repaired and also recycled.

**Metal windows**
These can be found on historical properties and modern ones. The modern versions are usually aluminium but can also be traditional steel. Metal often has high embodied energy but on the upside most metals are highly recyclable and can be used again and again without loss of quality. Aluminium is also durable and highly resistant to corrosion i.e. low maintenance. In recent years, contemporary aluminium windows are polyester powder coated in various colours – slate grey, matt black, natural green or brown. They are slim which gives them an attractive appearance and are strong which means they can support large glass panes and resistant to breakage.
Unattractive, poor quality materials and detailing

Some new developments within the National Park use materials and construction details which are selected without any careful thought given as to whether they result in a design solution which is well integrated with their neighbours.

In these situations designs are often based on proprietary construction products and systems which promote a Scotland-wide standard ‘vernacular’ - based on rendered walls, poor quality quoins, standard stain colours for timber, heavy interlocking concrete tiles and bulky eaves and verge details.

Often these choices of modern materials work poorly because:

• they result in elements that are visually intrusive,
• they conflict with local character and result in proposals with a ‘could be anywhere’ character,
• they are associated with suburban development, rather than the National Parks rural or small town character,
• they alter the simple proportions of properties.

Poor choice of materials; heavy roof tiles; visually intrusive construction detail at eaves and verge; cast stone quoins; poor fenestration.

Poor

Poorly designed roofs are bulky and visually intrusive.

Good

Better designs for roofs minimal eaves and verge details; roof coverings are smoother and less “bulky”.
Construction details
This is a selection of construction details that are common throughout the National Park area. Roof dormers are extremely common; pitched roofs are the norm although some are hipped - parapet/skew gables are uncommon; verge details tend to be flush with the gable; stone quoins and window dressings are popular.

Avoid: Box soffits, verges & eaves, fascia boards on closed eaves, white PVC as a material, cluttered or decorated doors, heavy verge details, over large dormers, chimney stacks which do not emerge on the ridge.
Energy conservation and zero/low carbon technology

Any new building requiring mass heating should be designed to minimise heat loss through effective insulation, draught proofing and double or triple glazing. It should be designed with sufficient space for residents but without being overly spacious resulting in large heating costs.

Energy use can also be reduced by considering solar gain and how to best integrate a proposed building into the landscape, using trees and hedges to minimise the impact of prevailing winds (see the site analysis section above). You should also consider higher densities (e.g. apartments and terrace housing) so there are less outside walls losing heat. Beyond energy conservation measures you should explore the options of incorporating renewable energy and low carbon technologies into your design.

This list is not exhaustive and we recognise that new technologies may become available in the lifetime of this guidance.

• **Solar electric (Electricity/Photovoltaic)** consists of roof-mounted or free-standing panels or tiles which harness energy from the sun to generate electricity. These are more expensive than solar thermal panels but electricity may be sold back to the grid. The benefits are that they have no moving parts and are silent. They can harness the sun’s energy on sunny and cloudy days.

• **Solar thermal (solar hot water)** usually consists of roof-mounted panels which harness energy from the sun to heat water. Solar thermal can reduce consumption of fossil fuels normally used to heat water by up to 55-70%. A water storage tank or existing traditional boiler is needed. They are very effective in non-domestic buildings that have a high demand on hot water. Unfortunately they rely on direct sunlight and therefore generate high levels of hot water in the summer when demand is lower.

• **Water, ground and air source heat pumps** extract heat from the air, water or ground (also known as geothermal) to be used for space and water heating, heat recovery, space cooling and dehumidification. Heat pumps are ideally suited for use with under floor heating. For large rural sites then the cheaper option of the horizontal loop system in trenches of 1.5m deep can be used rather than a pit of 60-100m which is more expensive.
- **Ground cooling** uses the relative constant ground temperature to provide summertime cooling through ground heat exchangers.

- **Small scale wind turbines** usually require separate planning permission and the sensitive landscape setting of the National Park is a key consideration and situations where a 3 to 6 kilowatt standalone turbine would be acceptable is limited.

