FORESTRY COMMISSION
GUIDANCE NOTE NO 23 **Amended July 2003**

LANDSCAPE DESIGN AND PRESENTATION FOR SMALL WOODLANDS

Introduction

The intention of this guidance note is to give practical advice on the design and presentation of small woodland proposals submitted to the Forestry Commission under the Scottish Forestry Grant Scheme (SFGS). It looks at the level of written and visual information which Forestry Commission staff would like to see to help us evaluate the possible visual and environmental impacts of the proposals.

If you have any doubts about whether the requirements in this guidance note apply to your project please speak to local Forestry Commission Conservancy staff. Their address and telephone number can be found at the back of the SFGS Applicants Booklet or in the telephone directory.

The following Forestry Commission booklets are recommended reading for small woodland landscape design:

Lowland Landscape Design Guidelines - Price £9.95
Community Woodland Design Guidelines - Price £9.75

Both these publications are available from HMSO Bookshops and through good booksellers.

These guidelines give information about the principles of woodland design and how to carry out a design project, including some basic techniques of presenting your proposals. If you feel you lack the skills or confidence to carry out a design proposal or that your scheme may be potentially complex and you would like professional help, Forestry Commission Conservancy staff will be able to give you advice on how you may find such assistance.

Written and Drawn Information

There are four basic steps in forest and woodland landscape design. These are:

1. Preparation of a design brief (a list of your objectives)

2. Site survey (collecting information on the site and its surroundings)

3. Information appraisal (appreciating the relative significance of the survey information)

4. Scheme design (developing ideas from what the appraisal says of the site and your own objectives into a woodland proposal)

You can present all of this information on plans with written notes to show the points you consider are important in your design proposal.

The process of design should also consider the effect your proposals will have on views of the landscape. Where these are considered to be important, applicants will be required to provide a visual interpretation of what the view will look like (perspectives) with your woodland added.

If in any doubt whether your proposal may require perspectives, please ask local Forestry Commission Conservancy staff for guidance.

Choosing Viewpoints

Viewpoints should be selected to show the proposals from the most sensitive places and to help the designer achieve a scheme that fits in with the landscape.

A scheme should be illustrated from locations that:

- people are known to visit and from where they will be able to see your scheme;
- clearly show your scheme within the surrounding landscape.

Viewpoints are considered sensitive depending on their location and number of people who may see the woodland, and the time they could spend viewing your scheme. The main types of views are from:

- those living in the landscape (the edge of a town or village, or a cluster of houses or farmstead etc);
- those who gather in the landscape (for recreation or community event etc);
- those travelling through the landscape (by road, rail, water etc).

Where a number of similar viewpoints are possible use your judgement to select the most important one.

Using Photographs

Using photographs is the simplest way to illustrate your scheme from selected viewpoints. Often a view may be too wide to show the entire area in one photo and a recommended technique is to join overlapping photographs together to create panorama (refer to the illustrated example at the end of the text).

The choice of camera and camera lens is important. The most appropriate camera is a 35mm single lens reflex with through-the-lens light metering and a 50mm focal length lens. Models which have manual setting of exposure and shutter speed are better than completely automatic cameras since this allows accurate exposure of the landscape, compensating for how bright or dark the sky may be. A good compact or digital camera with similar exposure facilities can also provide satisfactory photographs or digital images.

Whatever camera is used the lens should be 50mm focal length (or, if variable, capable of being set to 50mm) since this gives a picture similar to that seen by the human eye and makes the overlapping of photographs much simpler. Focal lengths above and below 50mm will distort the picture; above 50mm the lens will 'zoom' into the landscape and bring forward the image, below 50mm the lens will give a more 'wide angle' view making the scheme appear further away from the viewer.

If colour photograph film is used a film speed of 200 ASA should give good results under most lighting conditions. 400 ASA film can be used under poor daylight conditions but the photographs may lose some detail.

