



# COMMISSIONED REPORT

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Commissioned Report No. 120

## **New housing, settlement expansion and the natural heritage**

(ROAME No. F04AA501)

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## New housing, settlement expansion and the natural heritage

Commissioned Report No. 120 (ROAME No. F04AA501)

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### Background

Housing developments can have positive and negative impacts on natural heritage interests. This report provides a review of the current debate about sustainable housing patterns and their implications for the natural heritage, and presents guidance on how to work with the planning system to secure positive outcomes for the natural heritage of Scotland.

### Main findings

- The planning system provides an effective framework to influence land use planning and manage the location and quality of new housing developments through planning policies and strategies.
- Historically, planning policies considered the natural heritage as a constraint to development, so opportunities to enhance local environments and overcome problems of fragmentation and isolation of valuable environmental resources have been missed.
- Current policy practice has recognised the value of the wider natural environment, but opportunities for achieving better integration of residential developments with the landscape, achieving biodiversity gains and improving sustainable access and open space provision have not always been maximised.
- Sustainable housing requires a more integrated approach to development and the natural environment. This needs to take account of: landscape character; opportunities to protect and enhance biodiversity; and provision for open space, access and recreation.
- It is important that these principles should be reflected in development plan policies. Supplementary planning guidance will also help to secure the implementation of sustainable housing development.

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# 1. INTRODUCTION

**This guidance should be used by SNH staff when working with local authorities and developers, to successfully target natural heritage issues associated with housing developments.**

This report provides a review of the current debate about sustainable housing patterns and the implications for natural heritage and presents guidance on how to work with the planning system to secure positive outcomes for the natural heritage of Scotland.

The guidance is designed for use by SNH area officers and presents the key principles for natural heritage in the context of new housing developments and when and how to get involved with local planning authorities to secure beneficial outcomes for natural heritage.

Throughout the guidance, examples of best practice are set out to illustrate the types of solutions available.

## **New housing and settlement expansion**

Despite a falling population, the changing nature of household type in Scotland continues to place considerable pressure on existing settlements to expand in order to secure an adequate supply of affordable homes. In the SNH Natural Heritage Futures Settlements Prospectus, concerns are raised in relation to the effects of urban sprawl, in particular affecting the Country's six designated green belts and creating pressure on towns within commuting distance of the main employment centres. The prospectus identifies a number of trends in settlement patterns, including:

- higher density housing developments;
- settlement consolidation through the re-use of brownfield land;
- expansion onto greenfield sites;
- settlement amalgamation;
- growth of smaller rural or suburban settlements particularly within commuting distance of urban areas; and
- more houses in the countryside.

The pressures for growth and expansion can, and do, impact on the natural heritage and it can be

difficult to secure protection and enhancement in light of the range of considerations that affect decisions to locate and develop new housing schemes, such as infrastructure and access to services considerations.

The development planning system provides an effective framework to influence land use planning and manage the location of new housing developments through development plan policies, including the protection of European, nationally and internationally important sites and the protection and enhancement of other features of natural heritage value.

New housing and settlement developments can make positive contributions to natural heritage, and to national objectives for sustainable development and economic prosperity. It is important however, to secure protection of not only designated sites, but the overall natural environment, through the provision of informed planning policy and by the implementation of informed development control decisions.

Developing sustainably in the broadest sense means achieving development to meet present needs whilst securing the ability of future generations to meet their own (World Commission on Environment and Development 1987). It is often the case that when developing strategic policies and identifying sustainable locations for new housing expansion, there is a tendency to focus on sustainable economies, transport and building design, overlooking the important role and value of natural heritage. While designated areas are protected, indeed isolated, for the most part from these types of development, opportunities for protection, restoration and enhancement of non-designated, yet important natural heritage features can be missed, to the detriment of the scheme and the environment.

Residential development should therefore aim to achieve a holistic approach taking into account sustainable:

- economies;
- transport;
- energy;
- communities;
- landscapes;
- biodiversity; and
- access and recreation.

Specifically in natural heritage terms, sustainable approaches to residential development should be well informed, establishing baseline understanding of the natural environment. This will help to establish what action to take and why, namely to:

- protect;
- restore; and or
- enhance.

#### **Additional Guidance: Sustainable Development and the Natural Heritage**

SNH considers that all social, cultural and economic activities need to take place within agreed environmental constraints, and due weight needs to be given to the long-term stewardship of the environment. It also recognises the importance of creating and maintaining high quality natural environments for economic development and quality of life. SNH has established five guidelines for sustainable development as it relates to the natural heritage.

**Guideline 1:** Sustainable Use - non-renewable resources should be used wisely and sparingly, at a rate that does not restrict the options for future generations.

**Guideline 2:** Carrying capacity - renewable resources should be used within the limits of their capacity for regeneration.

**Guideline 3:** Environmental Quality - the quality of the natural heritage as a whole should be maintained and improved

**Guideline 4:** The Precautionary Principle - in situations of great complexity or uncertainty the precautionary principle should be applied.

**Guideline 5:** Shared benefits - decisions about development need to look for a more equitable distribution of costs and benefits (material and non material).

*SNH Policy Statement No 02/01*

## **Study objectives**

This study's objectives are to:

- review appropriate literature to summarise the current debate on sustainable housing patterns, with a particular emphasis on their environmental/natural heritage implications;
- review a selection of recent development plans and housing capacity studies to identify a range of spatial housing strategies being taken forward in Scotland;
- identify the implications and opportunities for the natural heritage of these different approaches, identifying the positives and negatives of each; and
- provide a framework for guidance which SNH staff would use in considering the implications of development plans' proposals, masterplans for housing developments, housing capacity studies and other strategic documents.

## **Methodology**

This study has been divided into two stages, the first identified and reviewed relevant literature, current development plans, recent and current housing capacity studies and identified the implications (positive and negative) for the natural heritage associated with different housing strategies. It was also informed by key stakeholder consultation with representatives from area offices of SNH and also from a number of other relevant key stakeholder organisations (see Appendix 1).

The second stage of the study has drawn on this baseline information to develop practical guidelines to assist SNH staff, working with local authorities and developers, to successfully target natural heritage issues associated with housing developments.



## **How to use this guidance**

This report is divided into a further four chapters and is set out to allow the reader to quickly reference a particular issue that may arise in the course of working with local planning authorities and developers in creating the right policies for natural heritage and ensuring that these are carried through at the development stage. It should help the reader to find the relevant information necessary to inform these consultations and should be used to answer the following questions:

1. what can be achieved?
2. why natural heritage should be integrated with housing developments?
3. when to use different methodologies for informing natural heritage solutions?
4. how to achieve positive outcomes for natural heritage?

**Chapter Two** sets out the relevant national planning policies that should be used to inform discussions and representations made in relation to housing land allocations and proposals and should be used to inform consultations with, and recommendations to, local planning authorities and developers. It also looks at planning processes and housing developments and sets out guidance on the types of issues that should be considered by SNH staff when consulting with planning authorities and developers in relation to housing developments and how. This chapter should be read in association with Chapter Three.

**Chapter Three** considers the key natural heritage issues of relevance to housing developments, in relation to landscape, biodiversity, and access and recreation. It sets out the benefits of natural heritage and key principles and methods for addressing threats and opportunities that are associated with housing developments. This chapter should be used to gain an introduction to the relevant research methodologies, terminology and potential solutions for natural heritage.

**Chapter Four** identifies the key characteristic modern housing development types of Scotland and identifies guidance on the types of relevant natural heritage issues that should be considered and how. This chapter should be read in association with Chapter Three.

**Chapter Five** presents a summary, highlighting the key conclusions of the guidance.

<b>1 INTRODUCTION</b>	
<b>2 PLANNING POLICY AND PROCESSES AND NEW HOUSING DEVELOPMENTS</b>	<p>&gt;</p> <p>Landscape          Biodiversity          Access and recreation          Structure plans          Local plans          Strategic Environmental Assessment (SEA)          Supplementary Planning Guidance          Masterplans          Development control          Implementation</p>
<b>3 PRINCIPLES</b>	<p>&gt;</p> <p><i>Landscape</i></p> <ul style="list-style-type: none"> <li>• Issues and impacts</li> <li>• Principles and action</li> <li>• Landscape character assessment</li> <li>• Townscape character assessment</li> <li>• Landscape sensitivity</li> <li>• Landscape capacity</li> <li>• Landscape guidelines</li> <li>• Benefits for housing development</li> <li>• Types of landscape opportunities</li> </ul> <p><i>Biodiversity</i></p> <ul style="list-style-type: none"> <li>• Issues and impacts</li> <li>• Principles and action</li> <li>• Baseline conditions</li> <li>• Constraints mapping</li> <li>• Implementation</li> <li>• Site management plans</li> <li>• Benefits for housing development</li> <li>• Types of ecological opportunities</li> </ul> <p><i>Access and recreation</i></p> <ul style="list-style-type: none"> <li>• Issues and impacts</li> <li>• Principles and action</li> <li>• Baseline conditions</li> <li>• Needs and desires</li> <li>• Potential connections</li> <li>• Benefits for housing development</li> <li>• Types of access opportunities</li> </ul>
<b>4 TYPES OF HOUSING DEVELOPMENT</b>	<p>&gt;</p> <p>Brownfield housing          Peripheral housing          Planned settlement expansion          New settlements          Small settlement expansion          Housing in the countryside</p>
<b>5 CONCLUSIONS</b>	

## 2. PLANNING POLICY AND PROCESSES AND NEW HOUSING DEVELOPMENTS

### Planning policy

The Scottish planning system aims to promote the right type of sustainable development in the right place and SPP1, The Planning System (Scottish Executive 2002) notes that the primary objectives are:

- to set the land use framework for promoting sustainable economic development;
- to encourage and support regeneration; and
- to maintain and enhance the quality of the natural heritage and built environment.

National Planning policies recognise the role of the environment in helping to achieve this. However, a review of Scottish structure plan policies carried out to inform this study concluded that in many cases, policies for the natural environment can tend to focus on the role of the environment in terms of creating attractive locations, attracting tourists and supporting agriculture and do not fully recognise the wider value and importance of the Country's natural heritage.

Nonetheless, national planning policies provide considerable scope to support natural heritage and the potential for contributing to achieving policy objectives across Scotland through the development plan structure. This section provides an overview of these relevant policies and should be used to support any representations made to local planning authorities in relation to development plan policies and development proposals and when negotiating with developers.

**Remember:** "in making any determination (of a planning application) under the planning Acts, regard is to be had to the development plan, the determination shall be made in accordance with the plan unless material considerations indicate otherwise". Section 25 of the Town and Country Planning (Scotland) Act 1997.

What this means is that where a developer can demonstrate that a proposal complies with local planning policy and or with the relevant material considerations, e.g. national policy and supplementary planning guidance, the proposal can be granted planning permission, subject to the approval of local council members.

If natural heritage objectives are not written into planning policy and do not reflect national policy, it becomes very difficult to secure genuine benefits for the natural heritage. In order to support your proposals and recommendations therefore, always use national policy as a reference when commenting on development plan policies, supplementary planning guidance and planning applications.

### Landscape policies

SPP1 The Planning System (Scottish Executive 2002) states that design is a material consideration in the determination of a planning application and the Policy Statement for Scotland Designing Places, (Scottish Executive 2001) stresses the importance the Scottish Executive places on good design.

SPP3 Planning for Housing (Scottish Executive 2003 c) states that:

'...housing is the largest single urban land use [and that] it is a key factor in defining the character of our cities, towns and villages. Achieving quality is therefore important.'

The policy document highlights the importance of respecting the settings of existing towns and villages and of creating quality residential environments. It also notes the contribution landscape design can make to environmental quality and identifies the role of planning authorities in maintaining the effectiveness of existing greenbelts, and the need to review green belt boundaries as part of long-term sustainable settlement strategies.

Effectively integrating landscape considerations into the planning system is supported in order to help inform the delivery of the housing land

and achieve 'quality residential environments', guiding 'development to the right place'. The policy advocates a proactive approach to planning for residential areas supporting the integration of the aspects of strategic locational guidance and detailed site design.

In particular the following issues summarised from SPP3 (Scottish Executive 2003 c) should be developed from a sound understanding of existing landscape and visual character:

- *Design, Layout and Architecture:* consideration needs to be given to the environmental impact of housing, with the overall design of development being fully addressed. In addition Planning Authorities should take a proactive approach to providing design guidance to inform developers. Policies in the development plan should ...make clear where local distinctiveness is to be maintained, and where there are opportunities for more innovative architectural approaches.
- *Energy Efficient Housing:* in the preparation of a design brief appropriate for larger schemes, energy efficiency is an important part of good design, for example, through siting and orientation.
- *Form of Development:* highlights that priority has been given to car travel with housing layout dominated by roads and car parks, at the expense of pedestrian, disabled and cycle access. Good layout design should seek to incorporate safe streets and a welcoming environment, where roads standards should serve as a guide and starting point, but should not dominate the layout.
- *Landscape and Open Space:* highlights that landscape should be integrated early into the design development of the layout. To attain a high standard of landscape design, existing mature trees, natural features, areas of open space should be respected as part of the layout development.
- *Density:* good design can be used to ensure the efficient use of land, by achieving densities of development appropriate to particular locations and sites, without overcrowding congestion or loss of residential amenity.

SPP 15 Rural Development (Scottish Executive 2005 c) supports the continued growth of small scale rural housing, advocating clusters and groups and notes at paragraph 21 that fit and design are important planning considerations.

PAN 44 Fitting New Housing into the Landscape (Scottish Office 1994) sets out advice on the shape, layout and form of the development and its impact on the surrounding area. Well designed schemes should respect both the local environment and the landscape setting.

PAN 72 Housing in the Countryside (Scottish Executive 2005) supersedes PAN 36 and places a very clear emphasis on the importance of design and quality, taking a lead for the Scottish Executive's policy statement Designing Places. The PAN sets out key design principles for promoting rural housing that "respects Scottish landscapes and buildings traditions". The PAN recognises the opportunities for conversion, rehabilitation, small scale infilling, new groups of dwellings and notes that single houses need to be planned to sensitively reflect their locality.

Guidance is set out for achieving the right locations and the right designs looking at landscape, layout and access and scale, material and details. Overall, the advice note sets out key messages to secure appropriate scale of development in rural areas, the need for clear policy frameworks and the need to ensure that new housing contributes to 'enhancing' local areas, making a positive contribution to them.

PAN 73 Rural Diversification (Scottish Executive 2005 b) aims to support diversification in rural areas and recognises the role that new housing plays in economic regeneration in rural areas. It is noted that in some locations new housing may be appropriate to complement business proposals, however rural housing should not be seen as a form of rural diversification in itself. Where such housing is proposed it should still be located in sustainable locations.

Circular 24/1985 Green Belts, states that green belts should maintain identity of towns by establishing a clear definition of their physical

boundaries and preventing coalescence, and maintain the landscape setting of towns. This circular is set to change under the emerging new policy guidance from the Scottish Executive.

### **Biodiversity policies**

NPPG14 for Natural Heritage (Scottish Office 1998 a) sets out the role of the planning system in ensuring that land requirements for housing and other development activities are met in ways that do not erode environmental capital, while acknowledging that development and the natural heritage are not incompatible. The policy document describes the role of the planning system in safeguarding sites of national and international importance and identifies that planning authorities should seek to prevent further fragmentation or isolation of habitats.

Furthermore, NPPG14 advises planning authorities to identify opportunities to restore habitat links that have been broken and importantly notes the contribution made by non-designated sites to environmental quality, of value for attracting investment and providing important links between the designated sites.

The recent Nature Conservation (Scotland) Act 2004 provides a considerable backing to NPPG 14, stating that all public bodies operating in Scotland are obliged to further the conservation of biodiversity, and to take due consideration of the recently launched Scottish Biodiversity Strategy (Scottish Executive 2004).

SPP3 Planning for Housing notes that:

“the environmental impact of housing needs to be given much greater importance, from land allocation through to the preparation of development briefs and design statements for planning applications (para. 10);

The policy document also sets out that new developments should respect and where appropriate enhance existing vegetation and other natural features and mature trees should be retained wherever possible. Also, replanting should be undertaken where development involves their loss.

Housing developments are noted to have the potential to enhance a site’s wildlife value through retention, creation or management of natural features and wildlife habitats and well-designed sustainable urban drainage systems (SUDS) can also add to the natural heritage interest of a housing development, as well as its amenity and character.

### **Access and recreation policies**

NPPG11 for Sport, Physical Recreation and Open Space (Scottish Office 1996) encompasses all the land use implications of sport and physical recreation, taking account of the need to maintain the quality of the environment and noting that the provision of opportunities for sport and recreation near to residential areas has an important role to play in achieving sustainable development.

The policy document also outlines the requirement that councils, under the Countryside (Scotland) Act 1967, “assert, protect and keep open and free from obstruction or encroachment any public right of way...” (Section 46).

Research is currently underway at the Scottish Executive into minimum standards for open space and this will be used to inform a review of this policy guidance. The review is due to start late in 2005 and will involve a consultation opportunity to influence policy at a national level.

NPPG14 Natural Heritage (Scottish Office 1998 a) notes that good provision for open air recreation and access to the natural heritage are important, alongside the role of open space in and around cities.

NPPG17 Planning and Transport (Scottish Executive 1999) sets out policy for more sustainable transport options to support, amongst others, the natural environment. The overarching aim of the guidance is to promote development in sustainable locations, i.e. those accessible by all modes of transport, and to encourage walking and cycling.

Pedestrians should be given priority over other

modes to make movement on foot as convenient and as safe as practicable, while safe cycling networks are a priority. In terms of housing developments, planning authorities are also advised to seek opportunities to help redress the impact of traffic on the environment.

PAN 65 Planning for Open Space (Scottish Executive 2003 b) notes that open spaces should be well located, designed and managed and that they should be adaptable and multi-functional, contributing to flood control and environmental education.

### **Planning processes**

SNH area officers will tend to get involved in influencing particular housing proposals only where there is a natural heritage designation at risk of impact. For this reason, how policies for natural heritage and housing are established locally is key to achieving sustainable new settlements. Nonetheless, opportunities to influence housing proposals do exist at all stages of the process and it is a matter of how issues are identified and prioritised and how well an area office works with the local planning authority.

#### **Additional Guidance: Natural Heritage in and Around Settlements, A Framework for Action.**

This document describes SNH's overall aims for the natural heritage in and around settlements. It sets out a policy framework for pursuing the organisation's goals, based on four themes. Each theme is elaborated in terms of a range of specific activities, between them relevant to a host of existing and potential partners.

- Theme 1 looks at securing good quality design that promotes the protection and conservation of the natural heritage, and understanding what is there;
- Theme 2 considers access and open space;
- Theme 3 focuses on involvement, understanding and education; and
- Theme 4 focuses on the involvement of the community in the natural heritage.

SNH (1995)

According to the principles set out in SNH policy documents in relation to housing therefore, emphasis should be on identifying opportunities and securing the best design of housing, understanding of natural heritage, providing open space and promoting community involvement. In doing this, the strategic approach is recommended, influencing statutory plans and strategies and supporting baseline studies.

This section provides a general introduction to the planning policy process, securing planning permission and developing new housing in Scotland and provides an overview of the role of SNH and its area offices in relation to new housing developments, from the strategic to the site specific scale.

#### **Additional Guidance: SNH and the Town and Country Planning System.**

This SNH policy statement notes that natural heritage may be found everywhere and that it is not confined to designated areas, or to the special, the vulnerable or the rare. SNH expects the planning system to contribute to the care, understanding, enjoyment and sustainable use of the natural heritage. This includes:

- protecting special natural heritage areas from developments which may significantly damage them;
- contributing to a more environmentally sustainable approach to management and maintenance of natural processes and ecological systems and biodiversity;
- ensuring that the location, siting, scale and design of all new development respects and where possible enhances the natural beauty and amenity of an area and the essential character of its landscape; and
- enriching people's lives by providing them with opportunities to enjoy the natural heritage, both close to where they live and work and throughout the whole countryside.

SNH policy is not to try to prevent change to the natural heritage, but rather to avert the most significant adverse impacts and maximise

any benefits. SNH will also be receptive to the opportunities that development can bring to care for and enhance the natural heritage.

The policy statement provides clarification with regard to how SNH should work with the planning system, setting out statutory obligations, for example where a development proposal will affect a site designation and or where an issue will affect the natural heritage of Scotland. However the policy statement also notes that it is necessary to prioritise how the organisation gets involved with the planning process and provides an outline of protocols to help improve the effectiveness of working with planning authorities in order to effectively manage casework. The organisation therefore prioritises certain roles over others as follows:

- advising local authorities on the content of development plans;
- contributing to other relevant statutory plans and strategies;
- working in partnership to undertake systematic assessments of natural heritage resources and to apply strategic environmental appraisal methodologies.