- **Biomass** is the mainly the use of logs, wood chips, wood waste or wood pellets to create heat and electricity. The flue and ventilation needs to be considered and space is required for, wood storage and access for deliveries. Small boilers are available that are no larger than a standard kitchen unit but you may need additional space for a hot water storage tank.

- **Small scale hydroelectric** is usually in the form of ‘run of river’ and is usually not available to small scale developments. However, you may be able to connect to a local or community run hydro electric scheme.

- **Small combined heat and power (CHP)** for individual house, group residential units and non-domestic premises are becoming available. Most systems link to an electric generator and they can replace a domestic sized boiler. The common energy source at the moment is gas but fuel cells are under development.

- **Home fuel cells** are similar to batteries but differ as the consume fuel (usually oxygen and hydrogen) to generate power and heat on site. It could replace heating by burning oil or gas or a grid connection. Home fuel cells can either be sited an interior mechanical room or outside and they run 24/7. Since hydrogen has to be produced using coal, natural gas and oil, it is not a carbon neutral technology and its storage and transportation may indirectly lead to pollution. However they still offer a net reduction in energy consumption and CO2 emissions. Other fuel sources for fuel cells may become available in the future and consideration should be given to the full life cycle of the fuel cell.

- **Heat exchange recovery systems** is usually an air-to-air heat exchanger which recovers the heat produced in the house through a series of ducts around the house and in the loft space, a heat exchanger and a vent through the roof. They ventilate a house without losing heat (unlike opening of a window). The fresh air coming into the building passes through the unit and is heated by the warm air trying to escape from the house.

Further guidance on wind turbines, biomass and hydroelectric can be found in our Planning Guidance on renewable energy.
Exemplar design - local
Section 3

Building types
3.1 Holiday developments
Holiday developments

Due to scenic beauty of the National Park, holiday developments have the potential to offer a high quality experience to visitors and there is a need to raise the benchmark for this type of development. We have separate visitor experience planning guidance that provides locational guidance and definitions of campsites, static caravan sites.

Poor solutions are unacceptable - the park is a special countryside location

Given the National Park’s important environment, poor holiday development proposals are not appropriate within the park area. Many holiday villages have been developed from what were originally static caravan sites. The worst examples in the National Park are on prominent sites (often open flat land or on hillsides) where static caravans/lodges are dense urban looking layouts in regimented rows where existing green infrastructure has been overlooked from the outset and not used to sympathetically integrate the development in the landscape. There is a distinct lack of privacy and amenity for those staying in holiday units and the roads and parking often have a residential character.

Bad
- Too prominent and regimented layout.
- Same orientation and too closely spaced – lack of privacy.
- No relationship with wider landscape setting and no landscaping.
- Suburban style road network.
Poor solutions are unacceptable - within towns and villages or near existing buildings

Sometimes individual or small groups of units within towns and villages or nearby existing traditional buildings, usually involving subdivision of plots, can impinge on residential amenity and affect the character of the area. These types of development are not appropriate in the Park area as it does not give the holiday maker an experience commensurate with the quality of the National Park.

Although timber chalets can provide comfortable holiday accommodation, they are often not suitable adjacent to existing traditional buildings, particularly where they are large and dominant. Their character is distinctively different, therefore they detract from, rather than reinforce, the character of the area.

Bad

- No consideration of existing building character, materials and form.
- Roof plane not broken up.
- Regimented layout.
- Same orientation and too closely spaced.
- Formal entrance and no relationship to landscape setting.
New holiday park developments should:
• Be of a size appropriate for their site based on aesthetically designed layouts.

• Be sited appropriately in a way that they are either screened by landscape and natural features, or, if seen, they integrate with and enhance the landscape in which they sit.

• Be carefully sited in relation to existing towns and villages to avoid impinging on their character.

• Be designed with limited infrastructure (roads, lighting, paths) to reduce the residential feel and parking could be remote from the units.

• Be designed with attractive natural communal areas integrating the development into the surroundings.

• Include play areas only in a larger formal holiday park environment and be sited appropriately within the units.

Individual holiday units should:
• Be sited attractively and make the most of natural topography and landscape.

• Have external areas for visitors to use that have some element of defensible space.

• Have natural or designed landscape between them.

