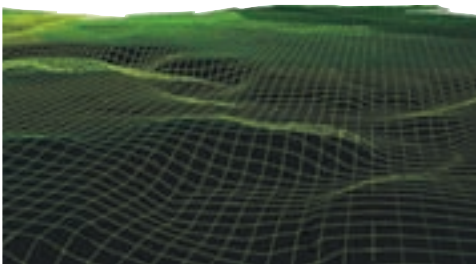




Urban design in the Nieuwland neighbourhood of Amersfoort, Holland, is centred on optimising solar potential



A terrain model can provide an invaluable tool for masterplanning sloping sites



Existing features can provide cues to inform design

A thorough investigation of a site's natural resources will lead to an overall design response that:

- integrates the various needs of the new development;
- identifies possibilities that the site offers; and recognises the site's limitations.

Work with the elements

The optimum approach involves the maximum use of the site's resources while placing minimum demands on the environment. This involves taking a long term view of the possible environmental impact and addressing how to:

- utilise the solar potential;
- make full use of rain water and drainage systems;
- use the potential of the ground for heating or cooling;
- harness wind energy;
- further reduce energy demands by, for instance, integrating a Combined Heat and Power (CHP) plant into the development (see 3.4.5) or harnessing biomass.

Table 2.3 (taken from English Partnerships' *Best Practice Note 65*) provides an inventory of considerations to use as the basis for environmental and landscape appraisal. This may culminate in an environmental statement or environmental impact assessment, according to the project scale.

'If it ain't broke, don't fix it'

The critical questions to be asked include:

- should the site be developed at all?
- if it should, then what parts of the site?
- what mitigation measures can be taken to avoid, reduce and remedy negative environmental impacts?
- what types of development are appropriate and how can these integrate with the wider urban structure?
- which features can form the basis of the landscape structure?
- how can exploitation of the site's assets reinforce a unique sense of place?

As a general principle, it is important to focus on how to repair and re-use previously developed or damaged parts of the site, while retaining and respecting undamaged parts. This requires three key considerations:

1 Identify landscape assets to preserve

Many of the most valuable spaces, places and landscape assets are precisely thus because they have been left alone. Most ecological or landscape assets need respecting, rather than exploiting. The value of a landscape asset can easily be degraded.

2 Re-use and repair brownfield land

Many sites will be deficient in natural or semi-natural assets, such as topographical features, watercourses and planting. Furthermore, decontamination or remediation may cause further impacts on the existing landscape. On such sites consider ways of:

- introducing new landscape features and wildlife habitats;
- restoring damaged parts by, for instance, re-profiling a slope;
- integrating elements from the site's past life, such as routes, structures and buildings.