*SNH Policy Statement No 02/05*

## **Proposed changes to the Scottish planning system**

It is important to be aware that the current system of development plans is undergoing change, moving away from the two tier structure plan and local plan model towards a single development plan system.

With the arrival of devolution, the Scottish Executive has been working towards overhauling the entire planning system in Scotland, including the framework for development plans. There is now a National Planning Framework and National Planning Guidance is being replaced by Scottish Planning Policy. Furthermore, the Scottish Executive is working towards producing a new planning act.

These changes will see the introduction of a development plan structure with single Local Development Plans for all local planning

authority areas and an additional four City Region Plans for the cities of Glasgow, Edinburgh, Aberdeen and Dundee which will be simplified strategic planning documents. This will ultimately mean that local development plans will not be as detailed as the current local plans and planning authorities will need to use supplementary planning guidance more frequently. National Parks will produce National Park Plans that will provide the strategic context for the development plan.

Full details of the changes to the Scottish Planning system, based on the Review of Strategic Planning 2001, can be found at the Scottish Executive Development Department website, under the heading 'Modernising Planning': <http://www.scotland.gov.uk/Topics/Planning-Building/Planning>. Despite these changes, the following development plan will remain of relevance.

## **Development plans**

Currently in Scotland the statutory development plan is made up of structure plans and local plans, the function of which are to guide the future development of an area in a sustainable manner. This system provides SNH with the opportunity to influence planning policy across Scotland. Scottish Planning Policy 1, the Planning System (Scottish Executive 2002), notes that:

"policies should make connections to related projects and programmes which impact on land and the environment, such as ... Local Biodiversity Action Plans and access and regeneration strategies".

NPPG 14 (Scottish Office 1998 a) notes that the role of development plans in conserving and enhancing the natural heritage and safeguarding areas of natural heritage value is key in ensuring environmental concerns are adequately addressed through modifying the development proposal or attaching appropriate planning conditions.



**Additional Guidance:  
SNH Local Authorities Handbook, Issue 04,  
2001.**

This provides a detailed guide to the planning system, including development plans. The Handbook sets out the purpose of plans and explains their role in terms of influencing development and in determining planning applications. It identifies the relevant connections to natural heritage and provides a useful explanation of what natural heritage issues can and should be covered by structure and local plans, from national and international designations to important landscapes, areas of regional importance for their wildlife character, to the conservation and enhancement of biodiversity outwith designated areas and the identification of appropriate strategic opportunities for promoting enjoyment and understanding of the natural heritage.

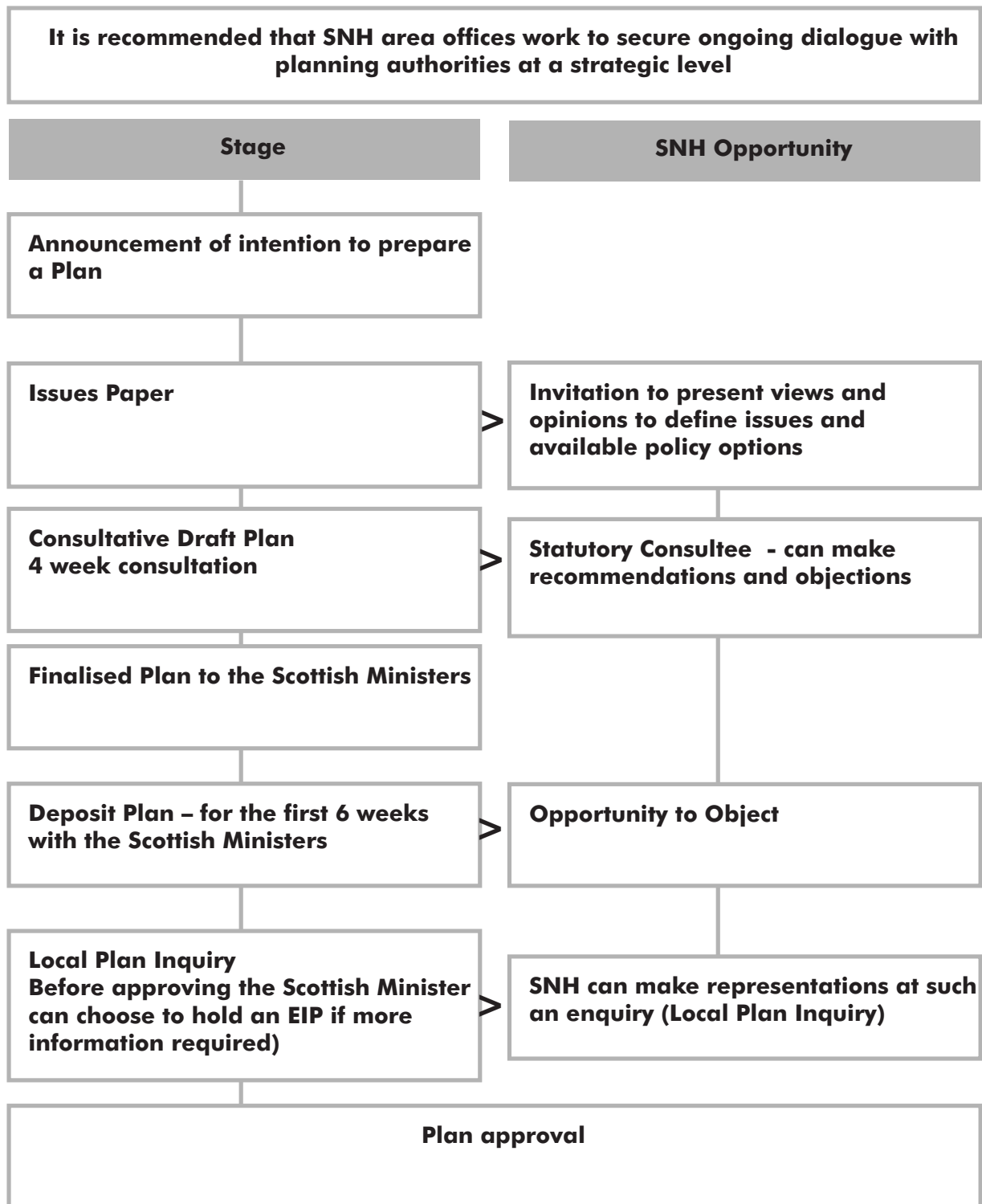
Most significantly, the Handbook provides advice on procedures and content of structure plans and local plans, and sets out how SNH should work, through consultation, to achieve positive outcomes for natural heritage. In particular it notes that SNH should try to influence policies and proposals, issues and options, and recommends best procedures, including recommendations to meet with the planning authority to establish a working relationship.

SNH is in a strong position to encourage planning authorities to pursue and strengthen planning policies, through consultation, in order to achieve net gains for natural heritage through all development types, including residential. This represents a key part of planning process, and can have a knock-on impact at other stages in planning, including the content of supplementary planning guidance, master plans and ultimately development proposals.

It has been found, through SNH area office consultation, that good working relationships with councils can help ensure that SNH are involved at the scoping stage of the development plan preparation process and before the statutory consultation stage begins, helping to extend the opportunities for positive outcomes for natural heritage.



**Figure 2.1 Structure plan process and consultation opportunities**



## **Structure plans and housing land**

SPP3 Planning for Housing (Scottish Executive 2003 c) states that “development plans are the vehicle for assessing future housing land requirements”, to facilitate the sustainable development of new ‘quality’ dwellings in a manner that provides for certainty to communities and house builders. In order to set the context for local plans, Structure Plans need to indicate priorities for the location of major new investment by the public and private sectors, including ‘green field’ housing development (McAllister, A. McMaster, R. Second Edition 1999). The structure plan will not identify specific sites but sets out a framework that should be taken forward through the Local Plan.

The structure plan carries out an assessment of future housing land requirements over a minimum period of 10 years (SPP1) with SPP3 setting out a preference for a 20 year period. PAN 38 Housing Land (Scottish Executive 2003 a) provides advice on the procedures for identifying land for housing and notes that “an effective policy framework” should consider the views of all relevant parties on the scale and general location of housing lands, including SNH, who “will have important contributions to make on development constraints related to natural heritage and amenity”.

While PAN 38 (Scottish Executive 2003 a) does refer to constraints, SNH can also take the structure plan consultation as an opportunity to promote proactive policies to support the sustainable development of natural heritage, in particular in relation to housing land which often avoids the designated sites and applications are rarely subject to Environmental Impact Assessment.

In some cases, in addition to identifying demand for housing and potential indicative locations, the structure plan will be informed by environmental and landscape capacity studies. These provide a valuable baseline for future development, and are an effective method of securing sustainable development of land. However, it is likely that in time, such capacity studies will be carried out at the local plan (local development plan) stage.

## **Structure plan guidance**

**Landscape:** An overview of the National Scenic Areas and local planning authority landscape character will help to inform strategic decisions about the location and scale of development that could be accommodated in different parts of the area without significant impacts on landscape character.

**Aim:** to ensure that policies for areas of search for housing land take account of the landscape and that the relevant strategic landscape policies are made applicable to housing developments.

To achieve this, you should ask if the Structure Plan will consider the following points:

- does the area include any national or local landscape designations (e.g. National Scenic Areas or Areas of Great Landscape Value)?
- does the SNH Landscape Character Assessment provide any guidance on the relative sensitivity of different parts of the Structure Plan area?
- has a Landscape Character Assessment (Chapter 3: Landscape, Transferring Principles into Action) been carried out?
- to what extent are areas capable of accommodating additional housing development?
- how might the character of these areas be affected by large, medium or small scale development?
- are some parts of the Structure Plan area more visually contained than others?
- would development in some parts of an area have more significant visual impacts, for example on views of key landmarks or from key viewpoints, as a consequence of their prominence in the landscape?
- taking account of these considerations, how has a judgement been made regarding the implications for housing land?
- should the aim be to concentrate development in one area, or to split it between different locations?
- are the landscape and visual effects likely to be so great that an alternative approach, perhaps based on higher density brownfield development should be promoted?

- are there any issues or areas that should be explored in greater detail through the local plan process?

**Biodiversity:** The nature and location of sites designated for their biodiversity value may have implications for the location of new housing development. In most cases it will be appropriate to avoid development that would result in the loss of these resources, or, as a consequence of changes in drainage or disturbance, have an indirect impact.

**Aim:** to ensure that Structure Plan policies for housing land take account of biodiversity interests.

To achieve this you should ask if the Structure Plan will consider the following points:

- how are international, national and local biodiversity designations and UK BAP priority species to be addressed by the Structure Plan?
- will consideration be given to how these designations and priority species might be affected directly or indirectly by new housing developments?
- what LBAP habitats or species will have implications for the strategic location of new housing development?
- will policies ensure that either:
  - these species and areas are avoided by housing developments or
  - housing developments will be used to enhance biodiversity?

Taking account of these questions, is it possible to draw any conclusions regarding:

- the location or scale of new development in different parts of the Structure Plan area?
- what specific issues or opportunities should be explored through the local plan process?

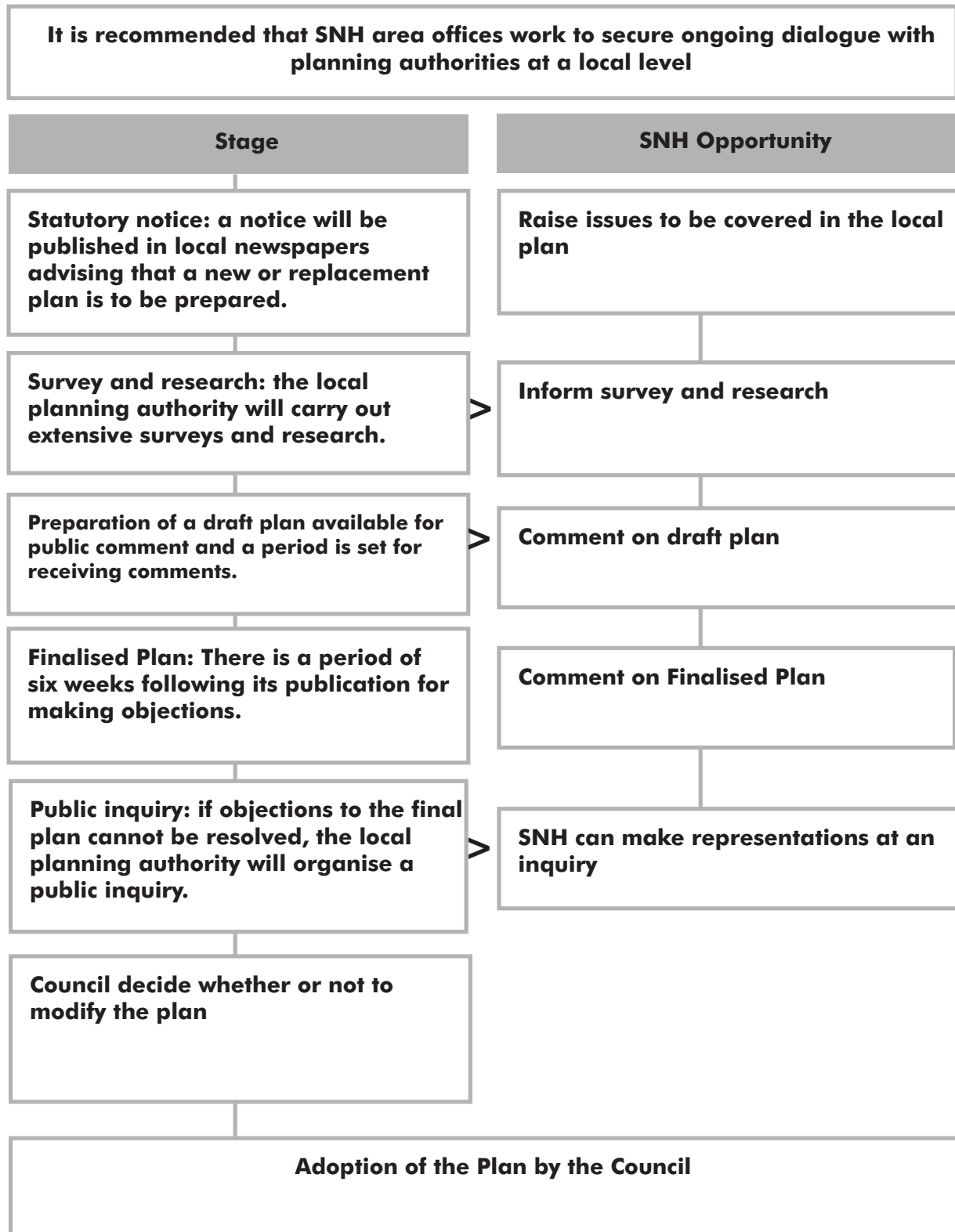
**Access and Recreation:** At a strategic level, Structure Plan policy should take into account access and recreation strategies where these exist, providing statutory backing for their policies and therefore securing consideration of their objectives through development.

**Aim:** To secure sustainable access and recreation opportunities through new housing policies.

To achieve this, you should ask if policies:

- take account of the relevant access, recreation and open space strategies?
- set out how these should be taken into account when identifying housing land allocations at local plan level?
- set out what specific issues or opportunities should be explored through the local plan process?

**Figure 2.2 Local plan process and consultation opportunities**



## Local plans and housing land

Local Plans allocate specific sites for housing land and are required to provide sufficient effective land for at least five years at all times by the carrying out of a Housing Land Audit. Planning authorities should demonstrate that:

“their housing land allocations are feasible and realistic, offer a coherent strategy to meet short and longer-term needs in an environmentally acceptable manner, and are capable of being implemented”.

The local plan can set out a requirement for the preparation of a masterplan to secure the appropriate development of a particular site or sites. However, this is not always a requirement for housing land sites. The result is that not all sites will be developed to a standard that gives full and detailed consideration to the local landscape, natural environment and access and recreation opportunities, given the practical constraints at development control level and pressures to secure development.

In addition to consulting on the content and type of policies contained in local plans therefore, there is value in seeking to secure requirements for supplementary planning guidance and masterplanning for housing land allocations, identified by SNH, as being potentially vulnerable, or with value for natural heritage.

### **The Falkirk and The Clackmannanshire/Stirling Structure Plans**

In the Falkirk Structure Plan, the potential to create links between designated areas is set out in policy Env. 6 which supports the need for enhancement of the natural environment.

In the Clackmannanshire and Stirling Structure Plan (2002), objectives are set out to protect and enhance biodiversity and distinctiveness of the natural and built environment. Policy is set out to ensure that all development proposals are considered in the light of the recommendations and findings of the LBAP and an ecological appraisal is required where there is potential for an adverse impact upon local biodiversity.

## Local plan guidance

**Landscape:** While some types of landscape (e.g. lightly settled, upland areas) might only be capable of accommodating a small amount of development, others (e.g. more urbanised, lowland areas), might be less sensitive to larger scale development. A finer grain assessment of landscape is necessary at the local plan stage in order to draw out important local variations in landscape character (see Chapter 3 Landscape Principles).

**Aim:** to ensure that housing land allocations and policies reflect the landscape character of the local area in terms of location, scale, form and intervisibility and to maximise the extent to which new development fits the local landscape taking account of landform, land-cover and the patterns of existing settlements.

To achieve this you should ask if the local plan will consider the following points:

- does the SNH LCA provide sufficient detail to assist in the development of local plan housing policies?
- should a more detailed local landscape character assessment be required? This would include:
  - the identification of local landscape character areas (LLCAs) with an analysis of settlement patterns and vernacular (the consideration of vernacular should extend beyond issues of building design and materials to include typical locations, orientation, massing and issues such as boundary treatment and landscaping);
  - identify vernacular styles of settlement, including architectural style, building materials, the scale of buildings, their location in relation to the landform, roads and other buildings, and the treatment of walls, hedges and fences together with gardens etc.
  - an analysis of intervisibility, including views from key viewpoints or towards key landmarks. This can take the form of map analysis allied to site survey, or by carrying out GIS based intervisibility

- analysis;
- the identification of areas with higher and lower sensitivities to development, leading to the identification of variations in the capacity to accommodate different scales of development (e.g. large growth areas, urban expansion, village expansion, groups of houses, and individual houses in the countryside);
- explore the potential role of Green Belt designations in protecting the setting of towns and cities and in maintaining the physical, visual and perceptual separation of other settlements.
- will the local landscape character assessment be used to inform supplementary planning guidance and master plans about:
  - site layout, densities and the need for green space?
  - building design, materials and scales?
  - treatment of site boundaries, internal landscapes, road corridors, gateways etc. so that the development is tied into the surrounding landscape context?
- will all relevant landscape designations be addressed by landscape policy, making links to housing policies?
- will there be a requirement for supplementary landscape guidance for local landscape areas designated for housing?
- will there be a requirement that the results of the Landscape Character Assessment be taken into account at the development stage to inform master planning and the detailed design process for all housing proposals?

This information will help ensure that landscape issues are reflected in the process of developing Local Plan housing policies, identifying specific locations for housing development, and defining the 'design' criteria that should be reflected in policy and built into supplementary planning guidance.

**Biodiversity:** While recognising European, national and local designations for nature conservation, local plan policies should also be informed by LBAPs and set out policies that aim to conserve and enhance biodiversity at all levels and by all housing development types.

**Aim:** to ensure that housing policies conserve and enhance the biodiversity of the area.

This should be reflected in general housing policies and by specific housing proposals including identified growth areas or peripheral housing land releases. To achieve this the local plan should consider the following:

How will policies be informed?

- by the mapping of biodiversity sites including designated areas (distinguishing between international, national and local sites), LBAP information (including the distribution of priority habitats and species) and any additional information such as that from phase 1 habitats surveys?
- by using constraints mapping to identify areas of highest and lowest biodiversity interest, and areas where appropriate development could be used to enhance biodiversity?
- by the identification of areas of lower biodiversity interest where development would normally have a lower impact on flora and fauna and where there might be an emphasis on habitat creation or enhancement?
- by consideration of the ways in which housing development of different scales, and in different locations could contribute to biodiversity objectives? For example by:
  - avoiding areas of higher biodiversity interest;
  - incorporating existing biodiversity features into developments;
  - creating new habitats, particularly where they contribute to habitat networks;
  - compensating for any habitats lost.

**Policies:**

- will the conservation of habitats and species of international, national or local importance be set out in policy?
- will the local plan identify preferred areas for new housing development that takes into account the LBAP?
- will the plan set out a requirement for the provision of supplementary planning guidance on habitat conservation,

- enhancement, creation and compensation?
- will the plan set out a requirement that new housing development incorporates and enhances existing habitats, achieving a net gain in biodiversity, and creating new habitats, particularly where this reflects LBAP priorities and contributes to habitat networks?
- where the local plan prioritises the redevelopment of brownfield sites, will there be a requirement for the consideration of existing biodiversity value of the site, and the potential for habitat creation and enhancement, particularly where this ties into the surrounding area?