Good quality local precedent

Forest Holidays
• Good consideration of landscape design concepts to produce internal landscaping as buffers/screening
• High quality detailing
• Well considered siting and spacing between chalets

Carrick Lodges
• High quality construction
• Use of local building typology
• Local materials
• Landscaped setting and well considered siting

Forest Holidays
• Sustainable materials
• Interesting dual-pitch roof
• Large areas of glazing to capture views
• Parking grouped at rear
• Good consideration of wider landscape concepts to inform internal landscaping
**Timber holiday chalets/pods/huts/tree houses**

The best holiday developments afford their residents the impression that they are living in the landscape – they are at one with nature. For this to be possible the holiday unit should be located so that their landscape setting is more prominent and important than the structure themselves.

Any new landscaping should result from sound landscape design concepts to integrate the site in an appropriate landscape setting. For example, using native woodland planting and retaining and using local landscape features such as rock outcrops, knolls, burns within the site not separated from the site by an artificial boundary. Landscaping should be of sufficient scale to compliment the visual impact of the development. Sites which need extensive screening with new planting will not usually be appropriate. The buildings and the structure should be dominated by the landscape.

Timber holiday chalets, pods, treehouses and huts will often be most dramatic and more suited to wooded or sloping sites which are not easily used for any other purpose e.g. housing (access can be designed for the disabled with ingenuity). Visitors are looking for a ‘landscape experience’—similar (but not the same as) to camping; which is close to nature, calm and tranquil. Timber chalets should be designed to appear ‘temporary’ – sitting lightly in the landscape with enough space between lodges to give residents a sense of privacy and let nature dominate. The materials and construction methods such as logs and timber cladding emphasises their rustic ‘forest’ character. Vehicular access tracks should be limited and parking areas grouped to avoid a residential layout.

**Good holiday development**

- Consideration of landscape setting, pods nestled into vegetation.
- Spaced appropriately within the landscape.
- Different orientation to create privacy.
**Yurts and Teepees**
Yurts, safari style tents and teepee’s are usually fitted with light coloured cotton canvas and therefore are usually more visually intrusive in the landscape. Dark green or brown canvas can also be opted for and may be more suitable in certain locations. A site can be designed with minimal footprint where existing facilities e.g. in a hotel, can be utilised and toilet blocks can be temporary. Where temporary toilets (i.e. portaloos) are proposed it would be expected that these would be screened by existing planting or fencing.

**Houseboats**
Houseboats can be an attractive option in some waterside locations particularly suited on a managed shoreline where infrastructure exists (e.g. parking, access). Given the nature of this type of proposal, houseboats are often in flood zones and therefore even though the accommodation would be afloat, the parking, sewerage requirements would need to be outwith the flood zone and access and egress to the houseboats would need to be considered in an extreme event. There are often ecological issues and houseboats are unlikely to get support if located on a sensitive natural shore or where there are important or protected species such as otters and water voles.
Caravan and campsites
A campsite typically consists of open spaces of ground where a camper can pitch a tent or park a camper-van or caravan. Visitor experience Planning Guidance confirms that new static caravan sites are not favoured in the National Park given the landscape and visual impacts. Proposals need to sit comfortably in the landscape and the creation of regimented pitches with hook ups and parking spaces at each pitch is not the starting point. The following should be considered when developing a new site:

- The area and site appraisal should be undertaken to inform the landscape design concepts for the site.
- Innovative design solutions for pitches, landscaping and car parking areas should be considered.
- A path network could be used instead of access roads at tent only sites.
- Caravan pitches should be grouped together interspersed with trees and shrubs. In some instances naturalistic screening bunds may be appropriate.
- Barbeque/campfire areas with picnic benches could be found at each pitch if appropriate and on more formal sites, barbeque huts may be appropriate.
- Toilet and kitchen blocks, the reception building and shop should be sited and designed to fit with the unique setting rather than being standardised. If there is an existing building on site then this should be reused or sites could be located near hotels where existing facilities can be used.
- Consideration should be given to the bin area and how this would be screened.
Holiday developments beside existing buildings and in existing towns and villages

Small scale holiday accommodation in existing towns and villages, as like all other developments, should be designed to retain and enhance local character. The density, siting and massing should be derived from their setting. Design should generally include a designed range of types or sizes of property to avoid a uniform, standardised appearing development. Because holiday accommodation does not generally require conventional gardens their design offers the opportunity to create characterful, semi private or part-shared external spaces.