Preparing 'Panorama' Photographs

To prepare panoramic photographs try to ensure when taking the pictures that you have an overlap of around 25 per cent between one photo and the next. The photographs can be 'landscape' with the camera held in the usual horizontal position, or 'portrait' with the camera held vertically. 'Portrait' photos use more film but can be useful when the site and proposals are close to the viewer and would more than fill the picture if taken in 'landscape'. Ideally a panoramic sequence of photographs should include both sky at the top of the photograph and foreground at the lower edge, with the ends of the panorama including scenery outside your proposal area.

You may find it useful to take photographs from a wide range of viewpoints. This will help you to understand the landscape and to select the most appropriate photographs for the design and illustration of your scheme. Remember that taking too many photographs and having them developed could be cheaper than making a return journey should you miss a vital scene.

For design purposes the photographs should be processed at the standard 5" x 7" or larger to give a bigger visual image of the landscape as you might actually see it.

Using Panoramic Photographs for Design and Presentation

Having produced your panorama photographs there are two simple ways in which these can be used for designs and presentations:

1. Using transparent overlays.

This technique is best done using clear acetate laid over the panoramic photographs. With a permanent fine black pen, the main landscape features are traced onto the acetate. This line drawing can then be photocopied on to paper and used through the process of design outlined above. Colour crayons or felt-tip pens can be used to illustrate the scheme in appropriate colours and textures.

Rolls of acetate are available so that panoramic photos can be covered with a single sheet. All these materials can be bought from a good arts/graphics materials shop.

2. Laser copying (a more sophisticated type of photocopying) the original to create black and white copies.

For this to be successful the photograph needs to be of good quality, taken on a bright day so that all the details of the landscape can be seen.

This technique avoids the necessity of a line drawing on acetate but requires access to a laser copier. Such printing facilities are generally available from larger printing and copying shops, although even small companies are installing colour laser copiers as their purchase price comes down.

Laser copiers have the capacity to generate copies in half-tones and subdue colour, the objective being to provide a panorama picture in tones of grey where the background detail of the landscape is visible yet the added information of the scheme will stand out more obviously. Copies of the grey tone picture can then be used for the analysis and design through to the final presentation drawings. Colour can similarly be applied with crayons or felt-tip pens, the grey base seen through the colour but not too black to obscure the proposals.

Artistic skill is helpful but by no means essential for the production of perspectives. What is essential, however, is a degree of accuracy when drawing the shape, height and position of the woodland on the perspective and transferring the scheme between perspective and plan.

When completed, colour copy your proposals and keep the originals for future reference.

Drawings Required

Providing a comprehensive level of plan and perspective information is essential to Forestry Commission Woodland Officers who have to judge your woodland proposals. Woodland Officers may not have your local knowledge of the site and surrounding area, so accurately presented plan and perspective information will help them to understand your ideas.

The following is a summary of the presentation material you should provide to illustrate your forestry and woodland proposals:

Site Survey and Appraisal

You will have carried out a full survey of your site and the surrounding area, collecting information on both the physical and visual features.

The analysis is when you look at all the gathered information and decide what it might mean in terms of your proposed woodland. This analysis stage generally has two separate parts:

1. Site Features

Analysis of all the site features to decide those which may act as a constraint on your proposals and those which provide opportunities for developing your scheme.

2. Visual Appraisal

Analysis of your visual study of the site area and surrounding landscape. This should help you understand the patterns which form the landscape; the scale of the area, be it large and open or small and enclosed; the shapes in the landform, be they smooth and rounded or sharp and jagged.

The visual analysis should also look at the different elements of the landscape to see how diverse it is, also those features that make the landscape appear special in some way - the ‘spirit of the place’. This study should also identify any existing visual problems that could be helped by your proposals, such as adding to an existing woodland to improve shape and scale.

Clear drawings in plan and perspective are normally required, the perspectives from your selected viewpoints.
The landform itself can be analysed using the drawing technique of 'lines of force'. This is where colour lines are used to illustrate the direction of a slope and, by increasing the width of the line, the steepness of the slope can also be shown.

Red Lines - running down spurs and ridges; convex slopes.

Green Lines - running up valleys and gullies; concave slopes.

Consider in your analysis the general character of the landscape (the separate parts of the landscape and the way they are put together gives the area a particular appearance; its' character). Think about this composition and the visual effect of existing natural features, such as rock outcrops, water-courses and tree groups. Also consider man-made features, for example field boundaries, roads and powerline corridors.