**Access and Recreation:** Local plan policies should reflect the importance of access (walking, cycling and horse riding) for sustainable local transport, recreation, tourism, local economic development and in the promotion of healthier lifestyles. New housing developments should therefore achieve links into existing access networks and open spaces, providing new residents with opportunities to walk, cycle or ride. Developments should provide open space within a site and be permeable, maintaining existing access and where appropriate creating new routes. This is particularly important on the urban fringe where new development would sit between an existing settlement structure and the surrounding countryside.

### **Green Spaces, New Places**

In the emerging Aberdeen Local Plan 'Green Spaces, New Places', access and open space have in fact been given priority, with the over all vision for physical development being:

"to protect and enhance the unique countryside areas of the city so they can be enjoyed by current and future generations. Through (the creation of) a network of green spaces and develop along the transport corridors, everyone can enjoy the peace and tranquility of countryside pursuits. All this would be within easy access of the city centre with its cultural attractions and City Buzz. Core Paths Plans are being developed to improve access and movement developing along the transport corridors will open up many more opportunities for local people to enjoy the open space".

**Aim:** to ensure that new housing developments link into and enhance existing networks of footpaths and cycle routes and that they include areas of high quality and functional open space.

To achieve this you should ask if the local plan will consider the following:

- will the local plan identify existing access routes (including core paths, rights of way, local path networks and longer distance routes) in areas under consideration for housing development. (This information may be available from the Scottish Paths Record or the local access strategy, where one exists. Under the terms of access legislation, local authorities are now also required to prepare Core Path Plans which should comprise many of the area's most important paths)?
- will the local plan review the local access strategy to identify links between housing policy and local access priorities, and to determine whether there are any local access projects to which development could contribute?
- a requirement for an analysis of the ways in which different potential housing sites could affect existing access and open space provision?
- a requirement for an analysis of the likely access and open space needs of different potential housing sites, taking account of routes through the site and the need to provide links to facilities such as schools, open spaces, shops and other community facilities?
- a requirement for development proposals to identify ways in which existing access provision should be maintained and new access provision created as a result of housing development?
- a requirement for high quality and functional open space provision within housing proposals, linked, where possible, to existing open space provision and or the open countryside (for example coinciding with habitat and access networks, or accommodating SUDS)?
- a requirement to identify links between access and open space provision and the landscape and biodiversity, for example

developing SUDS as part of open space  
provision that supports on site biodiversity?

### **Stonehaven Draft Capacity Study**

The North East Scotland Together, Aberdeen and Aberdeenshire Structure Plan 2001-2016 recognises Stonehaven as one of the key settlements with potential to contribute to a sustainable future for the Structure Plan Area. As a consequence a study has been carried out to establish the long-term framework for the expansion of the town from its existing stock of 4,100 dwellings in 2001 to approximately 6,000.

The study gives priority to identifying a 'green solution' that will contribute to sustainable development and sets out a list of key assumptions and land requirements. This includes the requirement for the expansion of community woodland and a requirement for a total of 16 hectares of open space and the need to use the natural potential of the landscape wherever possible.

The study recognises the importance of sense of place to the area and how this will provide the foundation for the future prosperity of the settlement, based on the value of its historic core, sea frontage, coastal setting and location within its 'bowl' of hills and its green corridors radiating from the central core, which could form the basis of the open space framework.

The study proceeds to identify suitable areas for new development by using a sieve technique to precluded areas from development according to a set of absolute constraints. Amongst the absolute constraints were the sea frontage, the town's coastal setting within its bowl of hills, the town's green spaces and the town's backbone of existing parkland/public and open space and green corridors radiating from the central core.

A 'Goal Achievement Matrix' was then developed, based on the principles of sustainable development to assess the relative merits of the remaining parcels of land. The Matrix sets out criteria based on climate, energy, resources, social issues and biodiversity, and applies scores to each locality tested. Criteria include, potential for passive solar gain, ease of providing public transport/pedestrian and cycle routes, availability of services, loss of natural and built resources (including quality of biodiversity lost), balance of community, sense of place and contribution to the open space strategy.

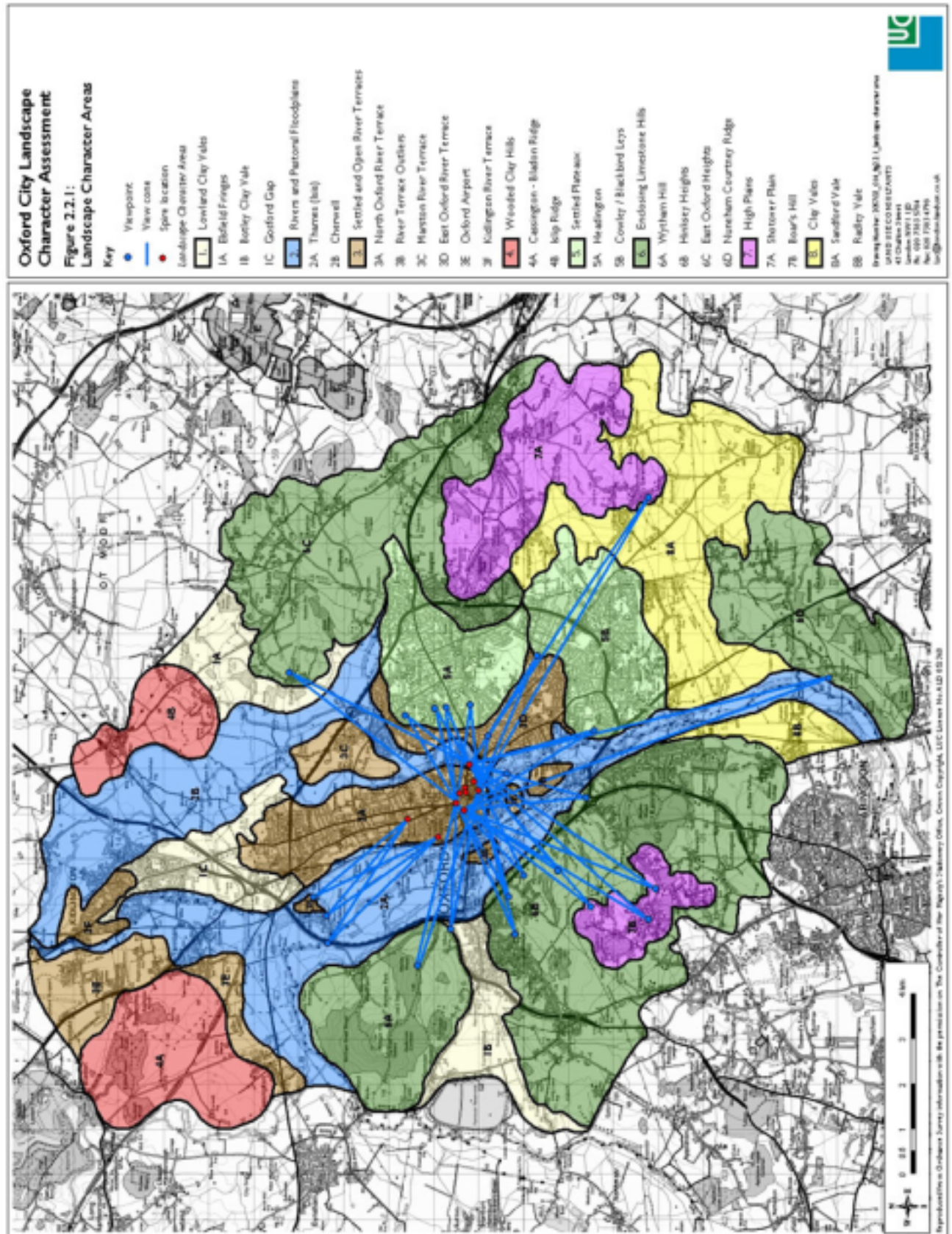
### **A Character Assessment of Oxford City in its Landscape Setting**

Land Use Consultants (2002) The Countryside Agency, in partnership with Oxford City Council commissioned a Character Assessment of the whole of Oxford City and its setting, in recognition of the importance of the city's landscape and townscape and the changes that it faces. The assessment involved a systematic study taking a holistic approach which considered historic, cultural and architectural associations, open places, wildlife and natural habitats and perceptual characteristics that together create the very special sense of place that is Oxford.

The character based approach can help in accommodating necessary change without sacrificing local character and ensure that future change in and around Oxford leads to the enhancement of the character of the City and its setting.

The study considered the main influences on the contemporary landscape of Oxford, including its broader landscape setting within the County, the topographic, geological and ecological conditions, human influences and issues relating to the management of future change. The illustration from the study below shows landscape character areas combined with key viewpoints towards the city.





## **Strategic environmental assessment**

Since July 2004, the European Directive for Strategic Environmental Assessment (SEA) has been incorporated into Scottish law. SEA of strategic policy documents requires that development plans be assessed for the potential environmental impacts of their policies before approval/adoption.

The process of SEA involves the examination of objectives, policies and proposals of a plan in relation to wider environmental aims and identifies the likely consequences and ways to prevent or reduce the significant effects of the plan in question on the environment.

David Tyldesley and Associates (2003) identify the potential benefits of assessing a development plan, which are:

- clarifying the plan's environmental aims and objectives;
- identifying aspects of the plan which may be inconsistent or in conflict with the planning authority's wider environmental aims;
- increasing the plan's sensitivity to environmental issues, particularly outwith designated environments;
- helping to choose between policy options and alternative locational strategies;
- explicitly considering the possible environmental consequences of policies and proposals;
- considering whether additional measures are needed to prevent, reduce or off-set adverse environmental effects;
- improving people's ability to participate in plan making by showing how environmental issues have been taken into account;
- ensuring that all stakeholders can engage in the process of helping to achieve a plan more in accord with the environmental aims of sustainable development;
- helping to prevent avoidable environmental damage; and
- influencing subsequent development proposals.

In relation to new settlements, SEA will extend the requirement for detailed consideration of

potential environmental impacts of development schemes that would not otherwise be subject to environmental impact assessment. This is of particular value in housing terms where in most cases even large-scale schemes can be developed without detailed assessment of the likely environmental impacts.

## **SEA checklist**

At SEA, it is worth asking if the SEA has identified the relevant issues in relation to:

- landscape, and whether policies are fully informed by character and capacity studies?
- biodiversity, and whether policies are informed by national and international designations, LBAP and for local plan policies, constraints assessments? and
- access and recreation: do planning policies take into account existing access networks and opportunities and do policies require adequate consideration of community needs in relation to access and recreation?

## **Supplementary planning guidance and master plans**

Supplementary Planning Guidance (SPG) can be effectively used to achieve particular objectives through land use planning to secure an overall better quality development than would otherwise be achieved under the provisions of a development plan. The Scottish Executive's Policy Statement for Scotland, Designing Places, notes: "that an important function of the (development) plan is to provide the basis for more detailed guidance on how its policies should be implemented in specific areas and sites. Unless the plan is supported by well conceived supplementary planning guidance, it is likely to have little effect on what is actually built".

Such guidance is noted by SPP1 (Scottish Executive 2002) as useful where there is a need for an urgent policy response to an emerging issue or the level of detail provided by such guidance would be inappropriate for a development plan. To qualify as supplementary planning guidance, and hence be most effective, it must be consistent with the relevant

development plan, prepared in consultation with relevant organisations and communities and finally approved by the council (Scottish Executive 2001).

SPG should be developed in the light of available information about a site and its context in order to secure a successful development. For this reason, full baseline survey work, as described in the principles section, should be a requirement.

The guidance can take a range of forms, including local authority development briefs, design guides and master plans and SPP1 stipulates that both the public and interest groups should be involved in preparing them, providing an opportunity for SNH to be involved in their development and influence their content.

While this type of guidance does not carry the same weight as a statutory planning document, it does hold considerable value as a potential material consideration, where, under Section 25 of the Town and Country Planning (Scotland) Act 1997:

*“in making any determination (of a planning application) under the planning Acts, regard is to be had to the development plan, the determination shall be made in accordance with the plan unless material considerations indicate otherwise”.*

The SNH Local Authorities Handbook (SNH 2004), sets out an introduction to informal plans and strategies, including supplementary planning guidance and identifies that while councils are not obliged to consult with SNH, it is considered to be good practice for them to do so where natural heritage interests may be affected. Advice is given as to the approximate times for consultation. However, due to the absence of specific consultation criteria, there are no guarantees that SNH will be consulted. It is therefore advantageous for SNH area offices to have established working relationships with the relevant planning authorities and their strategic planning teams in order to increase the opportunities for consultation and partnership working.

## **Development briefs**

Designing Places describes development briefs, as supplementary planning guidance “on how planning and design policies should be implemented on a specific site of significant size or sensitivity”. The level of detail can vary, but should aim to set out the main planning and design principles. Importantly, Designing Places states that; “a development brief... should form the basis for dialogue between planners and developers rather than a prescriptive substitute for it”.

## **Checklist**

- have SNH been invited to comment on and inform the content of the development brief for a housing site?
- does the brief set out the key principles for development in the local landscape context?
- does the brief set out a requirement for a landscape capacity study for the site and its surrounding landscape?
- does the brief set out the key characteristics of local biodiversity?
- does the brief set out a requirement for the potential developer to identify the baseline characteristics of the site’s biodiversity and establish an action plan to secure net biodiversity gain?
- does the brief identify the local access networks and key local community facilities that should be accessible from the site?

### **Craigmarloch, Cumbernauld**

North Lanarkshire Council produced a development brief for an area of land partly in ownership of the Council, known as Craigmarloch, identified by the former Cumbernauld Development Corporation as an area suitable for comprehensive development to create a village community. A concept plan set out a vision for a village community with a clearly identifiable sense of identity, with integrated vernacular design that was used to define the content of the development briefs. Part of the vision included the need for a village green and a village pond to create focal points within the village. Developers responded constructively to the design requirements and have successfully marketed the area based on its strong identity.



## **Development brief guidance**

The aspects identified under each of the topic headings here can and should be combined under a single development brief for housing sites.

**Landscape:** A good development will fit its context by reflecting vernacular patterns of settlement and tying into the surrounding structure of the landscape. Careful consideration is necessary in relation to issues of intervisibility. While it is often possible to screen development using new planting or by making use of the local topography, development of appropriate quality in the correct location should not need to be hidden. A development brief can be used to set out these and other principles for landscape, taking into account local characteristics from baseline surveys.

**Aim:** to ensure that the development brief for any given housing development sets out the guiding framework for a development that will reflect the landscape character of the local area in terms of layout, building scale, design, materials and massing, the treatment of boundaries and the internal landscape of the site.

Key points to consider when considering the content of a development brief, and in reviewing one submitted in support of a planning application:

- does the development brief consider the local landscape character assessment used to inform the relevant local plan?
- has a site specific landscape character assessment been carried out, considering the landscape beyond the boundaries of the site, to identify those landscape features that should be retained or enhanced?
- has a map of the area of the site been prepared identifying the range of landscape features that are to be retained?
- does it set out the principles for the way in which development will tie into the surrounding landscape including;
- determine the extent to which development should be intervisible with surrounding areas, and associated issues of screening, boundary treatment and building height and colour. It

may be appropriate to focus on a number of key viewpoints or views from publicly accessible areas such as transport corridors or open space?

- determine the way in which development should sit within the structure of the landscape and should visually interact with surrounding areas. (This should include the identification of any key viewpoints or vistas)?
- identify the extent to which the historic pattern of development in the area can be reflected in the development including reflecting different aspects of vernacular?
- is the need for landscape enhancement measures identified including new planting and measures to integrate the development within the wider landscape?
- are ways of reflecting vernacular within the settlement form, design and materials identified?
- is the treatment of gateways, corridors and undeveloped areas within the site and between the site and any existing urban area considered? and
- is the potential to contribute to local and regional identity considered?

**Biodiversity:** The development brief should highlight the importance of conserving and enhancing the biodiversity of the site and the area around it. It should identify any existing habitat features that should be conserved within the site. It should also set out criteria to guide habitat creation or enhancement and the possible need for off-site compensation measures.

**Aim:** to encourage development that secures net biodiversity gains by integrating practical solutions for biodiversity into the housing scheme.

Key points to consider when considering the content of a development brief, and in reviewing one submitted in support of a planning application:

- does the development brief take account of habitats that are already present on or near the site?
- does the development brief take into account

- habitats that are prioritised within the LBAP?
- does the development brief establish the needs for habitat conservation, enhancement and creation?
- are principles set out that will ensure that the proposal will achieve a net gain in biodiversity?
- does the development brief take into account habitats that can contribute to open space within or around the site?
- habitat conservation, enhancement or creation should be provide for habitat corridors linking the open countryside with open spaces within the urban area?
- will habitats be integrated with site features such as gardens and SUDS?
- will on site and adjoining watercourses, field boundaries, woodlands, and other linear features such as transport corridors, canals and paths be used to provide the framework for habitat corridors?

*Access and Recreation:* Development briefs can be used to set out how proposed development sites should be developed in order to integrate sustainable access and recreation.

*Aim:* to ensure that a housing development site, when developed, will be fully integrated into the local access network and has proper access to open space and recreation facilities to meet the needs of future residents and the existing neighbouring community.

Key points to consider when considering the content of a development brief, and in reviewing one submitted in support of a planning application:

- have existing elements of the path network that connect with, or pass through the development site been identified?
- does the brief identify how to maintain access through the site (of particular importance where new development will occupy a location between the urban area and the open countryside)?
- does the brief identify how to provide safe access to schools, shops, open spaces and village and town centre facilities, whether they are located within the development site or in the existing urban area?
- does the brief set out the principles for high quality functional and safe open space provision within the development, and the potential requirement for links to open space networks in existing settlements?

### **Master plans**

A master plan, often developed in response to a development brief, or a requirement set out in a development plan, provides a detailed explanation of how a site will be developed, using illustrations and setting out an explanation of how the scheme will achieve a specified vision, and implementation, including costs, phasing and timing.

A master plan may be prepared by a planning authority or alternatively, by a potential developer in response to a requirement from the council. In this case, a master plan would be supplementary to a planning application and form an important pre-application negotiation tool.

Master plans are frequently prepared for housing schemes and provide an excellent opportunity to achieve detailed site information to inform road and housing layouts and the ultimate scheme design. Landscape and ecological capacity studies can be prepared to inform the final outcome of a master plan.

### **Checklist**

- has the master plan been informed firstly by the local landscape character assessment, where there is one, and secondly, by a landscape capacity study to inform the landscape treatment of the site?
- does the proposed development integrate with the landscape or is it designed to hide in the landscape, or has little concession been made to the needs of the landscape?
- has the master plan been informed by LBAP policies and by a baseline study of biodiversity on site and adjacent to the site, to understand the ways in which all ecological receptors function within the site and its surrounding environment and to establish an understanding of their inter-

- connectivity?
- establish the desired biodiversity 'outputs' of the scheme – conservation, restoration, strengthening, rebuilding?
- does the master plan integrate fully biodiversity into the proposal to achieve net biodiversity gains, for example, translocating vulnerable/protected species, installing of bat boxes etc.?
- does the master plan incorporate integrated and sustainable access into the scheme?

### **Master plan guidance**

**Landscape:** A good quality development will be visually integrated with the existing landscape. A master plan will set out in detail how the principles for landscape will be developed on site.

**Aim:** to ensure that a master plan fully considers the issues relating to landscape character and potential visual impacts of a housing development and secure the proper implementation of principles for development on the ground.

Key points to consider when considering the content of a master plan, and in reviewing one submitted in support of a planning application:

- does the proposed layout and building form respond to the underlying landform and to key landscape features on the site in the surrounding area as set out by existing landscape character and capacity studies?
  - does the master plan identify and respond to key characteristic landscape features within the site and the surrounding area?
  - are important features retained within the site, or reflected in the layout?
  - do landscape enhancements reflect the landscape character of the surrounding area?
  - will the development affect the visual setting of key landmarks, or the outlook from key viewpoints in the local landscape?
  - does the proposed pattern of development (scale, layout, road network, open spaces, massing etc.) reflect the pattern of local settlements, or should it?
- does the proposed range of building types, designs and materials reflect the pattern of local buildings, or should it?
  - will the development contribute to local distinctiveness?
  - does the master plan include proposals for boundaries within and around the site?
  - will boundary treatments contribute to local or regional distinctiveness?
  - will the site gateway(s) and corridors make a positive landscape contribution to the site and the surrounding landscape?
  - does the master plan show how the development will be integrated with the surrounding pattern of settlement?
  - will the development be prominent as a consequence of its location or the design, materials or colours of the buildings?
  - what landscape mitigation measures, including boundary treatments are proposed?