Holiday homes generally do not have tended gardens and this can have an adverse aesthetic impact. External areas should be designed and landscaped with this in mind and roads, parking and access should be sensitively designed. Converted traditional outbuildings or holiday accommodation above garage may be an option in some situations. Residential amenity and parking will be an important consideration.

Sympathetic holiday development

- Building style retains character of local vernacular
- Local materials are used
- High quality detailing
- Development size is limited
- Siting and density relates to existing village
- Characterful external space created
- Parking kept separate

Luss: two units in rear garden

- Siting and density relates to existing house
- Units are subservient to main house in both size and colour
- High quality detailing including slate roofs, natural stone
- Development size is limited
- Building orientation to reduce noise impact on neighbours
- Sufficient parking kept separate away from units, no separate access road

Balmaha: small cottage development

- Siting and density relates to existing house
- Units are subservient to main house in both size and colour
- High quality detailing including slate roofs, natural stone
- Development size is limited
- Building orientation to reduce noise impact on neighbours
- Sufficient parking kept separate away from units, no separate access road
3.2 Extensions
A well designed extension can enhance the character, appearance and architectural value of a building. The design principles already set out in this guidance will apply to your proposal however the following principles should also guide the design of your extension:

- New extensions should not be larger in scale than the original building i.e. it should not overwhelm or dominate the original building.

- On a large house plot, consider a detached outbuilding or linked extension.

- Eaves and ridge heights should be no higher than existing building.

- Materials and detailing should complement the original building.

- Ensure the extension does not compromise the privacy or sunlight daylight afforded to neighbours.

Many householder extensions will be permitted development (i.e. not requiring planning permission) except in conservation areas or for listed buildings or flats.

Further information can be found in the Scottish Government’s Circular on Householder Permitted Development Rights. See Section 4, sources of information.

**Good Extension**

- Appropriate scale – ridge lower than existing.
- Contemporary design and materials yet complementing original house.

**Rural setting extension**

- Double pitch used to match scale of original house
- Contemporary materials to complement original

**Urban setting extension**

- Use of glass to see through to original building
- Materials and roof pitch are contemporary and extension is not trying to match
- It does not overwhelm or dominate the original building.
3.3

Outbuildings
Outbuildings can contribute to the local character of an area. For example, simple timber outbuildings of traditional form and bespoke rendered buildings are a marked contrast to prefabricated concrete buildings and garages that can detract from the character of the locality.

Outbuildings are becoming increasingly popular, either to provide additional accommodation or a variety of ancillary uses such as biomass systems to garage space. Many outbuildings in the grounds of house will be permitted development (i.e. not requiring planning permission) except in conservation areas or for listed buildings.

Two storey outbuildings are generally not encouraged as they can adversely impact on the character of existing buildings, as well as the amenity of neighbouring properties. Outbuildings should:

- Be subservient in scale to the main building or house on the site.
- Harmonise with the main building to which it relates and complement the style, profile and materials.
- Avoid impact on existing trees.
- Not cause overdevelopment of the site i.e. not take up too much garden ground.
- Be designed to appear as incidental and subservient to the main building in terms of the size, scale massing and finish.
- If providing additional living space, it should not appear residential in character i.e. look like a separate dwelling house with separate private space.
- Use natural materials where appropriate that harmonise with the outside space and complement the landscape.
- Consider sustainability – use local reclaimed material, encourage wildlife e.g. bat and bird boxes, water should be recycled from roofs to water butts or ponds, green roofs could be considered and roof space could be utilised, where appropriate, for solar panels.

Timber outbuildings
- The form and design harmonise with the main building.
- It does not result in overdevelopment of the site.
- Appropriate choice of materials gives subservient feel.