For general advice on the local landscape character of your area you can refer to the suite of Scottish Natural Heritage Landscape Character Assessments.

Areas of opportunity for your proposals should also be identified and recorded. For instance, zones of good, deep soils in sheltered areas that would give scope for species diversity and long term tree retention.

All this information should be interpreted and recorded on your plans and perspectives, the perspectives showing the most important landscape features using drawings and notes.

Design

The design proposal comes out of the analysis; the better the analysis the more it will help you to decide what you can and cannot do with your site and how your proposals will best fit in with the landscape. What the Forestry Commission will be looking for in your scheme will be that the proposals offer multiple benefits in terms of the diversity of the woodland and a contribution to both the environmental health and visual appearance of the landscape.

Again, where appropriate, your proposals should be in plan and perspective with the design process decided in perspective then transferred to plan, especially important when the proposals are sited on prominent hill sides.

Aerial photographs - especially those in colour - can be a valuable tool allowing you to find in plan what you will see in the panorama photographs. This will help you transfer your design from the perspective to the plan. Careful study of the aerial photographs can reveal site detail, such as tracks and rides, enclosure pattern, rocky outcrops and tree and scrub vegetation; all critical information to producing a good, workable proposal. A useful step is to plot the design onto clear acetate overlying the aerial photograph before transferring it to your proposals map.

To help your appreciation of what we would like you to provide in terms of design process and particularly perspective drawings you will find below a simplified, hypothetical scheme.

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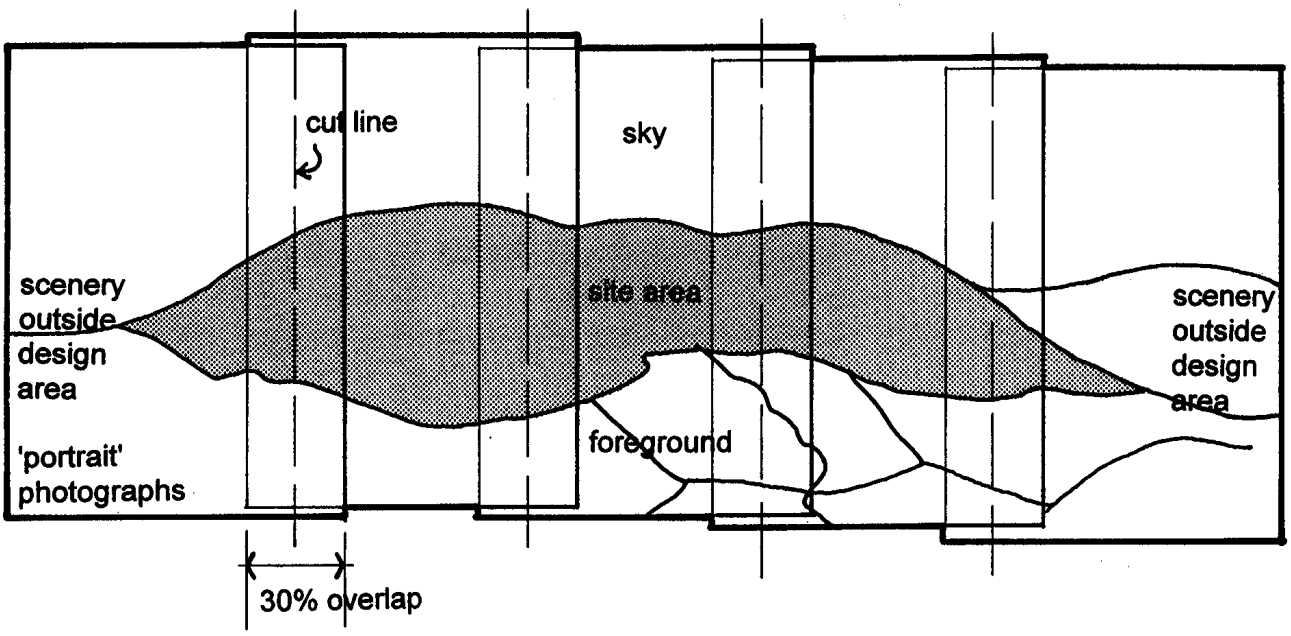
Landscape Architect
Forestry Commission Scotland