**Biodiversity:** A master plan document will clearly set out how on and off site biodiversity can be managed and enhanced on site and the methods that will be used to achieve this.

**Aim:** to secure net biodiversity gains by conserving existing habitats and undertaking appropriate forms of habitat enhancement, creation and compensation.

Key issues to consider during the process of master planning or in reviewing a master plan submitted in support of an application include:

- has the master plan been informed by a baseline survey of on site and adjoining habitats and species?
- does the master plan take fully into account any relevant local authority supplementary planning guidance?
- does it prioritise the conservation, enhancement or creation of habitats in accordance with the LBAP?
- does it identify habitat opportunities associated with open space and access networks, or with SUDS or transport infrastructure?
- does the master plan conserve, enhance or

create habitats within the context of wider habitat networks across the site and linking into neighbouring habitat areas?

- does the master plan provide information on future monitoring and management of habitat measures?

**Access and Recreation:** Similarly, a master plan should set out in detail how access and recreation principles will be applied on site, including provision for the long-term maintenance.

**Aim:** to include provision for access and open space needs of a development's residents and to maintain, and where possible enhance, existing access and open space provision, reflecting the objectives of the Local Access and Open Space Strategies.

Key issues to consider during the process of master planning or in reviewing a master plan submitted in support of an application should include:

**Access:**

- does the master plan take account of the relevant local strategies?
- does the master plan include a path network to meet the needs of people travelling on foot or by bike to access community facilities including schools, shopping, employment and recreational opportunities?
- how does the proposed path network connect with existing routes in surrounding areas?
- how will the master plan affect existing patterns of access?
- will existing formal or informal access across the site to other areas be affected? If so, what modifications are required to maintain such access?
- are access routes through the development designed to minimise impacts on amenity, using passive supervision?
- how will access features be designed and maintained in the long-term?
- does the local access provision comply with the local roads authority's standards to secure long-term maintenance?

**Open Space:**

- what open space provision has been identified by the master plan?
- how do this respond to the local context (landscape, network of open spaces, shortfalls in quantity or type of open space)?
- will open space facilities provide for the needs of the future residents, including play facilities for children and toddlers and meeting areas for teenagers and adults?
- is open space provision designed in order to maximise passive surveillance?
- does the master plan make provision for the long-term maintenance of open space provision on site?
- has provision been made to ensure that any maintenance responsibilities of future residents will be clearly set out in sale contracts?

### Marchfield masterplan

The Dumfries and Galloway Structure Plan identified the need for 1,350 new house sites for Dumfries between 1998 and 2004 with an additional 900 needed from 2004 to 2009.

One major site at Marchfield/Summerfield/Fountainbleau area, northeast of Dumfries has been identified under for the allocation of 220 housing units. The Council prepared a development brief for the site and developers will be required to prepare a master plan to address:

- landuse and phasing;
- setting, landscape and planting plan;
- sustainable urban drainage scheme;
- foul drainage;
- access and transport;
- site facilities;
- open space and sport/recreation areas;
- biodiversity; and
- design.

The site allocation is justified on the basis that it is accessible from the town centre and forms a logical extension of the existing urban edge of Dumfries, contained by the by-pass. The justification also takes into account the scale of the area and the undulating nature of the site that will help to integrate development into the landscape. In its response to the Finalised Plan, SNH noted some reservations about the accommodation of the biodiversity interests on the adjacent Scottish Wildlife Trust Nature Reserve within Marchfield area. The consultation response noted that changes to the hydrological regime and wildlife corridor links to the surrounding countryside were a concern. As a consequence, SNH asked that the proposed master plan take into account the various outstanding issues with regard to the nature reserve.

### Riem, Bavaria, Germany

Until 1992, Munich's east central district of Riem was home to Bavaria's major metropolitan airport. The airport's relatively small size and close proximity to residential areas eventually forced its relocation. This provided a site with an area of roughly 2.2 square miles for development. The planning for the development of the site began in 1990 with a target completion date of 2013.

Planning efforts focused on furthering the old European City structure, which recognises the need for and value in proximity of work and home, open space, compact design, energy efficiency and multi modal transportation. Planning team members devised several sets of guidelines for creating an ecological urban setting as well as an economically sound and easily accessible business park and convention centre.

The most important goal for the master plan has been to create an attractive, multi functioning, and largely self-sufficient city district nestled between the existing city of Munich and the rural region surrounding it. This is achieved through the following planning strategies:

*Identity and self-awareness:* Riem will have its own identity and character, giving the residents who live and work there a sense of place and community.

*Ecological land use planning and smart growth:* The district will develop according to ecological principles, and environmental planning aspects will include maximum infiltration and reuse of rainwater/stormwater, and green space providing a range of recreation opportunities including walking trails, forests, promenades, a sledding hill and swimming lake.

*Complete infrastructure:* All necessary infrastructure and conveniences will be integrated to foster togetherness and a sense of community in Riem's residents.

The ideas for variety and quality also apply to the surrounding open spaces, and a family friendly green space concept was designed that includes everything from private vegetable gardens to a spacious 500 acre landscaped park integrated with an adventure playground. (source: Weissbach, A. and Bauernsmidt, T. (2001) A systematic approach for creating an ecological urban environment From abandoned airport to Liveable Community, <http://www.brownfields2002.org/proceedings2001/CV-04-02.pdf>)



## **Additional Guidance: Designing Places A Policy Statement for Scotland**

Designing Places sets out the policy context for important areas of planning policy, design guidance, professional practices, and education and training. The document notes that thinking about sustainability focuses in particular on promoting greener lifestyles, energy efficiency, mixed uses, biodiversity, transport and water quality.

The document identifies the use of a framework for design that can work at any scale of project. There are a number of distinct stages:

1. *Context appraisal*: What do we understand about the place and its setting?
2. *Policy review*: What policies, guidance and regulations apply to this area or site?
3. *Vision statement*: What sort of place do we want this to become?
4. *Feasibility appraisal*: What use or uses are realistic and achievable in view of legal, economic and market conditions?
5. *Planning and design principles*: On what planning and design principles should development be based?
6. *The development process*: What processes should be followed in developing the place?

The document identifies the following tools for planning and urban design guidance:

*Urban design frameworks* – for areas where there is a particular need to control, guide and promote change.

*Development briefs* – guidance on how planning and design policies should be implemented on a specific site of significant size or sensitivity.

*Master plans* – for sites where a degree of certainty is possible, explains how a site or series of sites will be developed, describing and illustrating the proposed urban form in three dimensions.

*Design guides* – for sensitive areas or on specific

topics, provides guidance on how development can be carried out in accordance with the development plan.

*Design codes* – likely to be part of or associated with a development brief or a master plan which sets out the design principles that the code elaborates.

*Scottish Executive (2001)*

## **Development control**

The development control stage in the planning process is where a developer makes an application to a planning authority under the requirements of the Town and Country Planning (Scotland) 1997 Act. A developer can apply for either outline consent or full consent and in order to be acceptable, the application must be in keeping with the provisions of the development plan unless there are other material considerations of relevance.

Outline consent is most often applied for to identify whether or not the principle of a proposal is acceptable in planning terms at a particular location and it is not necessary to provide a considerable level of detail at this stage. Where the principle is accepted, additional details of the application can be submitted to the planning authority, known as reserved matters, in order to achieve consent for the development.

On the other hand an application for full consent can be made, in which case, full details of the proposal are submitted to the planning authority in the first instance.

It is often the case that prior to submitting a planning application, a developer will enter into pre-planning discussions with the local planning authority before submitting in order to achieve clarification regarding the acceptability of proposals. This is particularly common in the case where a supplementary planning guidance or master planning has relevance to the site/proposal.

SNH area offices tend to get involved at this

stage in the planning process when the proposal will affect a designated site. However, they are less likely to be consulted for proposals for new housing developments on allocated sites, in particular where there has been no strategic capacity assessment or master planning exercise. It can therefore be difficult to assert an influence on a proposal at this stage, in particular where SNH is not involved in pre planning discussions.

The SNH Local Authorities Handbook provides clear guidance for SNH officers in relation to how to consult at the planning application stage, and Appendix 5 provides guidance as to the appropriate contents for SNH responses to consultations about planning applications.

*It is crucial that any discussions with regard to achieving natural heritage gain are written into the terms of a planning consent so as to secure their implementation.*

### **Development control guidance**

**Landscape:** It should be emphasised that a good quality development will be visually integrated into the landscape and there should be no need to hide it with screening.

**Aim:** to ensure that a planning proposal has considered fully issues relating to landscape character and potential visual impacts.

While the range of issues will vary according to the scale of the development and its location, key points to consider in considering and commenting on a planning applications include the following:

- does the proposal comply with development plan policies and requirements for compliance with supplementary planning guidance or preparation of a master plan?
- where development plan policies do not fully address the needs of sensitive and sustainable development in landscape terms, does the proposal comply with the relevant national planning policy and guidance?
- do the proposed conditions secure compliance with supplementary planning

guidance and any master plan document?

- what mitigation measures are proposed?
- can a Section 75 agreement be made to secure additional landscape improvements on or off site?

In general terms, always consider the following points:

- does the proposed layout and building form respond to the underlying landform and to key landscape features on the site in the surrounding area?
- does the proposal identify and respond to key characteristic landscape features within the site and the surrounding area?
- are important features retained within the site, or reflected in the layout?
- do landscape enhancements reflect the character of the surrounding area?
- does the proposed pattern of development (scale, layout, road network, open spaces, massing etc.) reflect the pattern of local settlement, or should it?
- will the development contribute to local or regional distinctiveness?
- does the proposed range of building types, designs and materials reflect the pattern of local buildings, or should it?
- does the scheme include proposals for high quality gateways and boundaries within and around the site?
- will the proposal integrate with the surrounding pattern of settlement or will it be prominent as a consequence of its location or the design, materials or colours of the buildings, if so should, and how can, this be mitigated?
- will the development affect the visual setting of key landmarks, or the outlook from key viewpoints?

**Biodiversity:** Securing positive outcomes for biodiversity at the application stage should not only focus on designations, but target an overall positive outcome through development.

**Aim:** to secure net biodiversity gains by conserving existing habitats and undertaking appropriate forms of habitat enhancement, creation and compensation.

Key issues to consider when responding to planning applications include:

- does the proposal comply with development plan policies and requirements for compliance with supplementary planning guidance or preparation of a master plan?
- where development plan policies do not fully address the needs of sensitive and sustainable development in ecological terms, does the proposal comply with the relevant national planning policy and guidance?
- do the proposed conditions secure compliance with supplementary planning guidance and any master plan document?
- what mitigation measures are proposed to secure, conservation, restoration, strengthening and or rebuilding in the context of wider habitat networks across the site and in neighbouring areas?
- can the developer be required to provide information to future residents about on site and neighbouring biodiversity, to encourage stewardship?
- can a Section 75 agreement be made to secure additional improvements to biodiversity on or off site?
- is the developer required to make provisions for the long-term management of the site biodiversity?

In general terms, does the proposal:

- identify habitats on or near the development site?
- prioritise the habitats in accordance with the LBAP?
- identify habitat opportunities associated with open space and access networks, or with SUDS or transport infrastructure?

Access and Recreation: Provision for transport and road safety on site can often mean that roads and parking provision take priority over more sustainable access features.

Aim: to include provision for sustainable access and open space needs of residents, and maintain, if not enhance, existing access and open space provision reflecting the objectives of the Local Access and Open Space Strategies.

Key points to consider when responding to a planning application include:

- does the proposal comply with development plan policies and requirements for compliance with supplementary planning guidance or preparation of a master plan?
- where development plan policies do not fully address the needs of sustainable access and open space provision does the proposal comply with the relevant national planning policy and guidance?
- do the proposed conditions secure compliance with supplementary planning guidance and any master plan document?
- what access and open space measures are proposed, will these promote their safe and sustainable use, discouraging anti-social behaviour?
- can a Section 75 agreement be made to secure additional access and open space improvements off site?

In general terms, does the proposal:

Access

- include a path network that will meet the needs of residents travelling on foot or by bike?
- provide safe functional access to community facilities including schools, shopping and employment as well as facilitating recreational activity?
- affect existing formal or informal access across the site to other areas? If so, what modifications are required to maintain such access routes in a safe and sustainable manner?
- specify how access will be managed and maintained in the long-term?
- address these through planning conditions or agreements?

Open Space

- propose open space provision as part of the scheme?
- respond to the local context (landscape, network of open spaces, shortfalls in quantity or type of open space)?
- specify how open space facilities will be

- managed and maintained in the future?
- address these issues through planning conditions or agreements?

### **Housing development implementation**

Less is written about implementation and aftercare of housing schemes in Scotland. The statutory structure for ensuring that planning conditions attached to permissions are complied with is covered by planning enforcement, a power given to local authorities to control breaches of planning controls. However, it is often the case that planning authorities do not have the adequate resources to effectively monitor the implementation of schemes granted permission, let alone take advantage of enforcement powers where consents are not fully complied with. Similarly, SNH area officers are unlikely to have the resources to follow up the implementation of schemes post consent.

Nonetheless, there are ways of attempting to secure adequate long term care of sites to provide for the natural heritage; including environmental monitoring during construction, ecological management schemes, landscape maintenance and management and community engagement.

The use of Section 75 agreements can be used to secure these where it can be proven that the management proposals would actually make an otherwise unacceptable scheme acceptable in planning terms.

However, it is important to be aware that in all other cases, it is up to the developer to take forward such initiatives and this may not always be economically viable from the developer's perspective. The cost will in most cases be passed to either the local authority or to new residents through maintenance contracts. This can be particularly difficult and it has been noted by the representative body of Scottish house builders, Homes for Scotland, that it is very difficult to get people to take responsibility for such initiatives and can ultimately lead to their failure.

Less cost intensive solutions for long term management and enhancement should be promoted, aiming to take advantage of residents' willingness to secure a good living environment. For example the provision of information sheets about the value of the local natural heritage and explaining the various natural heritage initiatives that have been implemented as part of that scheme, may be an effective way of achieving ownership and consequently care and protection by residents.

### **Checklist**

- are planning conditions being implemented?
- is there a landscape management strategy?
- has a low maintenance/affordable planting regime been designed for the scheme and agreed with the planning authority (this is often agreed post consent, subject to condition of agreement with the planning authority)?
- has wildlife legislation been complied with?
- are efforts being made to manage on and off site biodiversity in a sustainable manner, for example, promoting resident ownership and care?
- is there any site monitoring regime in place, if so, who is managing this?
- is passive supervision of paths and open spaces working to deter anti-social behaviour or are requests for path closures and removal of play facilities indicative of a need to consider alternative solutions?

### **Implementation guidance**

**Landscape:** Are planning conditions being met in terms of:

- retention of key landscape features?
- treatment of site boundaries and the use of on or offsite planting?
- building design, materials and massing?
- treatment of internal open space, trees and gardens?
- ongoing maintenance of internal landscape and any offsite works?

**Biodiversity:**

- has wildlife legislation been complied with?
- are planning conditions being met in terms

of:

- conservation and management of existing habitats on and offsite?
- habitat creation and management on and offsite?
- habitat compensation measures on and offsite?
- is there any local or community involvement?
- is the scheme contributing to wider habitat networks?

conservation issues need to be considered while any development is being built and highlights the importance of sustainable management, and presents a framework for achieving it once the planning and construction phases are complete. Finally it deals with the ongoing need to monitor the effects of a development, or progress towards positive nature conservation objectives.

*Oxford, M. (2000)*

Access and Recreation: Are planning conditions being met in terms of:

- creation of access and open space networks within and adjacent to the site?
- management, monitoring and maintenance of the access and open space networks?

**Additional Guidance:  
Developing Naturally A Handbook for  
incorporating the Natural Environment  
into Planning and Development**

The document is aimed at all participants in the planning process and sets out the information that should be considered and applied if acceptable standards are to be achieved for nature conservation in the development context. The aim is to identify and promote ways of incorporating nature conservation into the design and construction processes.

How the development process should consider nature conservation is set out and the document explains some of the key issues and policy directions for nature conservation that are relatively new to the planning and development process. It also emphasises the importance of good design that seeks environmentally sustainable solutions.

The document describes how the ecological impacts of a proposal may be predicted and assessed for their significance, and how to identify mitigation measures, and covers most of the nature conservation techniques which may be encountered in the planning and development process. It also describes why and how nature



### 3. PRINCIPLES FOR NEW HOUSING DEVELOPMENTS

#### Introduction

Landscape, biodiversity, and access and recreation are all affected by the development of new housing and have the potential to secure protection and improvements if proposals are managed effectively through the development planning process. It is often the case that individual aspects of the natural heritage achieve a degree of protection, and increasingly efforts are being made to support/enhance landscapes, improve access to the countryside and to support local biodiversity action plans.

However, despite the potential opportunities offered by the planning system, it is not often the case that an integrated solution, that prioritises an overall beneficial outcome for natural heritage, is pursued. This is often the case in relation to housing developments where land allocated for housing in development plans will avoid areas with natural heritage designations and as a consequence proposals are not subject to any type of environmental impact assessment. Furthermore, proposals for housing developments are subject to a wide range of considerations, including road and service provision, that tend to take priority over natural heritage issues as they will fundamentally affect the economic feasibility of a proposal.

This chapter provides an overview of the key issues affecting natural heritage in relation to new housing development. The natural heritage impacts are presented and methods of avoiding, reducing and mitigating these impacts discussed under the headings of:

- landscape,
- biodiversity, and
- access and recreation.

Each topic area section identifies:

- the relevant issues and impacts associated with new housing developments;
- the potential benefits for housing;
- the principles for the sustainable development of new housing clusters and settlements;
- transferring principles into action - the tools that can be applied to achieve the best type

and scale of development possible in the most appropriate location; and

- the opportunities for natural heritage.

#### Landscape

In recent years the increasing integration of landscape into the decision-making process has helped to enhance the effective protection of the Scottish landscape. The consideration of landscape issues at a variety of levels is becoming an important tool supporting the overall aims of sustainable development.

#### Issues and impacts associated with new housing and settlements

In the past, the planning system has typically supported the form and character of settlements by identifying and, where appropriate, protecting a settlement's historic core and its setting by designating conservation areas and green belts respectively. These types of designations, recognising areas of value, have effectively established a series of 'rings' within, or adjacent to settlements, that require attention when considering the siting and design of any proposal that would directly affect their setting and character. However, this type of protection is limited in scope as a control mechanism, protecting only certain landscape types identified to be of value. This often means that developments not affecting or outside designated areas, where landscape is perceived to be of lower value, achieve the minimal design standards in landscape terms, often exactly where a high quality landscape design solution could provide a significant improvement in landscape value, enhancing an area of low quality, for example at Glasgow Green.



### Glasgow Green Homes for the Future

The Homes for the Future project has an inner city location beside Glasgow Green. The site was previously made up of a number of derelict sites. A master plan was prepared for three phases to the year 2005 for the area covering two hectares of inner city brownfield land, mostly in the ownership of Glasgow City Council and the Glasgow Development Agency. The first phase of housing was completed in 1999 and represents a significant enhancement of the physical environment in the local area, reinforcing the urban fringe at Glasgow Green and creating a new and attractive living environment in a formerly blighted area of the city.



Historically there has been a connection between the settlement patterns and the environment, e.g. aspect, shelter, availability of water and topography. However, this has been lost over time with the residential developments in many areas being independent of the surrounding landscape and the term 'landscape' coined to represent detailed amenity landscaping. In reality, landscape relates to a complex interplay between the natural and cultural environments, in both urban and rural contexts and should be considered as such by all housing proposals.

At all scales of housing development, inappropriately sited developments can have a profound effect on the coherence and quality of a landscape's and or settlement's character and form. Often however, where the wider landscape approach is considered, the 'solution' will be to provide screening to hide development rather than taking a more informed approach to understanding the local landscape and identifying how to contribute to it, using landscape character and or capacity assessment.

### Additional Guidance: Green Belts and Coalescence

One particular tool used in planning of relevance to the development of new housing is green belt policy. Green belts exist around towns and cities and *Circular 40/1960* explains the three main purposes of greenbelts:

"(i) to maintain the identity of towns by establishing a clear definition of their physical boundaries and preventing coalescence;

(ii) to provide countryside for recreation or institutional purposes of various kinds; and  
(iii) to maintain the landscape setting of towns".

Scottish Office (1996) NPPG11 Sport, Physical Recreation and Open Space extends the definition of the function of the green belt to also cover the role of green belt in access and urban regeneration.