Further information can be found in the Scottish Government’s Circular on Householder Permitted Development Rights. See Section 4, sources of information.
3.4 Agricultural buildings
Agricultural buildings

Agricultural is a key industry within the National Park and it helps maintain the special qualities of the Park. The same high design standards apply to new agricultural buildings as to any other proposal in the National Park.

The same high design standards apply to this agricultural buildings as to any other proposal in the National Park. This guidance is on design and setting only and does not cover the application procedure. Specific advice can be sought using our pre-application service. You should also refer to the government’s Planning Advice Note on design and sitting of agricultural buildings.

**Siting**
You should follow the general siting guidance provided above. Our preference is for new buildings to be within, or well related to, existing buildings, but avoid siting near residential properties unconnected with the farm. The landscape and visual context of the site including key views to and from it, as well as the external spaces around them should inform the siting, layout and design of the buildings good landscape design being sympathetic to local character.
Cut and fill can often be the best method of providing a level site on a slope. However this approach should be kept to a minimum as it can result in large extents of unattractive steep cuttings and bare downslopes which are difficult to re-vegetate. Mitigation through the extension of the site footprint to allow gentle back slope (batter) can aid restoration and therefore achieve successful landscape integration and avoid significant landscape and visual impact in the wider and local landscape.

Retaining walls are also visually intrusive if poorly planned, designed and lacking in attention to detail. Planting mitigation can successfully be used to break up or screen retaining walls. Native hedging with field boundary trees and or woodland copses would be the most appropriate in rural settings dependant on the existing local landscape character.

Building up a level platform is not advisable as it makes a building more prominent with unsightly un-vegetated slopes and result in landscape and visual impacts. Stepped buildings can be used and produce interesting roof patterns. Existing access roads should be used where possible but where required they should follow established field boundaries and contours.

Farm buildings built of local materials such as rubble stone and slate provide local character. However changing farm practices and new environmental, hygiene and animal welfare requirements have created a demand for new and larger buildings which are often unattractive.

**Form and Design**
Modern farm building are generally a single span, shallow pitched roof construction to achieve best economic and practical solution. You should vary the standard rectangular plan, break up large flat expanses of walls by using different materials, use different coloured materials for walls and roofs and divide a building where possible into smaller ones. An industrial appearance to doors, i.e. boxed runners should be avoided.

**Materials**
The type, colour and texture of construction materials are extremely important in the National Park context. Breeze blocks for instance are not considered appropriate in sensitive and prominent locations. Concrete blocks if high quality can be acceptable and a concrete plinth is also suitable where timber, stone or corrugated metal is used alongside. Use dark matt finishes such as brown, dark green, black or dark grey which blend with the landscape and choose a darker colour for the roof. The colour will depend on the local surroundings.
3.5 Conversion of traditional buildings
Conversion of traditional buildings

The Proposed Plan has a specific policy on conversions and the criteria of the policy must be met. We expect very high standards to retain the character of an original building.

Are buildings suitable for reuse?
You need to balance the practical requirements of a new use against the need to protect the special characteristics of a traditional building. Some buildings will not be suitable for reuse due to their scale (i.e. low floor to ceiling height, or require substantial extension), their importance (have a special historic or cultural significance), their condition (be in such poor condition that they would have to be demolished and re-built).

What survey and reports may you need that are different from a new build proposal?
We recommend you submit an appraisal of the building history identifying its previous use (cattle shed, barn, stable, cart shed, other) and why it has become redundant. A structural assessment is useful to ensure the building is capable of being reused. You should get the building recorded on the Historic Environment Record. A wildlife and ecology survey should be undertaken. A bat and barn owl survey are usually essential.

Extensions and alterations including new window openings
You should adapt your plans to suit the existing building structure as far as possible. Guidance is provided in the above section on extensions but it is particularly important that where a building is being converted that it is not significantly extended but minor extensions can add to the character. Avoid over-large dormer windows or complex roofs. New window opening should reflect the original agricultural character. Large openings can often be accommodated in old cart/machinery entrances and barn doors. Details such as lintols and window dressings should be carefully considered.