Panorama Photgraphs

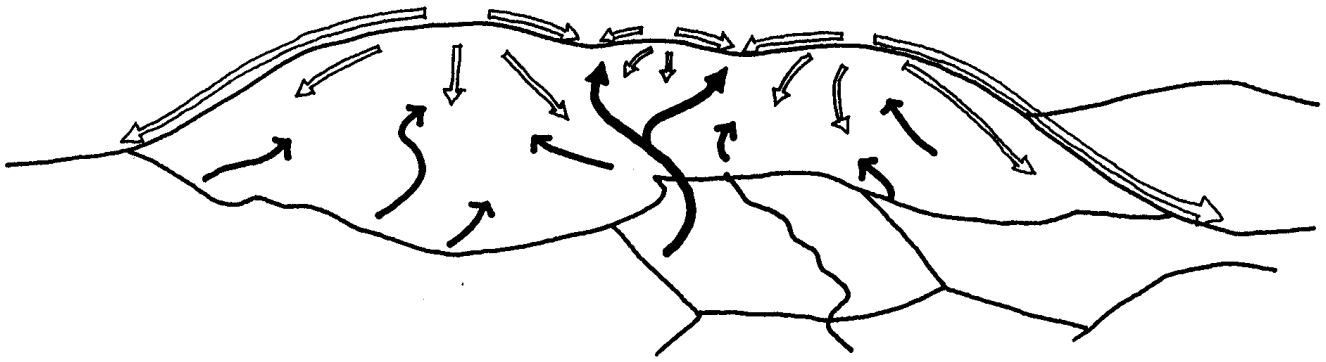


Photographs laid out, each aligned accurately to the adjacent and held in position with pieces of masking tape.

Carefully cut down middle of overlap using scalpel and steel rule.

Remove masking tape from face of photograph and replace with tape strip to the back of the cut photographs.

Landform Analysis



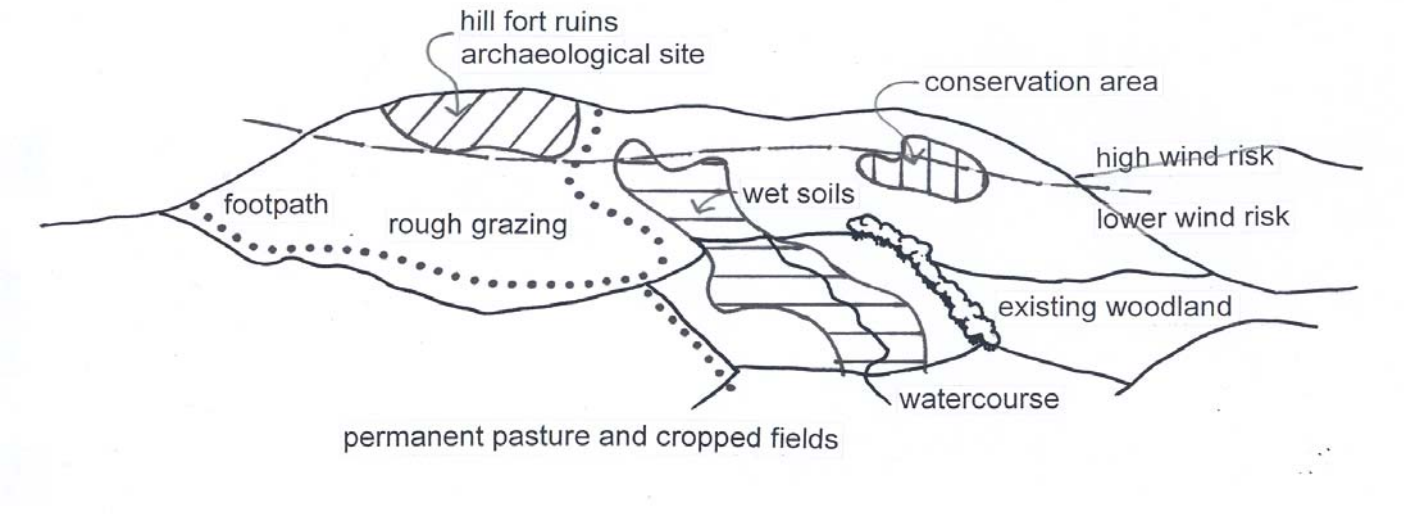
Downward forces, down spurs, ridges, convex slopes - colour red.