Scottish Office (1985) Circular 24/1985 notes that: "structure plans should describe the strategic context and general location for green belts and set out the development control policies which apply to them. Local plans should define the precise boundaries of any green belt within the area covered by the plan. It is inappropriate, however, for local plans to establish green belts unless the structure plan has provided the strategic context for this". The recent review of greenbelt policy in Scotland (Hague et al 2004) identified the importance of protecting landscapes and green environments close to towns, but noted that there are also concerns that green belts contribute to "town cramming" with a loss of valuable urban open space.

The review makes a number of recommendations for green belts including protecting open spaces and moving towards sustainable urban development.

G. Hague, C. Kirk, K., Prior, A., Raemaekers, J., Smith, H, with Robinson, A., and Bushnell, R., (2004)



Scottish Office (1994) PAN 44 Fitting New Housing Development into the Landscape cites a number of characteristics of recent housing developments that provides a useful summary of types of impacts encountered, from inappropriate siting and poor quality design, related to a lack of consideration of the baseline landscape:

- involves extensive land-take, with limited landscape or green framework;
- adversely affects the visual setting of existing towns and countryside;
- evolves as a sequence of phased developments related solely to market consideration often in the absence of any overall design for the wider environment;
- often results in a mono-type and mono-density layout lacking in variety of land-use and building form;
- presents stark contrast to the urbanity which traditionally characterises Scottish towns;
- contrasts markedly with the form, style, materials and general character of the established townscape creating significant visual intrusion at the edge of towns;
- are often characterised by standardised suburban designs and layout with little diversity and lacking other uses to create focal points and landmarks. As a result they lack individuality and identity;
- have standard house types insensitive to individual locations;
- use standard palette of materials often transported over long distances and alien to the locality;
- lack of evidence of success in the creation of place. There is often a lack of distinction between public and private space and an absence of landmarks and distinguishing features.

### **Principles for landscape and new housing**

Many landscapes contain distinctive and often historic patterns of settlement. While this may not preclude further housing development, it may have implications for scale, location and design. Most local planning authority areas include a combination of upland and lowland, and settled and unsettled areas. Some areas may

have a finer grain landscape than others, while some may be more influenced by the history of settlements development.

While visibility in the landscape is not automatically a negative attribute, all other things being equal the aim should be to avoid more prominent locations or development in areas that would conflict with key views.

Landscape variations are likely to reflect variations in landform (e.g. hills versus valleys), land use and land cover (e.g. woodland, moorland or farmland) and settlement (e.g. a few farmsteads, large villages or towns). While the aim should not be to hide development away, development in a more prominent location is likely to have a larger landscape impact than were it in a less prominent position.

While the scale of housing development may be significantly greater than that accommodated in the past, there is value in attempting to reflect similar influences in order to tie new development into existing settlement patterns and to the local landscape.

As for any type of development, the initial choice of site is crucial to ensure impacts on landscape character and visual amenity are kept to a minimum, in particular in rural locations, where the relative simplicity of landscape character can emphasise new housing.

“In the countryside, inappropriate development, however small, can have large impacts. Sensitive location and design is needed to avoid urban sprawl, ribbon development, new buildings on obtrusive sites, incongruous materials and house styles more characteristic of suburban than rural areas” (Scottish Executive 2001).

Nonetheless, even the optimum preferred development site, can incur significant landscape and visual impacts where sensitive and good quality design are overlooked.

Every site, natural or man-made, is to some degree unique, a connected web of things and activities. That web imposes limitations and offers possibilities (Lynch and Hack 1984).

A sustainable landscape approach to housing development should therefore seek to consider the existing settlement and proposed housing holistically, taking account of all aspects of the built form and landform. When looking at housing proposals, whether at strategic or site specific level, it is therefore necessary to establish the landscape character and make a judgement as to whether areas are suitable for:

- conservation,
- restoration,
- strengthening,
- rebuilding; and
- new build.

This information should then be used to inform housing policies and proposals.

### **Transferring principles into action**

The tools and processes of relevance to the landscape and visual impacts and opportunities for protection, remediation and enhancement can be applied at all stages of the planning process, to influence policy, inform strategic planning guidance and master plans and to inform detailed planning applications.

It is possible to incorporate a requirement for this wider consideration of landscape impacts and opportunities into planning policy, in order to secure consideration at all stages in the planning process for new housing types. Provided below is an introduction the key tools that can be used to inform development and its impact upon the landscape.

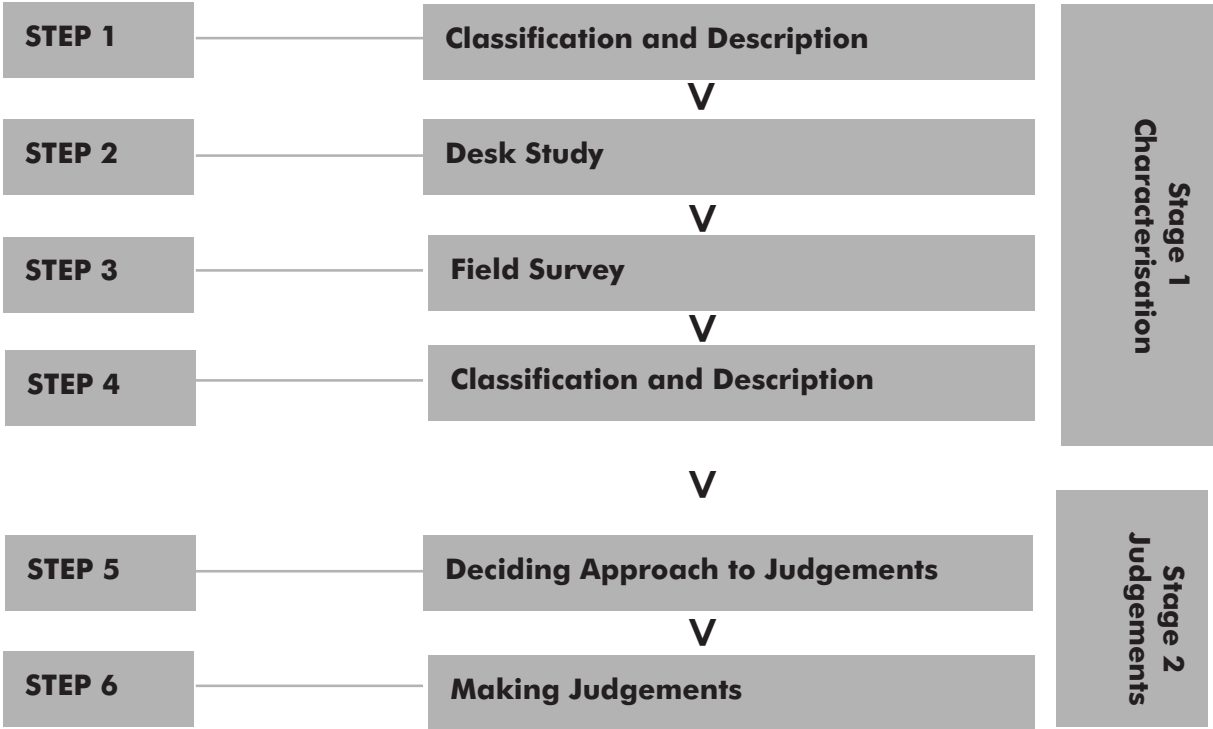
### **Landscape character assessment**

Landscape character assessment (Countryside Commission 1987) is an effective practical tool, taking into account physical influences of geology and climate, ecological influences and human interaction, intervisibility and changes in land use and landform. It is now a widely established and accepted tool and in 2002, the Countryside Agency and Scottish Natural Heritage commissioned the latest *Landscape Character Assessment Guidance for England and Scotland* (Swanwick and Land Use Consultants 2002). This guidance relates landscape character assessment (LCA) to the national context and links it to evaluative methods. It provides advice on assessment methodologies applicable at different scales, and also explains the role of the landscape and the uses of LCA in planning, and its application in developing strategies for landscape creation, conservation, management and enhancement. It is available at: <http://www.snh.org.uk/wwa/sharinggoodpractice/CCI/cci/guidance/Main/Content.htm>.

The classification of the landscape is central to the practice of landscape character assessment, and is...concerned with the process of dividing landscape into areas of distinct, recognisable and consistent common character and grouping areas of similar character together.' Figure 3.1. below, is a simplified flow chart derived from the above guidance which describes the process and key stages of landscape character assessment .

The existing suite of SNH Landscape Character Assessments provide guidance on the siting of development in the more rural landscape and typically stop at the urban fringes. These promote good practice in terms of analysis of landscape character at a regional level and are particularly useful in highlighting the types and design implications of developments which have the potential to cause significant impacts in the rural landscape. In tandem with this process, and complimentary to the practice of LCA, the use of intervisibility assessment (developed from guidance in Topic Paper Six, Techniques and

**Figure 3.1 Key stages of landscape character assessment**



Criteria for Judging Capacity and Sensitivity, Swanwick 2002) in urban fringe areas is useful in understanding settlement settings and the surrounding rural landform and is used to inform how different landscape character types and areas relate to one another.

**Townscape character assessment**

Urban or townscape characterisation is less studied and different from landscape character assessment in that it deals with the built environment. As for landscape assessment, townscape assessment can be applied at a range of scales, although typically it is used at the more detailed sub-regional or local scale (1:25,000 and 1:10,000) where differences in built morphology and housing styles are readily apparent.

With respect to urban fringe assessment, Topic Paper 7 Development and New Landscape Character , is due for release in May 2005. On publication, this paper is intended to broadly explore the role of landscape character assessment as a positive tool for setting visions and principles for sustainable development and new landscape character.

## Application of character assessments

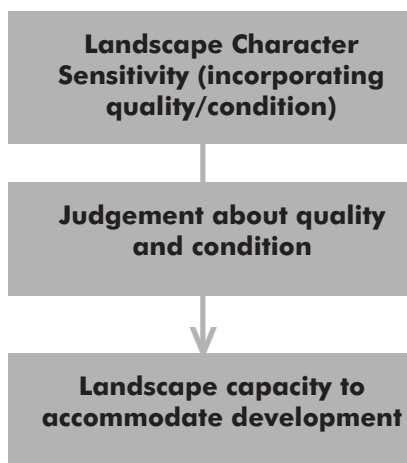
Using landscape character assessment, a range of judgements can be made to identify and or inform:

- landscape capacity/sensitivity;
- landscape strategies; and
- landscape guidelines.

### Landscape sensitivity assessment

Landscape Sensitivity should be used to refer to the inherent sensitivity of the landscape irrespective of the development changes proposed. As illustrated below this primarily considers the sensitivity of the physical landscape resources, for example hedgerows, and the perceived character of these in order to form a judgement about their sensitivity to change.

**Figure 3.2 Landscape sensitivity assessment**

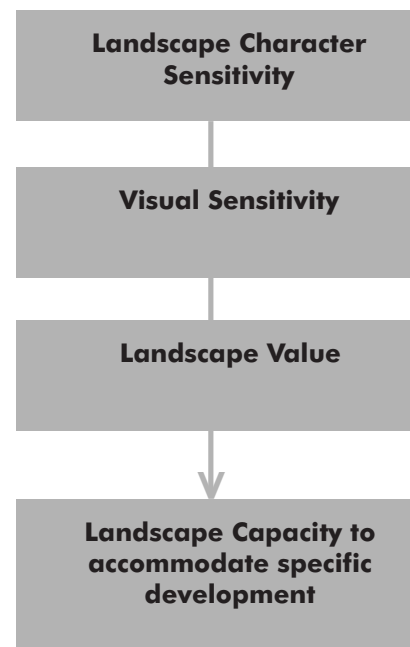


As the type of development is not known, this approach is typically most effective at the strategic level, for example in the preparation of regional landscape management strategies, where development zones could be identified.

### Landscape capacity assessment

Alternatively, the term Landscape Capacity should be used to describe the ability of a landscape to accommodate change of a specific type e.g. housing. Different amounts of change can be managed, although this has implications for the complexity and timescale of the assessment. Capacity assessments require the consideration of landscape character, visual sensitivity and landscape value. The diagram below reflects current thinking on the order of how to inform landscape capacity to accommodate development.

**Figure 3.3 Landscape capacity assessment**



Depending on the level of detail that is required, landscape capacity studies, can be applicable at a range of assessment scales, from broader regional levels, providing input to structure plans, to a detailed site level in local plans, directing development around individual settlements or indeed to inform supplementary planning guidance and master planning at a site specific level.

## **Landscape strategies**

In order to provide justification for any landscape strategy, capacity and sensitivity need to be established. A strategy can then determine the need for:

- conservation and maintenance of existing character;
- enhancement of existing character through introduction of new features of alternative management;
- restoration of character where appropriate to current land use;
- creation of new landscape character;
- combination of the above options, especially where regeneration activity is occurring, involving much development and landscape change.

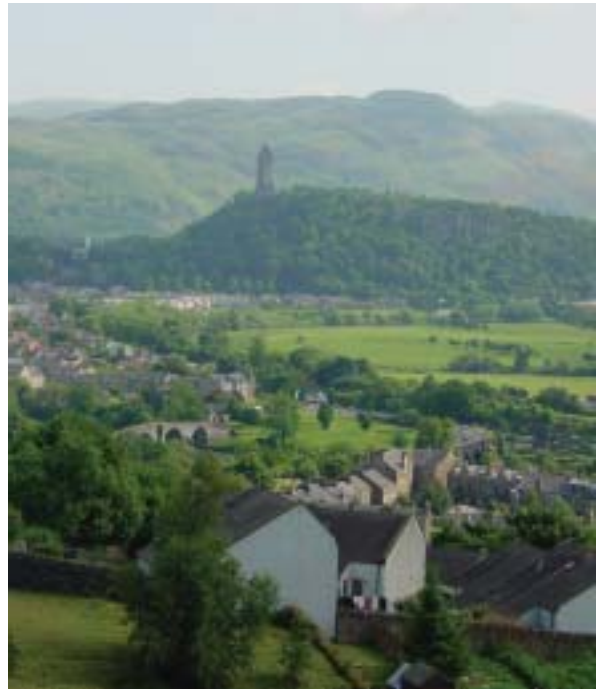
Landscape strategies are typically based on the above objectives, and are linked into development planning policy by providing guidance on what is the preferred option for the management of a particular area or zone.

## **Landscape guidelines**

Landscape guidelines should be developed in advance of any development proposal and seek to protect existing key characteristics to reinforce character where appropriate. They should be informed by landscape character assessments and capacity assessments.

Guidelines would concentrate on the removal or alteration of the negative characteristics, such as derelict mineral workings, or alteration and enhancement of character such as overgrown hedgerows to create or reinstate a landscape character, which has positive, attractive landscape features.

In the case of the Stirling Major Growth Area, a landscape study was commissioned by SNH, looking at the existing landscape and historic built form to inform the allocation of land for a new settlement and to inform the design guidance for the new settlement.



### **Stirling Major Growth Area**

The Clackmannanshire and Stirling Structure Plan (Clackmannanshire Council and Stirling Council 2002) identified a projected demand for 2,500 new homes and an area of search for a new settlement was identified, called Stirling's Major Growth Area (MGA).

SNH were involved in consultation with the Council and sponsored a landscape study to inform the decision making process. The study provided information on the landscape and visual implications of different options and identified significant variations in landscape character, caused by variations in the quality of the landscape, the extent to which areas are visible, physical characteristics and the history of settlement and land use in the area.

The study examined each of the development options and provided outline landscape design guidance to ensure that whichever site option was identified for development, the opportunities to maximise its positive contribution in landscape terms would be realised.

The Finalised Local Plan, Alteration 2: Stirling's Major Growth Area, published in November 2004 identifies the Durieshill area for development. The key principles for the new village address, amongst others:

- a clear and integrated design concept to achieve a distinctive Stirling village;
- integration of historically successful approaches to local streetscapes, open spaces, shopping, leisure and workplaces, with innovative and energy efficient modern design;
- a development that encourages safe walking and cycling to all local facilities; and
- a place which respects, and promotes the enhancement of, the environment and its biodiversity.

## **The benefits of landscaping for new housing developments**

The following examples set out the potential on-site benefits for the conservation and enhancement of landscape in association with new housing developments:

- provision of green 'infrastructure', such as a network of paths and open spaces and a high quality natural landscape, providing healthy living environments and space for social interaction;
  - creation of a sense of place and welcome;
  - promoting access to the countryside;
  - education benefits by providing opportunities to learn about the landscape on the doorstep;
  - provision of attractive garden spaces;
  - pollution control - supporting air quality and attenuating noise pollution, for example 'trees can remove sulphur dioxide and reduce particulates (in the air from cars) by up to 75%. Noise attenuation can be as much as 30dB per 100 meters' (Town and Country Planning Association 2004);
  - natural air conditioning, for example: 'a single large tree can be equivalent to five room air conditioners and will supply enough oxygen for ten people' (ibid);
  - supporting biodiversity by providing suitable habitats for birds and bats; and
  - provision of shade and shelter, through appropriate planting, from prevailing weather conditions, for example, shelter from winds or shade from bright sunlight.
- housing can complement the existing urban form;
- creation of character - where the existing surrounding urban form is of poor quality, opportunities exist to create an innovative and vibrant urban landscape, which establishes a sense of place and unique identity;
  - rehabilitation and renewal - for many former industrial and urban brownfield sites, the landscape character is typified by features of neglect and dereliction. Linked to the opportunity above, there can be an opportunity for the creation of landscape character or the rehabilitation of existing landscape or townscape character. This can either reflect the adjacent often historical urban form, through road layout, scale and type of housing and curtilage, or creation of distinctive high quality contemporary landscapes;
  - integration of open space - with careful consideration of the existing landscape character and existing value attached to that landscape, opportunities arise for the effective incorporation of the open space that represents interesting and exciting places for recreation for the new community, rather than 'left-over' voids. Coordinated with related elements such as access routes, habitat creation, microclimate audits and SUDS they can become an important part of, and valuable asset to, the community.

## **The opportunities for landscapes in housing developments**

With the implementation of new housing, there will be landscape change and impacts on landscape character. However, where developed within an informed landscape framework, drawing on the practice and application of landscape assessment, a number of benefits can be achieved:

- reinforcement of character - where a settlement or landscape has a relatively intact and strong vernacular housing character, carefully sited and designed



## Biodiversity

With regard to the incorporation of biodiversity into approaches to the sustainable development of new housing, the primary aims should be to:

- identify what key aspects characterise the local natural heritage features;
- understand the ways in which ecological receptors function within that site and its surrounding environment; and
- protect, restore and enhance natural heritage within a proposed development.

### **Biodiversity by Design a Guide for Sustainable Communities. A Town and Country Planning Association 'By Design' Guide. September 2004**

This guide introduces the core design principles for biodiversity by design and explores tools and techniques for analysing a site and its context, looking at the relationships with existing green networks. The guide also looks at how to develop a green infrastructure network into a master plan by integrating sensitive urban design principles, creating habitat networks, providing ecological services, such as air conditioning (mitigating the effects of heat islands) and pollution control, and creating connections with nature to improve opportunities to experience natural heritage. The guide then goes on to focus on detailed design elements including opportunities for urban ecology and explores how the long-term management and stewardship of green infrastructure can be secured. It provides a valuable tool, identifying the value of ecology to development, and presenting potential, often innovative, ways of integrating biodiversity into development schemes, through setting principles and by design. It presents the factors necessary to achieve an ecologically sustainable development in the urban context and provides a considerable amount of examples where principles were implemented in practice, both in the UK and elsewhere

## **Biodiversity issues and impacts associated with New Housing**

Existing mechanisms to manage the impacts of new housing development on biodiversity include national planning policy and advice, local Biodiversity Action Plans (LBAPs), conservation initiatives and specific land use policies in local plans. However, these policies tend to be fragmented and uncoordinated (CURE 2002) and consequently provide neither a consistent nor effective mechanism for the protection and promotion of biodiversity across the country.

In general, sites protected by nature conservation designations achieve a good degree of protection within the planning system. However it is non-designated sites, with value for biodiversity, that struggle to be properly incorporated into policy, and hence are often under-valued during the design and evaluation of development projects.

New housing and settlement developments can often have a number of unsustainable impacts on biodiversity, including:

- loss of habitats and species to buildings and associated infrastructure;
- disturbance of habitats and species during everyday operation of residential developments;
- predation and disturbance of birds, small mammals and reptiles by domestic cats and dogs;
- impacts on groundwater and surface water, including altered patterns of drainage and pollution;
- disturbance of species through light and noise pollution.

Unsustainable approaches to natural heritage aspects of new housing and settlement developments are often attributed to a misconception that biodiversity issues will be a restriction to development, and that they will be expensive or complicated to mitigate. This highlights a lack of understanding regarding the types of opportunities available to integrate biodiversity with development.