Materials
You should use lime mortar to re-point joints to existing stonework as it allows traditionally constructed buildings to breathe. Cement mortars tend to have a closed pore structure that traps water. Walls are unlikely to have damp proofing so consider a well-thought through approach to drainage and ventilation as well as new damp proof measures. Limewash should be considered as an alternative to stone painting. Most roofs tend to be slate and any new sections of roofs should use salvaged slate where possible. Traditionally windows and doors were made of timber and PVC-U and aluminium windows should be avoided.

For further information read “Historic Scotland Guide for Practitioners: Conversion of Traditional Buildings Application of the Scottish Building Regulations 2004” Even though it is out of date it is very comprehensive and useful.
**External area - including outbuilding, gardens and car parking etc.**

The environs (areas surrounding) a conversion and any required outbuildings and site infrastructure should not be an afterthought. The external and internal spaces around them merit equal consideration in terms of design and layout views in and out, circulation and attention to landscape design to ensure the buildings and features relate and fit into the local and wider setting. For example where there is a group of converted farm buildings and where they are subdivided into a number of properties, you should consider retaining common open space/garden ground. This would enable local landscape character and a link to the wider countryside to be retained as well as the potential to produce a more naturalistic, integrated and appropriate landscape treatment for the landscaping.

You may need to consider separate outbuildings i.e. sheds, garages if the conversion itself has limited internal storage space. Bin storage, oil/LPG tanks and car parking should be hidden or screened and integrated into the setting, linking with the main buildings. High timber fencing should be avoided and stone walls, hedges, estate metal fencing or post and wire fencing are appropriate. Other sustainable design principles in relation to water and energy should be considered (see section above).
Glossary and sources of information

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| **Landscape setting** | In the National Park any of the landscape settings are influenced by the visual distinctiveness of landmark summits and the backdrops, focii and skylines these provide in any one location. Within the National Parks’ wider ‘landscape setting’ there are many components (i.e. woodland, farmland, hillside) which combine to make up any one ‘setting’ and the way setting is described.

The principle components of this wider setting are derived from the National Parks’ Special Landscape Qualities and Landscape Character. Landscape setting is also defined by the views in and out of the landscape on either side of the National Park boundary, it varies in depth according to the landscape character areas and topography. |
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<td><strong>Landscape design</strong></td>
<td>Landscape design involves the practical, aesthetic, horticultural, and environmental sustainability components of the overall design of a development in the landscape. It is carried out by both Landscape Architects and Landscape Designers. The use of either or both depends on the nature and brief for a development and the qualification and skills of the appointed agents.</td>
</tr>
<tr>
<td><strong>Layout</strong></td>
<td>The way buildings, routes and open spaces are placed in relation to each other.</td>
</tr>
<tr>
<td><strong>Listed building</strong></td>
<td>Buildings of special architectural or historic interest identified by Historic Scotland on behalf of Scottish Ministers that have statutory protection under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.</td>
</tr>
<tr>
<td><strong>Microclimate</strong></td>
<td>The variations of climate within a given area, usually, influenced by hills, hollows, structures or proximity to bodies of water.</td>
</tr>
<tr>
<td><strong>National and Major Applications</strong></td>
<td>These are types of planning applications which have certain legal requirements. They are defined by the Hierarchy of Development (Scotland) Regulations 2009 or any amended version. See the Government’s Circular 5/2009 for further information.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td>Naturalistic</td>
<td>Not formal and closely relating to or imitating nature</td>
</tr>
<tr>
<td>Placemaking</td>
<td>Creating somewhere with a distinct identity</td>
</tr>
<tr>
<td>Phase 1 Habitat Survey</td>
<td>A survey undertaken of the general habitat of a site include target notes specifying specific plants and animals.</td>
</tr>
<tr>
<td>Sun path analysis</td>
<td>The method of mapping the seasonal and hourly route the sun takes in a day from east (where it rises in the morning) to west (where it sets in the evening) from summer to winter. It is used to design the optimum building design to achieve passive solar heat gain, maximise use of natural daylight, provide appropriate summer shading and minimise overshadowing of adjacent properties/outdoor spaces.</td>
</tr>
<tr>
<td>Sustainable urban drainage</td>
<td>A way to manage surface drainage in a sustainable manner i.e. through ponds, permeable paving so it does not go directly into sewerage pipes.</td>
</tr>
<tr>
<td>Topography</td>
<td>Mapping to shape of the land surface i.e. the contours or a description of features on the ground.</td>
</tr>
<tr>
<td>Tree Constraints Plan</td>
<td>A plan showing all the existing trees on site and the root protection area where fencing would be erected to protect the trees from construction works.</td>
</tr>
<tr>
<td>Vegetated gabions</td>
<td>A rectangular basket made of galvanized wire mesh and filled with rock.</td>
</tr>
<tr>
<td>Visual amenity</td>
<td>A pleasant or attractive element of the environment that can be seen.</td>
</tr>
</tbody>
</table>
Sources of information