Upward forces, up valleys, gullies, concave slopes - colour green.

Note the use of thicker arrows to achieve a relative hierarchy of 'lines of force' reflecting the steepness of slope and character of the landform.

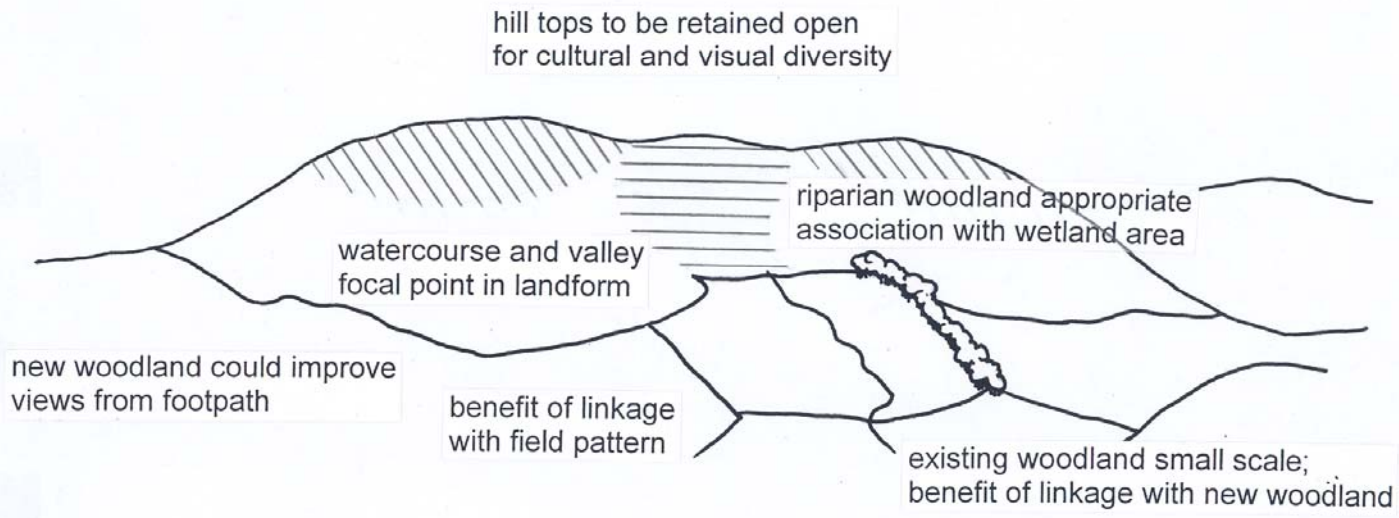
You may find this analysis easier to accomplish if you first carry out the exercise on a 1:10,000 OS contour plan and then transfer the information to the perspective elevation.