## Principles for biodiversity and new housing

“Working together, planners and developers should, through good design, aim to minimise harm to nature conservation features and, wherever possible, should actively seek to increase the abundance and diversity of wildlife and to ‘rebuild’ local ecological networks” (Oxford 2004).

Ecological systems are complex networks of habitats and species populations. They need inter-linking corridors to allow inter- and intra-system movement of species. Settlements are also open systems where people and goods are continually circulating (Llelyn Davies et al 1999). The same principles that guide communication links within and between settlements can be applied to ecosystems.

This inter-connectivity means that it is important to consider, in addition to the conservation of designated sites, the role of the wider, non-designated habitat mosaic (or wider countryside) incorporate this into development masterplanning. However, all sites and locations will have a unique resource base and development requirements. There cannot therefore be a standard check list for the development process. However, the following principles provide a guide:

- identification of the development area’s characteristic or important biodiversity features;
- identification of the desired biodiversity ‘outputs’ of the scheme;
- identification of the appropriate development processes to achieve these aims.

In order to achieve these aims, CURE (2002) identifies a generic approach to assessing how natural heritage issues might be incorporated within sustainable urban-fringe settlement planning, in terms of responding to the circumstances of the land in question. These are:

- high quality and in good condition: *conservation*
- high quality but in poor condition: *restoration*

- low quality but in good condition: *strengthening*
- low quality but in poor condition: *rebuilding*.

This approach is dependent on defining the condition of features, which in itself is a complex and often circumstance-specific issue, but is similar to the ‘avoid, mitigate, compensate, enhance’ strategy proposed by ENTEC (2002) and the more detailed, planning procedure approaches set out by Oxford (2000) to “enhance, restore, avoid, retain/incorporate, compensate, manage and monitor”.

## Transferring principles into action

The aim of all conservation, restoration and enhancement is to generate a net gain in biodiversity as an integral component of all new housing developments. This should be pursued at all stages of the development planning process, from strategic planning, to site-specific development.

### Establish the baseline conditions

Thorough field and desk-top surveys are necessary to identify the ecological receptors within an area, and how they inter-relate with receptors further afield. This will include statutorily protected sites and species, but also those considered important locally, through the LBAP process and consultation with the local Wildlife Trust and local experts.

Geographical Information Systems (GIS) can be a useful tool in mapping large quantities of spatial data, enabling an appreciation of landscape-wide relationships between sites, habitats and species. Historical maps can sometimes be used as a guide to what habitats or ecological features originally existed in an area, and how they related spatially to each other or were connected.

This type of detailed survey should be carried out to inform development plan policies at a local level, particularly where sites have been identified for housing land, supplementary planning guidance and site-specific proposals, whereas



LBAPs are a more appropriate tool to inform structure plans.

This information can be used strategically, to plan the location of traditional landscape ecology tools such as 'green wedges', wildlife corridors, and wildlife networks. However, for these to be successful it is necessary to have a thorough understanding of what species will be able to use these features, and how.

### **Constraints Mapping**

Constraints mapping should be used to identify development no-go areas (such as a presumption against development in statutorily designated sites), and those areas where development could occur without compromising the ecological integrity of the area. In this way, unsustainable ecological aspects of a development can be 'designed out' at a very early stage. Defining what may be lost as part of the development process will also assist with establishing what the ecological outputs of the project must be in order to maintain the sustainability principles.

While there are always other constraints that will influence the development of a housing site, features to be conserved, restored, enhanced or connected should be identified, taking account of nationally and locally important biodiversity features. A rationale for these actions must be clearly stated.

### **Implementation**

The materials and techniques used in construction can often significantly compromise the ecological sustainability of a scheme. Although the use of more 'natural' materials in developments, such as wood, has become more fashionable, this should be sourced locally from sustainably managed woodlands. Specifications for construction materials and techniques will be set out at the planning consent stage.

*It is important to be aware of the restrictions of European competition laws that restrict the ability of planning authorities to impose specific requirements about the use of materials in development, and clear and proper justification will always be necessary.*

Adequate attention should be paid to wildlife legislation during construction, particularly for European protected species such as bats, otters and great crested newt, but also nationally protected species (breeding birds and their nests, reptiles, badger and so on). The Nature Conservation (Scotland) Act 2004. has introduced new penalties for 'reckless' disturbance of such species, which will strengthen legal cases against developers who contravene this legislation.

### **Post-development site management plans**

Site management plans are useful for ensuring that the original objectives of a project continue to be delivered for the scheme's entire lifetime, and if the acceptability of a development depends on securing these objectives, failure of long term monitoring and maintenance will make the development unacceptable. A management plan for a sustainable settlement might cover a range of issues to ensure that all the socio-economic and environmental aspirations of the site are met, and biodiversity will form one aspect of that plan.

Ecological management plans tend to be wide-reaching in their content, and can cover some or all of the following:

- targets for habitats and species on the site;
- how the targets will be monitored;
- action to be taken if targets are not met;
- management regimes for habitats and species (including frequency, timing, methodology, personnel, etc.);
- how ecological aspirations will be incorporated with other outputs of the scheme (recreational, residential, industrial, etc.);
- funding.

## The benefits of incorporating biodiversity into housing design

Integrating biodiversity into new housing developments can have a range of potential benefits for the scheme and its future inhabitants. These include:

- provision of green 'infrastructure', such as a network of paths and open spaces and a high quality natural landscape, providing healthy living environments and space for social interaction;
- education benefits by providing opportunities to learn about natural heritage on the doorstep, whether from open space opportunities for play to awareness of wildlife through the provision of bird boxes and pond areas;
- opportunities to develop sense of community through initiatives to support local biodiversity;
- provision of biodiverse gardens;
- flood prevention;
- maintenance of water quality by helping to manage local wildlife resources, e.g. wetland habitats can be used for the storage and cleaning of 'grey' water; and pest control, by providing suitable environments for birds and bats whose diet includes garden pests.

### East Dunfermline expansion

The Dunfermline East Expansion (DEX) area was identified in the 1994 Fife Structure Plan to accommodate the town's expansion needs over a 20 year period. The former Fife Regional and Dunfermline District Councils along with Fife Enterprise commissioned consultants to produce a master plan for the area. A key consideration of the masterplan was drainage, where the site has potential to affect four watercourses to the south and west, passing through developed areas subject to flooding. Working with SEPA, a series of ponds have been created to attenuate the forward flow of surface water and to help improve its quality prior to discharge to the main water-courses. The attenuation ponds also provide significant amenity features within the developed areas enhancing ecological benefits as the vegetation becomes established.

*The concerns over the safety of having ponds so close to housing areas were mitigated by the use of shallow sloping sides, barrier planting, fencing and natural surveillance.*

## Opportunities for ecology from new housing developments

The following examples set out potential opportunities for the conservation and enhancement of biodiversity on sites proposed for housing developments. Some of these are accompanied by examples of where they have been implemented:

- \* *Creation of Wildlife Corridors:* opportunities are provided for wildlife to pass from garden to garden to other urban habitats and or the countryside, avoiding the need for animals to cross roads or separating/isolating habitats from one another.
- \* *SUDS:* are now commonplace in new developments. However, according to SEPA, for the majority of schemes adopted, no ecological benefits are achieved. SUDS such as filter drains and permeable surfaces do offset pollution run-off and contribute to managing flooding but they do not contribute to enhancing a site's biodiversity. Habitat creation opportunities do exist however, where settlements ponds, attenuation ponds or swales are used.

*The implementation of SUDS schemes can prove difficult in housing developments where there may be potential for accidents. It is necessary to identify responsibility for such schemes and often this will fall to the local planning authority or residents. In order to reduce the risk of liability, open attenuation ponds should be designed with child safety in mind, as in the East Dunfermline Expansion scheme.*

- **Habitat Creation:** wetland and scrub areas, log and rock piles and green roofs - supportive of amphibians, reptiles, insects, birds, butterflies and other invertebrates, supporting a wider diverse ecosystem. The simple introduction of new native plants or seeds also can help to build up new habitats for birds and bats, while enhancing the natural appearance of a site. Native species are more likely to survive and support other native species on the site and in the wider landscape.
- **Habitat Creation:** introduction of bird boxes and bat boxes/roosts –can help replace any habitats lost to construction and can promote wildlife diversity on a site. It is worth noting that bats do not tend to cause a smell or make noise and their droppings turn to dust rather than leave solid remains like mice (English Nature 2003). Also, bats and birds can provide a valuable and natural method of pest control.
- **Maintaining/Avoiding Existing Habitat Features:** instead of removing features and replacing them with new species, often not native, or difficult to manage, it can be more effective to identify existing features and retain and or enhance these, either on site or in the surrounding landscape.
- **Habitat Management:** construction and Long-term - management plans can be implemented to secure existing habitats, in particular during the disruptive construction phase. Similarly, once complete, there can be significant value achieved from long-term habitat management. For residential areas, there is potential to achieve this firstly through the introduction of low maintenance planting and secondly as part of the overall site maintenance scheme. Opportunities also exist to engage local residents in management schemes, promoting stewardship. For example through the use of incentives such as offering free membership of a local wildlife trust for new residents.
- **Environmental Education:** provision of information materials for new householders is a simple way of sharing the information, gathered about a site at assessment stage, with new residents. Developers can be encouraged to produce an information booklet about key features of interest or initiatives implemented on the site, explaining their value and how to respect these. This booklet could be made available to new residents on the sale of properties.
- **Fencing:** to protect important wildlife species in areas adjacent to new housing developments from predation by domestic animals, or similarly, to protect existing and new planting from damage by wildlife, e.g. the use of deer fences around a new a housing development in Applecross, Wester Ross.
- **Ground/Soil:** careful management of soils during development to retain soil integrity and potentially enhance quality to support growth and survival of new species and habitats.
- **Translocation:** use as a last resort to rescue important habitats that would otherwise be lost to development. For example, a new housing development at Carnbroe in North Lanarkshire, has implemented the translocation of orchids within the site to a more suitable/sustainable green area.

### **Viikki District, Helsinki 1994**

In 1994 the Finnish Ministry for the Environment, the Finnish Association of Architects and the Technology Development Centre of Finland (Tekes), initiated the Viikki Ecological Neighbourhood north of Helsinki with an objective to introduce urban experimental housing development in accordance with the principles of sustainable development.

The winning master plan for the scheme introduced a finger like system of alternating building and open spaces, which will be used for play, composting, SUDS and gardening. Existing local plan policy requirements for ecological construction influenced the scheme's principles.

The settlement will eventually accommodate 13,000 new inhabitants and 6,000 jobs and all of the residential areas are linked to the large surrounding park landscapes. The Latokartamo area has been used as a test area for ecological residential development. The site promotes water savings, maintains variety in the eco system, uses non-toxic materials with a long life, promotes involvement of inhabitants in the protection of the environment and finds solutions to exclude cars and prioritise public transport.

Source: [www.hel.fi/ksv/english/projects/viikki](http://www.hel.fi/ksv/english/projects/viikki)



Site Layout



Gardening Spaces integrated with housing

## **Access and recreation**

In an urban context, ensuring that all new developments are accessible by pedestrians and cyclists and have an adequate supply of useful open space, of value for active and passive recreation, has become a key strategic objective of planning policy. Provision of sustainable access and open space can contribute to the wider objectives for:

- health;
- social inclusion;
- land management; and
- economic development.

Whilst the relevance of each of these subjects is likely to vary from site to site, they all have potentially significant value for residential development and it is important that the opportunities for, and benefits of, access and open space are considered throughout the planning process to secure accessible and integrated residential developments in Scotland.

### **Key issues and impacts for access and recreation and new housing developments**

In recent years the most significant piece of legislation relating to access has been the Land Reform (Scotland) Act 2003 which came into force in February 2005. The Act gives everyone the right of responsible access across open land and water in Scotland.

While this right of access does not apply to the curtilage of houses, in most cases, the right of responsible access will apply in any open land around new housing developments and consequently, the creation of links between new residential development and access to open space or the countryside should be pursued.

Most local authorities in Scotland have developed Access Strategies, which provide a strategic framework for the development of access across each Council area. These strategy documents currently have advisory status only. However, the Land Reform (Scotland) Act 2003 places a number of responsibilities on local

authorities in Scotland, including a requirement to identify a 'core path network' within three years of enactment (February 2005). These core path networks will be identified through public consultation and must be shown to fulfil the needs of all users.

Local authorities will have a statutory obligation to: '...do anything they consider appropriate for the purposes of maintaining a core path and keeping a core path free from obstruction or encroachment'.

This could have significant impacts on development proposals if they are likely to obstruct or remove a core path and will provide valuable opportunities for the consideration of access in the future.

Accompanying the Land Reform Act, further support for increasing the profile of access within Scotland has come from Travel Choices for Scotland: The Scottish Integrated Transport White Paper (Scottish Executive 1998). This outlines an integrated approach to transport provision at the national level and recognises the direct relevance that transport issues have to many other policy agendas such as the environment, health, education and wealth creation.

The White Paper outlines a framework for the introduction of a number of policies providing support for walking and cycling and includes raising awareness of walking issues and the creation of safer cycling opportunities. It also provides an opportunity for integrating sustainable access into new housing developments, securing links to existing or potential routes and networks.

### **Sherwood Energy Village**

Sherwood Energy Village is on the site of the former Ollerton Colliery in the East Midlands which was a working mine until March 1994. The site comprises industry, commerce, housing, education, recreation, tourism and leisure. In 1995 a concept plan was drawn up to show how the site could look and the idea of Sherwood Energy Village was born with open space and access as central themes for the Village. These included:

#### **Central Park**

1.8 acres of landscaped open space located centrally in the site, to provide a focal point. It will be accessed via the main pedestrian entrance to the site, or by the many other foot and cycle paths throughout the Energy Village.

#### **The Arena**

The Arena is an area located to the edge of the site of about 20 acres in size. It is surrounded by mature trees and is designated for leisure and recreational activities. Incorporated within the Arena is a wetlands area, established to encourage different forms of wildlife.

#### **The Energy Trail**

The Energy Trail will pass through the Village and include a range of different plants, sculptures and examples of stand alone renewable energy features.

The Design Statement also provides for the integration of the Village with the existing communities of Ollerton Village and New Ollerton through extensive road and footpath links, bringing all local facilities within easy reach of the proposed new housing.

Source: [www.sherwoodenergyvillage.co.uk](http://www.sherwoodenergyvillage.co.uk)

In relation to recreation and open space provision, the open space agenda has also grown in importance, with the publication of PAN 65 in 2003 for Planning and Open Space (Scottish Executive 2003 b) and the establishment of Greenspace Scotland, which is, amongst others, working with local authorities to secure the creation of open space strategies.

Residential developments provide a significant opportunity to create high quality open spaces, however care has to be taken to secure these whilst avoiding the pit falls that are associated with them, such as anti-social behaviour and or lack of maintenance. Open spaces within

residential developments provide a valuable landscape structure for a scheme, the opportunity to promote net gains in biodiversity and a focus for community interaction.

New housing can have significant impacts on access and recreation including:

- existing 'informal' spaces or areas which may not be formally recognised or maintained but are locally important for activities such as dog walking can be lost, this can be particularly relevant in the case of brownfield sites and in urban fringe areas;
- without careful design, residential amenity can be affected by poorly designed routes and open spaces; and
- new housing developments adjacent to existing path routes can lead to demands for path closures where the uses are incompatible as a consequence of poor design, leading to conflicts between residential amenity and anti-social behaviour.

### **Principles for access and recreation and new housing**

Provision of access to community facilities, the countryside (where possible) and open space are key elements that should be considered when helping to develop a safe and sustainable new residential area. Open, accessible residential areas are likely to be 'healthier' and suffer less from problems of isolation. This concept links closely to the guidance set out in 'The Promotion of Physical Activity in Scotland', (Health Education Board Scotland 1997) the strategic statement of the Health Education Board Scotland (now Health Scotland) which highlights the importance of exercise because of its role in the prevention of coronary heart disease, stroke and vascular disease as well as general well being.

At a basic level, access is about being able to move safely by foot or bicycle between the home and a given destination (e.g. parks, school, work, shops, doctors etc). Whilst the types of destination may vary from settlement to settlement (depending on size, location and



type), the principle that the population should be able to gain access to local services and outdoor activities by means other than car, remains true.

Whilst the new access legislation gives a right of responsible access across open land, it is likely that the majority of the population will still predominantly use designated paths and routes. Therefore it is important that consideration is given to connections to access networks from new developments.

A Review of Peripheral Housing Developments and their impacts on the Natural Heritage, ENTEC (2002) outlines four principles to be considered by SNH and local planning authorities to 'safeguard and improve access'. These are:

- retain existing networks of footpaths, bridleways and tracks and well used open access areas, both within the site and to/from surrounding countryside;
- where extinguishing of existing paths and tracks cannot be avoided, ensure the development is sufficiently permeable to allow through access with good linkages to open countryside. Where open access areas are lost, ensure that these are replaced on, and/or off-site;
- provide additional paths through and around the development, giving particular consideration to links to existing path networks and areas of publicly accessible open space (e.g. there may be a requirement for new footbridges over roads/railways to enable residents to access the countryside safely and easily);
- and retain, create and manage land alongside new and retained paths in order to enhance the setting and users' enjoyment of them.

*It is important to remember that residential developments are particularly sensitive to loss of amenity as a result of path networks. This is especially true where paths encourage non-resident pedestrian traffic through a site or paths are provided to the side and rear of dwellings. To avoid this loss of amenity, paths should be designed in order to promote natural surveillance, i.e. to the front of dwellings rather than to the side or rear. This can be achieved while still creating important links to external routes and networks for residents.*

Similarly, open space provision within a scheme should aim to achieve the following principles:

- provide a sense of welcome and place;
- contribute to the landscape structure of a scheme and its surrounding landscape context;
- contribute to providing a healthy environment, with opportunities for play, social interaction, and views onto green areas, of proven value for mental health; and
- contribute to improving on site biodiversity.

### **Transferring principles into action**

To achieve the above principles through new settlement development, a useful starting point can be summarised as:

- Retain;
- Enhance;
- Replace;
- Add new.

As a minimum, these should be the principles applied at all stages in the planning process, taking into account the potential benefits of each action within an area. For example, failure to provide proper links to an existing Safer Routes to School scheme may lead to even more children being driven to school. This has potential impacts on air quality, physical health and the sustainable transport agenda.

### **Establish the baseline conditions**

A primary step in the development planning process, where identifying land for housing and developing sites should include the consideration



of how access can be fully integrated. In simple terms this can be done by looking at any existing data on paths and routes in the area (the Scottish Paths Record is held by SNH and each local authority's access strategy could be used as a starting point).

The analysis should also consider 'trip generators' such as parks, schools, shops or places of employment within walking/cycling distance of the development. Identifying these key locations will help to identify where the key access points are likely to be needed and where there may be a lack of permeability through a given site.

Any existing projects such as health walks, Safer Routes to School schemes or other access projects should be identified and mapped in relation to any potential site. In some cases there may be an opportunity to improve access into the countryside or onto an existing longer distance route such as a canal towpath. Information such as this can be available from a range of sources, such as consultations for Local Plans and from Access Officers.

The identification of baseline conditions should also identify any significant barriers to access that may be present in an area. These could include railway lines, major roads or large-scale industrial sites.

This approach should be used when looking at strategic plans and also when considering supplementary planning guidance, and site specific development proposals including masterplans.

For open space provision, there is value in taking into account the existing supply of open space provision in an area and the potential for making connections to existing spaces and enhancing that provision rather than integrating a new and separated facility within a scheme that duplicates existing provision. Similarly, where existing provision is limited in scale and quality, there may be scope for a development to contribute to improving wider community facilities as well as providing open space within the scheme.

A baseline assessment of open space facilities can be informed by local open space strategies and should inform strategic policies, supplementary planning guidance, master plans, right down to planning applications. Of particular importance however is supplementary planning guidance that can set out the detail of open space standards and principles that can be applied through all housing developments.

### ***Identify existing and likely resident needs/desires***

At the master planning and application stage an analysis of possible residential needs should be undertaken, to identify the potential trip generators and open space requirements. This is likely to vary considerably from scheme to scheme. The trip generators are likely to be very different for an urban brownfield development site compared to a suburban or rural development. In urban areas consideration may need to be given to creating links to cycle and access networks into urban centres and the provision of amenity open space or links to existing facilities, while in suburban or rural areas greater consideration may be given to the provision of more child friendly links between housing, open spaces, the countryside and schools and the provision of safe play areas.

### ***Identify potential connections***

Permeability between urban and rural locations into any new development is likely to be a key consideration. Any new development should connect with the major trip generators and existing access network as much as possible. For example, where possible, connections should be made to:

- Safer Routes to School;
- existing path networks (e.g. woodlands);
- green networks or corridors;
- parks; and existing important access routes such as canal towpaths or disused railways.