Scottish Government policy
- Designing Places (2010)
- Designing Streets (2010)

Special context of Loch Lomond & The Trossachs National Park
- Landscape Character Assessment (SNH)
- Guidelines for Landscape and Visual Impact Assessment (Landscape Institute)
- Use of photography and photomontage in landscape and visual assessment (Landscape Institute)
- The Special Landscape Qualities of the Loch Lomond and the Trossachs National Park (SNH)
- Wildness Study in the Loch Lomond & the Trossachs National Park (SNH);
- Loch Lomond & the Trossachs National Park Non-Inventory Designed Landscape Study;
- Historic Designed Landscape Study (LLTNP)
- Landscape / Seascape Assessment of the Firth of Clyde
- Community Action Plans (Loch Lomond Community Partnership)
- Listed Buildings and Conservation Areas Supplementary Guidance and Background Info (see LLTNPA website)
- Community Action Plans (Loch Lomond Community Partnership)
- Conservation Area Appraisals (see LLTNPA website)
- New Design in Historic Setting (Historic Scotland)
- Town Centre Toolkit (Scottish Government, 2015)

Preparing a design statement or Masterplan
- PAN 83 Master Planning (2008)

Sustainable design and construction
- Renewable Energy Planning Guidance (LLTNPA)
- PAN61 Planning and Sustainable Urban Drainage System (2001)
- Wild Park – LLTNP Biodiversity Action Plan
- Protected species advice and further links – SNH website
- Landscape and Urban Design for Bats and Biodiversity, Bats Conservation Trust
- Timber Cladding in Scotland (2002, Scottish Government)
- Green Infrastructure – An Integrated Approach to Land Use (Landscape Institute, 2013)
- Building Regulations 2011

Development in the countryside
- PAN44 Fitting New Housing Development into the Landscape (1994)
- PAN 39 Farm and Forestry Buildings
Adopting Design Professionals
- Landscape Architects – Landscape Institute website
- Architects – Royal Incorporation of Architects – RIAS website
- Urban Designers – Urban Design Group UDG website
- Building Conservation – Institute of Historic Building Conservation website

Biodiversity and Development
- Bats and People (SNH)
- A review of the success of Bat Boxes in Houses (Bat Conservation Trust commissioned by SNH)
- Barn Owls on site – A guidance for Developers and Planners (The Barn Owl Trust)
- Red Squirrels (SNH)
- Badgers and Development (SNH)
- Otters and Development (SNH)
- Conserving Scotland’s Water Vole (SNH)
- Great Crested Newt Handbook (Froglife)
- How to Survey Freshwater Pearl Mussels (SNH)
- Handbook for Phase 1 Habitat Surveying (JNCC)
- Trees in Hard Landscapes – A Guide for Delivery (Trees and Design Action Group)
- Arboricultural Association guidance notes and leaflets

Sustainable Urban Drainage
- Sustainable Drainage Systems - Maximising the Potential for People and Wildlife (WWF, RSPB, 2013)
- PAN 61 Planning and Sustainable Urban Drainage Systems (2001)
- Surface Water Drainage and Sustainable Drainage Systems (SUDs) Dumfries and Galloway Supplementary Planning Guidance (2014)
- The Rain Garden Guide (Bob Bray, Dusty Gedge, Gary Grant & Lani Leuthvilay, - www.raingardens.info
- Sustainable drainage systems - www.ciria.com/suds