Appraisal of Site Factors



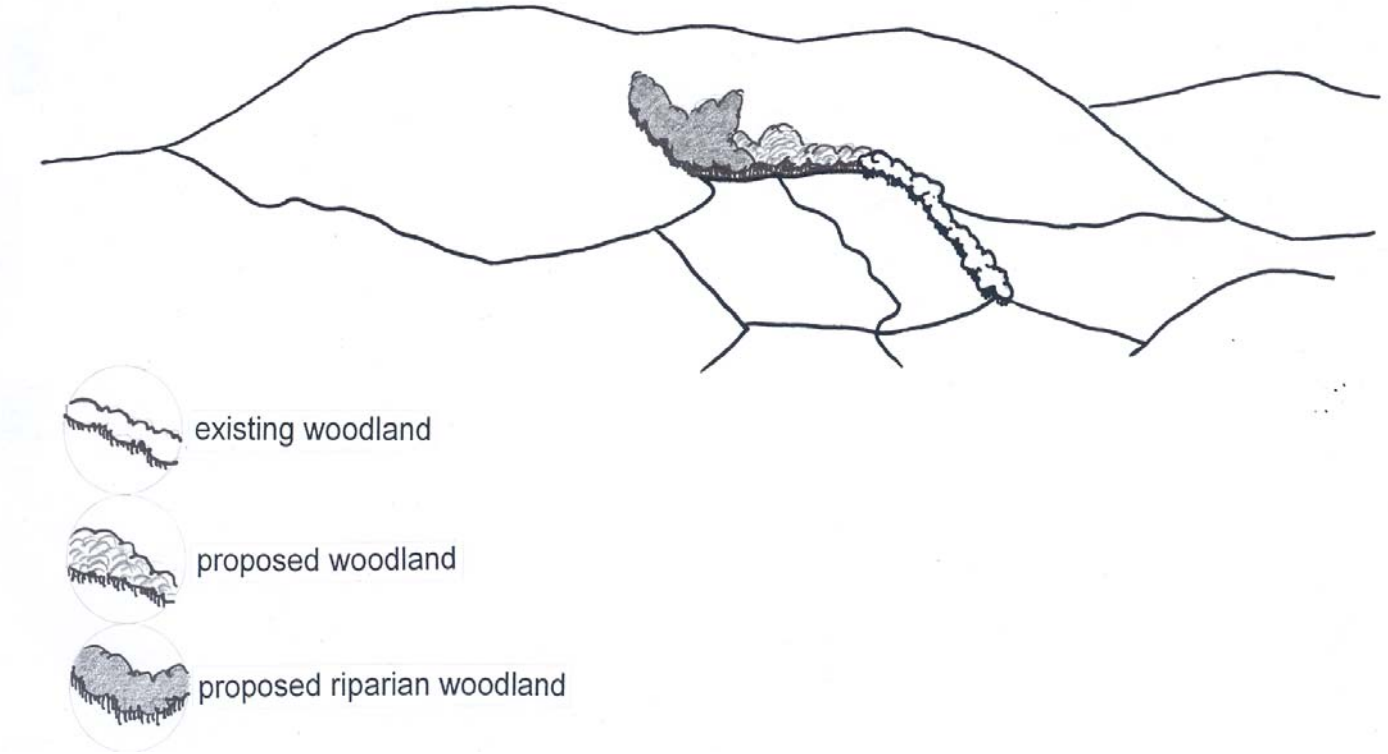
The above is an illustration of a hypothetical scheme showing the sort of factors that may have to be considered. Most selected sites will have a combination of natural and man-made features that will be potential constraints on woodland proposals. They will also have identifiable assets that provide opportunities for diversity and the achievement of multiple benefits. All factors should be considered not only for their individual contribution to the character of the site but also collectively to determine any patterns of constraints and opportunities that may assist you in the design.

Visual Appraisal



The visual appraisal is carried out from the established viewpoints. It considered the site factors in context with their existing and potential contribution to the visual appearance of the scheme within the local environs. With the objective of achieving unity in the landscape the visual appraisal should be carried out with an appreciation of the local landscape character.

Design Proposals



Note the following general rules of design:

1. In hill areas with either an indistinct or absent enclosure pattern woodland shapes should be related to landform; ascending up gullies, descending down spurs. If, however, the intention is for more extensive woodland cover that 'caps' an entire hill then this principle can be reversed; bring woodland off the high ground and down the ridges, leaving the gullies as open ground.
2. Open ground should interlock with woodland shapes and species areas should interlock one to another.
3. In all design aspects avoid symmetry, adopt asymmetry of one-third to two-thirds (open ground to forest, dominant to sub-dominant species etc).
4. Lines creating shapes should respond to landform. Avoid horizontal and vertical lines; use diagonal lines curved to the shapes of the landform.
5. Care should be taken to establish transitional edges where forest margins are adjacent open ground. This can be achieved by decreasing the planting density, especially to upper margins, and including an element of scrub planting to lower margins, all to achieve a diffuse edge.