### **Adambrae Parks , Livingston**

Adambrae Parks is a suburban residential development in Livingston. The key feature of the original masterplan was to build the housing around a linear park which follows the route of a burn. This was used to develop a connected network of walkways and cycleways which provide easy access into the 390 houses in the scheme. Links were made to existing bus stops, underpasses and an overbridge, which have allowed Adambrae to be fully connected with public transport, the local retail centre and Kirton Campus employment area. The access and recreation facilities formed the backbone to the scheme and have helped to maintain the viability of local shops and services. It has also led to favourable reactions from local people in residents surveys.

### **Additional Guidance:**

SNH, Paths for All (2004) Outdoor Access Strategies A Guide to Good Practice The document sets out key process related features for preparing or reviewing an outdoor access strategy. Part of the process involves developing a vision and an action plan to identify key action themes to address. This guidance stage of the process provides an important opportunity to access within new housing developments.

### **Benefits for new housing from access and recreation**

Access and recreation solutions integrated into new housing developments will be of value for residential developments by providing opportunities for health and education, enabling access to community resources.

Residential areas with good quality access are less likely to experience isolation, social exclusion and the associated economic and health problems.

The provision of high quality access and open space facilities will contribute to 'place making', creating a sense of place and community.

Access networks and open space provision can be established in a manner that support on site and neighbouring biodiversity, providing wildlife corridors and similarly contributing to landscape structures integrated with the local landscape context.

Finally, the advantages of providing opportunities for access and recreation are now recognised as major contributing factors in attracting buyers.

### **Opportunities for access and recreation from new housing**

New housing schemes can provide opportunities for existing access and recreational facilities through:

- replacement,
- extension or
- improvement.

Improvement of existing local open space facilities can be achieved through the use of Section 75 Agreements where open space provision off site can compensate for reduced provision on site.



## 4. TYPES OF NEW HOUSING DEVELOPMENT AND GUIDANCE

### Introduction

Despite a falling population, changing lifestyles and household structures, and in particular an increase in requirements for single person homes, mean that the demand for new homes in Scotland continues, and will continue, to rise. The trend is leading local planning authorities to facilitate an increase in housing land allocations and the development of a range of different housing types, including, high-density urban brown field developments, middle density suburban housing, large scale urban expansions, entire new settlements, and the expansion of existing small settlements and housing in the open countryside. However, despite there being a plan led system for development in Scotland, there are often cases where housing proposals will be submitted to planning authorities for consent outwith the designated areas, in particular away from towns and cities and beyond the green belt.

Scottish Planning Policy (SSP) 3, Planning for Housing (2003), highlights that the efficient use of land is an important planning aim. Higher density development should therefore be promoted on sites in close proximity to transport nodes with lower densities becoming more suitable away from large urban centres of population.

Densities in the simplest terms can range from high-density developments, which tend to include flatted and terraced developments, to medium density schemes, more popular in suburban/urban fringe areas, to low-density schemes, more common in older suburban developments and in rural areas.

The remainder of this chapter presents an overview of the different settlement types and presents guidance for securing the protection and enhancement of natural heritage.

### Brownfield housing developments

City or town centre housing developments generally tend to be located on brownfield (previously developed) land, and can be

represented by up market schemes similar to that at Glasgow Harbour, Edinburgh Waterfront and the former Royal Infirmary Site in Dundee, or equally, by social/affordable housing schemes such as at Crown Street in the Gorbals.

In many cases, brownfield land is prioritised for high density residential development. However, it should not be assumed that all brownfield land is suitable or preferable. Experience from across the UK often suggests that derelict land can sometimes be of greater biodiversity interest than some areas of intensively managed farmland.

SPP 15 for Rural Development (2005), also notes the potential of brownfield sites in rural areas, including former brickworks and sawmills, as suitable for conversion to residential use, with potential to achieve “net environmental benefit” (para 18).

Natural heritage issues typically associated with these types of schemes include:

- potential loss of important local landmarks or elements of cultural heritage;
- potential landscape impacts where brownfield land is located in an otherwise rural location;
- potential loss of semi-natural habitats and species that have colonised the site and loss of wildlife corridors; and
- loss of open space and informal access routes.

Opportunities on the other hand can include:

- positive contribution to local landscape and townscape;
- use of existing site features to ensure the new development sits comfortably with its wider urban landscape setting;
- retention of the green belt;
- concentration of development in existing urban areas;
- limited amount of land-take as a consequence of development;
- inclusion of existing natural heritage features, e.g. mature trees into the design to conserve and enhance them as habitats;
- creation of habitat corridors;

- provision of publicly accessible semi-natural open space; and
- use and extension of urban access networks for example, improved pedestrian access to the waterfront in Glasgow.

### **Brownfield housing guidance**

Aims: to ensure that the existing natural heritage value of the brownfield site is recognised from the outset and reflected in the way that redevelopment proposals evolve. An equally important aim will be to secure significant landscape, biodiversity, access and open space benefits.

### **Landscape**

Objectives should include:

- identification and retention of important local landmarks or cultural elements associated with the previous use of the site;
- development of proposals that reflect, enhance and integrate with the surrounding townscape or landscape.

This requires the following to be carried out:

- initial proposals for a brownfield site, whether identified through the Local Plan, supplementary planning guidance or by developers, should include an assessment of the landscape and townscape character and capacity of the site and its immediate context. This should provide an indication of which (if any) features to retain, and help define landscape and townscape design principles to inform development of the scheme;
- pre-application discussions, together with the review of any master plan proposals or planning application should consider the extent to which these design principles have been reflected in the scheme. Depending on the location and context of the scheme, issues to consider may include:
  - scale, form of new buildings and their relationship with neighbouring areas of townscape, open space or landscape;
  - the extent to which the development would affect key views or the setting of

- key landmarks;
- the treatment of boundaries;
- internal landscape proposals, particularly in terms of the way they relate to adjoining areas.
- how will the landscape features established through the development be maintained in the long-term?

### **Biodiversity**

Objectives should include:

- identification and potential retention of important habitats or species that are present on the site;
- creation of new habitats particularly where these contribute to wider habitat networks or support habitats species identified in the LBAP.

This requires the following to be carried out:

- key principles for biodiversity and brownfield development can be set out at the planning policy stage, in particular requiring that all housing developments should actively seek to achieve net biodiversity gain;
- initial proposals for a brownfield site, whether identified through the Local Plan, supplementary planning guidance or by a developer, should be informed by baseline surveys of the biodiversity value of the site and an overview of the surrounding area in order to define opportunities for habitat corridors and networks involving the site. This information should be used to inform the biodiversity objectives for the scheme. This is likely to highlight opportunities for habitat conservation, enhancement and creation, and the establishment of any habitat corridors or habitats linked to SUDS or other infrastructure;
- pre-application discussions, together with the review of any master plan proposals should consider the extent to which these objectives have been reflected in the scheme:
  - biodiversity issues should be the subject of a management plan, setting out how the proposal will be developed in the light of the site's attributes in order to secure net biodiversity gains. This should

include consideration of how habitats within and adjacent to the site will be monitored and managed once the scheme is complete;

- ask if the proposal achieve a net gain in biodiversity?
- ask if the site will secure and enhance green corridor networks for wildlife?

### **Access and recreation**

Objectives should include:

- enhancement of access and open space opportunities, particularly within urban areas;
- integration of the development site with surrounding access and open space networks.

This requires the following to be carried out:

- planning policy should encourage all housing developments to consider existing sustainable access networks and access requirements of future residents;
- initial proposals for the brownfield site, whether identified through the Local Plan, supplementary planning guidance or by developers, should include a review of existing access and open space provision within the wider area around the site. The local authority Access Strategy may include an audit of access routes (including longer distance routes) and will set objectives for the area in question. An analysis of proposed land uses on the site, together with land uses in the surrounding area, will help identify the need for new access routes linking through the site and serving schools, shops and other facilities. There may be opportunities to create new recreational access, for example along riversides or the coast, bringing benefits for new residents, the existing population and visitors to the area. Similarly, the council may have an Open Space or Greenspace Strategy, identifying any deficiencies in the quantity, quality or type of open space in the surrounding area. This review of information will help set access and open space objectives which should be reflected in the way that proposals for the site are developed;

- pre-application discussions, together with the review of any master plan proposals or planning application, should consider the extent to which these design principles have been reflected in the scheme and ask:
  - are the functional and recreation access needs of future residents on the site reflected in the scheme?
  - does the site link into and contribute to the wider network of paths and open spaces?
  - have key opportunities for new access been incorporated in the scheme?
  - what provision is there for future management and maintenance of these facilities?

### **Peripheral housing**

Peripheral housing developments tend to be medium density estates of detached or semi-detached units. Most urban areas in Scotland have seen a significant increase in the development of this type over the past 10 years. In terms of absolute numbers, it is likely that this type of development will account for a significant share of the new housing over the coming decade, and where the need may become greatest to ensure that natural heritage issues are fully reflected through the planning process.

Natural heritage issues typically associated with these types of schemes include:

- loss of rural and urban fringe landscapes on the edge of settlements;
- landscape and visual impacts associated with new houses and elements such as boundary treatment and screen planting, particularly where development is pushed in to more and more prominent locations;
- potential loss of historic settlement patterns and local distinctiveness, resulting from incremental peripheral additions to the urban area;
- the direct loss of habitats, and the creation of additional barriers to species movements within and across the urban area;
- loss of informal and formal access to the countryside from the existing urban areas;
- risk of poor accessibility for people on foot

or bike and dependence on cars and public transport.

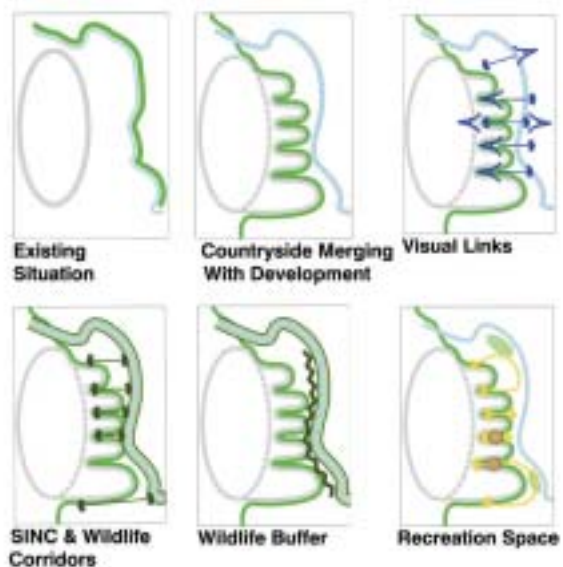
Opportunities on the other hand can include:

- enhance degraded urban fringe landscapes;
- retain and reflect existing landscape features;
- reflect layouts and building designs that reflect vernacular patterns in the surrounding area;
- conservation of valuable habitat features and the creation of new habitats;
- creation of new access opportunities linking through the site and between urban and rural areas.

### **Carnbroe, Coatbridge 2003**

North Lanarkshire Council worked with a housing developer to prepare a Design Statement for the development of 250 dwellings on a site identified by the Council for release from the greenbelt subject to the preparation of a design statement. In preparing the Design Statement, assessments were carried out for the site and adjacent environment covering landscape and biodiversity. These studies helped to inform the developer of the local context, potential landscape impacts, site visibility and natural features. Informed by the baseline survey work, the Design Statement set out the key design principles for the site including:

- creation of green links to:
  - create distinctive landscape features,
  - accommodate pedestrians and cyclists,
  - integrate the scheme with the countryside,
  - provide a strong shelter belt,
  - secure wildlife corridors, and
  - reinforce the rural edge to what is an urban fringe area;
- enhancement of the ecological value of the nearby SINC;
- retention of existing hedgerows and the shelterbelt of mature trees;
- native species planted towards the countryside boundary were proposed as native; and
- within the built up areas, more ornamental species were suggested to reflect the local tradition of designed landscapes.



Source: Barton Willmore Planning Partnership 2003.

The Design Statement also noted that the site would be subject to an ecological management plan, with specific details to be agreed following approval of the layout.



## **Peripheral housing guidance**

Aim: to ensure that the existing natural heritage value of the development site is recognised from the outset and reflected in the way that proposals evolve. An equally important aim will be to secure significant landscape, biodiversity, access and open space benefits.

### **Landscape**

Objectives should include:

- identification and retention of any on site features of value, including views;
- development of proposals that reflect, enhance and integrate both with the surrounding townscape and rural landscape.

This requires the following to be carried out:

- the identification of locations for peripheral development should be carried out through the local plan process. The use of a landscape character assessment and an analysis of landscape sensitivity to guide the development to appropriate locations, to determine the scale of development that is appropriate in a given location. Townscape analysis of settlement patterns and historic growth may also be valuable in determining appropriate urban fringe locations for additional peripheral development;
- landscape character assessment should also be used to develop design guidance in terms of site layout, retention and enhancement of existing landscape features, building design and materials and the need for landscape enhancement or treatment within the site or in off-site locations. The guidance should be endorsed by the local authority as supplementary planning guidance (such as development briefs);
- Pre-application discussions for specific sites and the review of the planning applications should include consideration of the extent to which the proposal reflects the results of the assessment and the objectives of the design guidance/development brief.

Points to consider at this stage include:

- does the proposed layout and building

form respond to the underlying landform and to key landscape features and character on the site in the surrounding area?

- does the proposal identify and respond to key characteristic landscape features within the site and the surrounding area?
- will important features be retained within the site, or reflected in the layout?
- does the proposed pattern of development (scale, layout, road network, open space, massing etc.) reflect the pattern of local settlement?
- will the development contribute to local or regional distinctiveness?
- does the proposed range of building types, designs and materials reflect the pattern of local buildings?
- does the scheme include proposals for boundaries within and around the site and will these aspects contribute to local or regional distinctiveness?
- how are gateways, corridors and undeveloped areas within the site and between the site and any existing urban area to be treated?
- how visible will the development appear in the wider landscape? Will it be integrated with the surrounding pattern of settlement or will it be prominent as a consequence of its location or the design, materials or colours of the buildings?
- will the development affect the visual setting of key landmarks, or the outlook from key viewpoints?
- what mitigation measures, including boundary treatment, are proposed?
- how can these issues be addressed through planning conditions or agreements?
- how will the landscape features established through the development be maintained in the long-term?

### **Biodiversity**

Objectives should include:

- identification of existing habitats and species present on the site or in the surrounding

area;

- habitat proposals that achieve a net biodiversity gain by conserving and enhancing existing habitats and creating new habitats as appropriate.

This requires the following actions:

- the identification of suitable sites for peripheral housing development through the local plan process should include a baseline study that considers the important biodiversity sites, and the potential of new development in different locations, using constraints mapping, to contribute positively to biodiversity, including the creation of habitat networks and corridors;
- the LBAP should be used to provide guidance on the range of habitats that should be prioritised in a particular location.
- supplementary planning guidance should be used to highlight:
  - the importance of conserving and enhancing the biodiversity of the site and the area around it;
  - any existing habitat features that should be conserved within the site;
  - criteria to guide habitat creation or enhancement and the possible need for off-site compensation;
  - opportunities to establish or connect with existing habitat networks and corridors, of particular importance where development is taking place on the periphery of a large settlement and where there is likely to be a need to facilitate species movement within and across the built up area
  - the need for pre-application discussions and consideration of the extent to which the proposal reflects the results of the assessment and the objectives of the supplementary planning guidance.

Points to consider at this stage include:

- does the planning application identify habitats present on or near the development site?
- does it prioritise the conservation, enhancement or creation of habitats in accordance with the LBAP?
- does it identify habitat opportunities

associated with open space and access networks, or with SUDS or transport infrastructure?

- does the proposal conserve, enhance or create habitats within the context of wider habitat networks across the site and linking into neighbouring urban areas and the countryside, achieving net biodiversity gain?
- does the proposal provide information on future monitoring and management of habitat measures, including a site management plan?
- how can these issues be addressed through planning conditions or agreements?

### **Access and recreation**

Objectives should include:

- the maintenance of any existing formal or informal access routes through the site, linking the existing urban edge with the open countryside;
- the creation of additional paths linking into existing networks with the aim of meeting the needs of new residents and the existing population and to facilitate safe access to facilities and recreational opportunities, both in the urban and rural contexts where possible;
- the creation of high quality and functional open space linked to habitat creation, recreation provision and the path network.

This requires the following actions:

- consideration of access and open space requirements in the selection of sites for peripheral developments during the local plan process. Council's open space audit or strategy may have identified urban areas with current deficiencies in the quantity or type of open space. Additional development between such areas and the open countryside could make such problems more significant, in particular where access is not properly considered. Alternatively this might highlight the need for additional open space provision within new development in this kind of location. Local plans should also set out a requirement for the preparation of supplementary planning guidance to inform

housing development requirements for access, taking into account areas identified as housing land;

- supplementary planning guidance should be prepared and identify the following elements:
  - existing elements of the path network that connect with, or pass through development sites;
  - the requirement to maintain access through the site, retaining links between the existing urban area and the countryside;
  - the requirement to provide safe access on foot or by bike to schools, shops, open spaces and village and town centre facilities, whether they are located within the development site or in the existing urban area;
  - the requirement for new high quality functional open space within the development, and the potential requirement for links to open space networks in existing settlements;
  - the need for pre-application discussions and planning consents to consider the extent to which access and open space objectives set out in supplementary planning guidance have been met.

Points to consider at this stage include:

- does the scheme maintain existing access through the area, linking the existing urban area with the open countryside?
- does the scheme include a path network to safely meet the needs of people travelling on foot or by bike, facilitating access to community facilities and recreational opportunities?
- does the proposed path network connect with the network in surrounding areas? If not, what measures are required to achieve this?
- how will the proposed development affect existing patterns of access?
- will existing formal or informal access across the site be affected? If so, what modifications are required to maintain such access?
- what open spaces are proposed as part of the scheme?
- how do these open spaces respond to the local context (landscape, network of open

spaces, shortfalls in quantity or type of open space)?

- does the application specify how access and open space facilities will be managed and maintained in the future?
- how can these issues be addressed through planning conditions or agreements?

### **Planned settlement expansion**

The planned expansion of settlements relates to the growth of an urban area, allowed for in development plans, beyond existing settlement boundaries or town envelopes, into adjoining areas or along identified growth corridors. Settlements such as Inverness are actively exploring options based on the creation of growth corridors focused on transport nodes.

Natural heritage issues typically associated with these types of schemes include:

- loss of rural landscapes adjacent to existing settlements;
- landscape and visual impacts associated with new houses and elements such as boundary treatment and screen planting, particularly where development is sited in more prominent locations;
- potential conflict with the area's historic settlement and local characteristics;
- The direct loss of habitats including woodland, hedgerows, wetland, grassland etc.;
- loss of informal and formal countryside access opportunities;
- risk of poor accessibility for people on foot or bike and dependence on cars and public transport.
- loss and fragmentation of habitats;

Opportunities on the other hand can include:

- enhancement of degraded landscapes, for example where mineral working or other activities have taken place in the past;
- opportunities to retain and reflect existing landscape features;
- enhancing 'urban fringe' landscapes;
- reflection of layouts and building designs that reflect vernacular patterns in the surrounding area;

- conservation of valuable habitat features and the creation of new habitats;
- creation of new access opportunities linking through the site and enabling access to the countryside.
- incorporating wildlife corridors alongside key landscape features in the new development;
- use of intensively farmed land of limited value for biodiversity instead of developing brownfield sites of biodiversity value.

### **Greater Copenhagen “The Finger Plan”**

The main source of inspiration for the creators of the “Finger Plan” was probably Sir Patrick Abercrombie’s “Greater London Plan 1944”. The plan consisted of individual neighbourhood units with local shopping centres, schools, and other everyday needed facilities. Larger shopping centres would be located at nodal points where large roads would meet, and the main shopping centre would be located in the city core. The space in between neighbourhoods would remain undeveloped to allow parks for recreational activities. The development of the finger like pattern was based upon the existing structure of the radial S-train (local commuter train) lines.

The “Finger Plan” aimed to reinforce and regulate the development trends that had emerged when the S- trains came into use in the 1930s through the development of housing around the stations. The “Finger Plan” has been used as a framework for regional planning in the Copenhagen metropolitan area for over half a century, and throughout this period the spatial pattern as a whole has remained intact. This has included the well-designed public transport system that provided a skeleton for future development of the public transport system, and the retention of the green spaces between the fingers.

The main lesson to be learnt from this example of a settlement framework is that environmental policy should be based on consistent and sustainable land use plans and principles.

The implications of this approach for the natural heritage include the maintenance of a network of green space between settlements. This is a very strategic approach and provides a framework for natural heritage issues, but does not provide detail on how responses to local natural heritage issues are integrated into the wider framework.

Source: [www.inro.tno.nl/transland/cases\\_nonprio/copenhagen.pdf](http://www.inro.tno.nl/transland/cases_nonprio/copenhagen.pdf)

## **Planned Settlement Expansion Guidance**

Aim: to ensure that the existing natural heritage value of potential new housing sites is recognised from the outset and reflected in the way that development proposals evolve. An equally important aim will be to secure significant landscape, biodiversity, access and open space benefits.

### **Landscape**

Objectives should include:

- identification and retention of important site features, landmarks or cultural elements;
- development of proposals that reflect, enhance and integrate with the surrounding landscape.

This requires the following to be carried out:

- The identification of locations for growth areas should be carried out through the local plan process, though the principle may already have been established through the Structure Plan process. The use of a landscape character assessment and an analysis of landscape sensitivity should be used to guide development to appropriate locations and to determine the scale that is appropriate in a given location. Analysis of settlement patterns and the pattern of historic growth may also be valuable in determining appropriate locations;
- Landscape character assessment should also be used to develop design guidance in terms of appropriate layouts, principles for retention and enhancement of existing landscape features, building design principles and materials and the need for landscape enhancement or treatment within sites or in off-site locations. These criteria should then be developed through site specific design statements or master plans;
- pre-application discussions and the review of the planning applications should include consideration of the extent to which proposals reflect the results of the assessment and the objectives of the design brief.

Points to consider at this stage include:

- does the proposed layout and building form respond to the underlying landform and to key landscape features on the site in the surrounding area?
- does the proposal identify and respond to key characteristic landscape features within the site and the surrounding area?
- are important features retained within the site, or reflected in the layout?
- do landscape enhancements reflect the character of the surrounding area?
- does the proposed pattern of development (scale, layout, road network, open spaces, massing etc.) reflect the pattern of local settlement and will the development contribute to local or regional distinctiveness?
- does the proposed range of building types, designs and materials reflect the pattern of local buildings?
- does the scheme include proposals for boundaries within and around the site and will these aspects of the development contribute to local or regional distinctiveness?
- how are gateways, corridors and undeveloped areas within the site and between the site and any existing urban area to be treated?
- will the development be integrated with the surrounding pattern of settlement or will it be prominent as a consequence of its location or the design, materials or colours of the buildings?
- will the development affect the visual setting of key landmarks, or the outlook from key viewpoints?
- what mitigation measures, including boundary treatments, are proposed?
- how will the landscape features established through the development be maintained in the long-term?
- how can these issues be addressed through planning conditions or agreements?

## **Biodiversity**

Objectives should include:

- identification of existing habitats and species present on the site or in the surrounding area;
- habitat proposals that achieve a net biodiversity gain by conserving and enhancing existing habitats and creating new habitats as appropriate.

This requires the following actions:

- the identification of suitable sites for peripheral housing development through the local plan process should include a baseline study to consider important biodiversity sites and the potential of new development in different locations to contribute positively to biodiversity, including the creation of habitat networks and corridors;
- supplementary planning guidance should be used to highlight the importance of conserving and enhancing the biodiversity of an identified site and the area around it. It should identify any existing habitat features, and using constraints mapping, identify what should be conserved within the site. It should also set out criteria to guide habitat creation or enhancement and the possible need for off-site compensation. The supplementary planning guidance should highlight opportunities to establish or connect with existing habitat networks and corridors.
- the LBAP should be used at all stages of the planning process to provide guidance on the range of habitats that should be prioritised in particular locations identified for settlement expansion.
- pre-application discussions and the review of planning applications should include consideration of the extent to which the proposal reflects the results of baseline studies, constraints mapping and the objectives of the LBAP and supplementary planning guidance.

Points to consider at this stage include:

- does the planning application identify habitats present on or near the development site?

- does it prioritise the conservation, enhancement or creation of habitats in accordance with the LBAP?
- does it identify habitat opportunities associated with open space and access networks, or with SUDS or transport infrastructure?
- does the proposal conserve, enhance or create habitats within the context of wider habitat networks across the site and linking into neighbouring urban areas and the countryside?
- does the proposal provide information on future monitoring and management of habitat measures?
- is there a long-term management strategy?
- how can these issues be addressed through planning conditions or agreements?

## **Access and recreation**

Objectives should include:

- the maintenance/diversion and or enhancement of any existing formal or informal access routes through the site;
- the creation of additional paths linking into existing networks with the aim of meeting the needs of new residents and the existing population and to facilitate safe access to facilities and recreational opportunities;
- the creation of high quality and functional open space linked to habitat creation, recreation provision and the path network.

This requires that the following information should be identified:

- establish baseline conditions of existing elements of the path network that connect with, or pass through the development site;
- establish existing and likely residential needs for access and recreation;
- identify potential connections.

Supplementary Planning Guidance should:

- set out the requirement to maintain access through the site;
- require the provision of safe access on foot or by bike to schools, shops, open spaces and village and town centre facilities, whether they are located within the

development site or in the existing urban areas;

- require new high quality functional open space within the development, and links to open space networks in existing settlements.

Pre-application discussions and applications should:

- consider the extent to which access and open space objectives set in the supplementary planning guidance have been met.

Points to consider at this stage include:

- does the scheme maintain existing access through the area that is safe and overlooked (to avoid anti-social behaviour and requests for closures)?
- does the scheme include a safe path network to meet the needs of people travelling on foot or by bike that provides access to community facilities and shopping or employment areas as well as facilitating recreational activity?
- does the proposed path network connect with the network in surrounding areas? If not, what measures are required to achieve this?
- how will the proposed development affect existing patterns of access?
- will existing formal or informal access across the site be affected? If so, what modifications are required to maintain such access?
- what open spaces are proposed as part of the scheme?
- how do these respond to the local context (landscape, network of open spaces, shortfalls in quantity or type of open space)?
- does the application specify how access and open space facilities will be managed and maintained in the future?
- how can these issues be addressed through planning conditions or agreements?

### **New settlements**

The scope for the establishment of new settlements as a means of accommodating new residential development is becoming increasingly relevant to planning and development in Scotland, as pressure for new housing continues

to grow. In Perth and Kinross Council for example, options for new settlements to the north and east of Perth have been examined. New settlements raise similar natural heritage issues as large growth areas, though these can be exacerbated by virtue of scale or a where such a settlement is centred on an existing village.

Natural heritage issues typically associated with these types of scheme include:

- loss of rural landscapes;
- landscape and visual impacts associated with new houses and elements such as boundary treatment and screen planting, particularly where development is sited in more prominent locations;
- direct loss of habitats including woodland, hedgerows, wetland, grassland etc.;
- loss of informal and formal countryside access;
- habitat fragmentation and loss of biodiversity;
- significant impacts on existing small settlements, where a new settlement is developed around an existing village, with particular implications for local historic character;
- impact of domestic pets and people on nearby wildlife and biodiversity resources;
- risk of poor accessibility for people on foot or bike and dependence on cars and public transport.

Opportunities on the other hand can include:

- the new scheme can positively integrate with local landscape character;
- enhancement of degraded landscapes, for example where mineral working or other activities have taken place in the past;
- reflection of layouts and building designs that reflect vernacular patterns in the surrounding area
- new settlement development can protect greenbelt areas from unsuitable development;
- identification of less sensitive sites both in landscape and biodiversity terms, for example agricultural land with low biodiversity value;



- incorporation of existing site features in the new development such as hedgerows, trees, streams and ponds;
- conservation of valuable habitat features and the creation of new habitats;
- creation of new access opportunities linking through the site;
- linking in with existing access networks in the wider countryside and developing links to key services within the site such as schools, shops and transport nodes.

open countryside and maintain the green link towards Holyrood Park.

- a strong woodland structure, planted at the outset and centred on the ridge lines, to enhance the landscape and its value for wildlife, and to mitigate the visual impact of new development.
- a continuous, hierarchical system of paths and cycleways to provide both through access and circuits within the green environment, to benefit both everyday travel and recreation.

### **Edinburgh South East Wedge**

The current 2004 Edinburgh and the Lothians Structure Plan allocated a significant area of Green Belt for new settlement in response to the demand for housing. The area known as the Edinburgh South East Wedge is located south of Craigmillar and extends to the City Bypass in Midlothian. The South East Wedge will accommodate 4,000 new homes and 30 hectares of employment land.

The SNH area office was involved in early consultation in this process and encouraged the development of a masterplan to address habitat protection and enhancement, landscaping, SUDS, provision of access and amenity facilities, etc.

The development requirements of the Structure Plan were for private housing development and land for industrial and/or business development, including a medi-park for hospital related business. The overall pattern of new communities proposed has been developed around public transport proposals that will facilitate and encourage the use of more sustainable transport modes. In relation to the environment a landscape strategy has been defined for:

- a continuous green wedge linking between settlements and out to surrounding areas, developed as a continuous park system although not necessarily all as public open space. This is intended to allow access to

### **Environmental Enhancement Action Plan for the South East Wedge Development**

A partnership called, the 'South East Wedge Project Group', has been established to ensure that the environmental potential of the new development is maximised through the integration of amenity, natural habitat and urban drainage. The group comprises of representatives from Midlothian Council, City of Edinburgh Council, Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH), and Scottish Water, with project management being provided by the Scottish Institute of Sustainable Technology (SISTech). As well as promoting the use of Sustainable Urban Drainage Systems (SUDS) the group also recognises the importance of linking this to the restoration of existing culverted watercourses in the development area. The group has produced an Environmental Enhancement Action Plan which provides a model framework and detailed design guidance for the implementation of SUDS features and the enhancement of watercourses in the development. Central to these proposals is a strategic overview of how SUDS features, watercourses and other urban green spaces in the proposed development could be linked to increase both accessibility and biodiversity.

## **New settlements guidance**

Aims: The key aim should be to ensure that the existing natural heritage value of the development site is recognised from the outset and reflected in the way that development proposals evolve. An equally important aim will be to secure significant landscape, biodiversity, access and open space benefits.

### **Landscape**

Objectives should include:

- identification and retention of important local landmark or cultural elements associated with the previous use of the site;
- development of proposals that reflect, enhance and integrate with the surrounding landscape.

This requires the following to be carried out:

- the identification of locations for new settlements should be carried out through the local plan process, though the principle may already have been established through the Structure Plan process. Landscape character assessment and an analysis of landscape sensitivity should be used to guide the development to appropriate locations, to determine the scale of development that is appropriate in a given location. Analysis of settlement patterns and the pattern of historic growth may also be valuable in determining appropriate locations;
- landscape character assessment should also be used to develop design guidance in terms of site layout, retention and enhancement of existing landscape features, building design and materials and the need for landscape enhancement or treatment within the site or in off-site locations. These criteria should be reflected in supplementary planning guidance (such as development briefs) for sites identified for this type of development;
- pre-application discussions and the review of planning applications should include consideration of the extent to which the proposal reflects the results of the assessment and the objectives of the design brief.

Points to consider at this stage include:

- does the proposed layout and building form respond to the underlying landform and to key landscape features on the site in the surrounding area?
- does the proposal identify and respond to key characteristic landscape features within the site and the surrounding area? Are important features retained within the site, or reflected in the layout? Do landscape enhancements reflect the character of the surrounding area?
- does the proposed pattern of development (scale, layout, road network, open spaces, massing etc.) respect and reflect the pattern of local settlement? Will the development contribute to local or regional distinctiveness?
- does the proposed range of building types, designs and materials reflect the pattern of local buildings?
- does the scheme include proposals for boundaries within and around the site and will these contribute to local or regional distinctiveness?
- how are gateways, corridors and undeveloped areas within the site and between the site and any existing urban area to be treated?
- how visible will the development appear in the wider landscape? Will it be integrated with the surrounding pattern of settlement or will it be prominent as a consequence of its location or the design, materials or colours of the buildings?
- will the development affect the visual setting of key landmarks, or the outlook from key viewpoints?
- what mitigation measures, including boundary treatment are proposed?
- how can these issues be addressed through planning conditions or agreements?
- how will the landscape features established through the development be maintained in the long-term?

## **Biodiversity**

Objectives should include:

- identification of existing habitats and species present on the site or in the surrounding area;
- habitat proposals that achieve a net biodiversity gain by conserving and enhancing existing habitats and creating new habitats as appropriate.

This requires the following actions:

- the identification of suitable sites for new settlements through the local plan process should include a baseline study to consider the important features for biodiversity and the potential of new development in different locations to contribute positively to biodiversity, including the creation of habitat networks and corridors through the new settlement and linking with the surrounding area;
- supplementary planning guidance should be used to highlight the importance of conserving and enhancing the biodiversity of the site and the area around it. It should identify, using constraints mapping, existing habitat features, that should be conserved within the site. It should also set out criteria to guide habitat creation or enhancement and the possible need for off-site compensation. The supplementary planning guidance should highlight opportunities to establish or connect with existing habitat networks and corridors.
- the LBAP should be used to provide guidance on the range of habitats that should be prioritised in a particular location.
- pre-application discussions and the review of the planning application should include consideration of the extent to which the proposal reflects the results of the assessment and the objectives of the supplementary planning guidance.

Points to consider at this stage include:

- does the planning application identify habitats present on or near the development site?
- does it prioritise the conservation,

enhancement or creation of habitats in accordance with the LBAP?

- does it identify habitat opportunities associated with greenspace and access networks, or with SUDS or transport infrastructure?
- does the proposal conserve, enhance or create habitats within the context of wider habitat networks across the site and linking into neighbouring urban areas and the countryside?
- does the proposal provide information on future monitoring and management of habitat measures?
- is there a long-term management strategy?
- how can these issues be addressed through planning conditions or agreements?

## **Access and recreation**

Objectives should include:

- the maintenance/diversion or enhancement of any existing formal or informal access routes through the site;
- the creation of additional paths networks with the aim of meeting the needs of new residents and the existing population and to facilitate safe access to facilities and recreational opportunities;
- the creation of high quality and functional open space linked to habitat creation, recreation provision and the path network.

This requires that the development should identify:

- baseline conditions of existing elements of the path network that connect with, or pass through the development site;
- existing and likely residential needs for access and recreation;
- potential connections.

Supplementary Planning Guidance should:

- set out the requirement to maintain access through the site;
- require the development of a safe and attractive network of routes for people on foot and bike, including safe access to schools, shops, greenspaces and village and town centre facilities;

- the requirement for new high quality functional greenspace within the development.

Pre-application discussions and applications should:

- consider the extent to which access and open space objectives set in the development brief have been met.

Points to consider at this stage include:

- does the scheme maintain existing access through the area?
- does the scheme include a path network to meet the needs of people travelling on foot or by bike? Does this provide safe functional access to community facilities and shopping or employment areas as well as facilitating recreational activity?
- does the proposed path network connect with surrounding areas? If not, what measures are required to achieve this?
- how will the proposed development affect existing patterns of access? Will existing formal or informal access across the site be affected? If so, what modifications are required to maintain such access?
- what open spaces are proposed as part of the scheme? How do these respond to the local context (landscape, network of open spaces, shortfalls in quantity or type of open spaces)?
- does the application specify how access and open space facilities will be managed and maintained in the future?
- how can these issues be addressed through planning conditions or agreements?

### **Small settlement expansion**

Small settlement expansion relates to the expansion of existing villages and smaller towns by the addition of comparatively large areas of new housing. Towns such as Comrie in Perthshire have undergone several phases of this type of growth since the 1970s.

Many villages have distinctive forms which may be linear, focused on either side of key river crossing, nucleated around a cross roads,

or around a market street or square. Some settlements are laid out on a clear grid pattern, others include development set back from the main street and accessed by vennels (alleyways). Crofting settlements, on the other hand, comprise a dispersed though regular pattern of houses, cottages and farmsteads. While the temptation might be to fill undeveloped segments with new residential development, there is a risk that this could undermine the historic settlement form unless undertaken in an informed way.

Natural heritage issues typically associated with these types of schemes include:

- dilution of historic settlement character, particularly where new development does not reflect historic settlement structure, or form, or where building and landscape designs and materials contrast with historic buildings;
- wider landscape impacts resulting from incremental development on the edge of villages;
- loss of habitats on the edge of villages;
- loss of access routes or separation of the historic village from the recreation opportunities in the open countryside;
- predation by domestic animals;
- reduction of rural amenity due to an increase in the local traffic, affecting accessibility.

Opportunities on the other hand can include:

- maintenance of viable rural communities and economies;
- high quality and sensitive design;
- creation new opportunities for managed countryside access;
- conservation and restoration of historic landscape features;
- enhancement of access to the countryside;
- reinforcement of rural traditions and landscape features such as hedgerows.

### Applecross, Wester Ross

In 2002, SNH and the Highland Council commissioned a landscape capacity assessment to help inform the allocation of housing land for the Replacement Local Plan for Wester Ross. This study looked at the landscape character of the study area, considering its scenic quality and landscape opportunities for suitable housing locations.

The objectives of the study were to evaluate the landscape capacity of existing settlements, and identify where future domestic scale development would be appropriate. The study was required to identify where development would be unsuitable for reasons of landscape quality or scenic quality and to advise on areas where planting or other landscape enhancement measures could be undertaken to create further opportunities for siting development in the long term.

A project for eight new affordable homes within a wooded area, including five new dwellings and further three within a B listed threshing barn and slaughter house were developed, taking account of the LCA. The scheme includes a landscaped courtyard, with informal parking, tree planting and the upgrading of the path to the village. According to the architect for the site, the Applecross area exists as “an oasis of trees in an otherwise barren highland landscape”. Integrating the scheme with the local woodland was therefore an important element of the design. A landscape architect was appointed to carry out an assessment of the trees and a deer fence was erected to protect the trees from any further damage.

Source: Albyn Housing Association



Before



After

### Small settlement expansion guidance

**Aims:** The aim should be to encourage development that responds to the historic character of small settlements and their landscape setting, whilst conserving and enhancing the biodiversity interest of the area together with the range of access opportunities for local people and visitors. The identification of locations for village expansion should be carried out through the local plan process.

### Landscape

Objectives should include:

- the identification of the most appropriate sites for development taking account of rural townscapes, landscape and intervisibility issues;

- development proposals that reflect, enhance and integrate with the surrounding rural townscape and landscape.

This requires the following to be carried out:

- village townscape appraisals, should analyse the historic development and form of the settlement including its relationship with key landscape elements and be undertaken in conjunction with local landscape character assessment and some intervisibility analysis. This information should be used to compare the relative merits of different development areas in terms of the townscape, landscape and visual impact and identify capacity for settlement expansion;
- the village appraisal and landscape assessment should be used to inform local plan policies and supplementary planning

guidance that will identify typical building forms, orientation, siting on plots, access, designs, roof pitches, materials and boundaries. It will be often be difficult or uneconomic to mirror this historic pattern of development, however planning policies, and supplementary planning guidance can helpfully identify key principles which can be distilled from such an analysis;

- pre-application discussions and the review of planning applications should include consideration of the extent to which the proposal reflects local plan policies and the principles identified through the appraisals and set out in supplementary planning guidance.

Points to consider at this stage include:

- does the proposed layout and building form respond to the local settlement pattern together with the underlying landform, pattern of woodland cover and other key landscape features on the site in the surrounding area?
- does the proposed pattern of development (scale, layout, road network, open spaces, massing etc.) reflect the pattern of local settlement?
- will the development contribute to local distinctiveness?
- does the proposed range of building types, designs and materials reflect the pattern of local buildings? Does the scheme include proposals for boundaries within and around the site? Will these aspects of the development contribute to local distinctiveness?
- how visible will the development appear in the wider landscape? Will it integrated with the surrounding pattern of settlement or will it be prominent as a consequence of its location or the design, materials or colours of the buildings?
- will the development affect the visual setting of key landmarks, or the outlook from key viewpoints?
- what mitigation measures, including boundary treatment are proposed?
- how can these issues be addressed through planning conditions or agreements?

- how will the landscape features established through the development be maintained in the long-term?

### **Biodiversity**

Objectives should include:

- identification of existing habitats and species present on the site or in the surrounding area;
- habitat proposals that achieve a net biodiversity gain by conserving and enhancing existing habitats and creating new habitats as appropriate.

This requires the following actions:

- the identification of suitable sites for new settlements through the local plan process should include a baseline study and constraints mapping, informed by the LBAP, to identify what important biodiversity sites should be avoided during the selection of sites for village expansion;
- policies and supplementary planning guidance should identify opportunities for on-site habitat conservation, enhancement or creation, and the potential to establish habitat corridors or networks through the proposed housing sites;
- pre-application discussions and the review of the planning application should include consideration of the extent to which the proposal reflects the results of the assessment and the objectives of the supplementary planning guidance.

Points to consider at this stage include:

- does the planning application identify habitats present on or near the development site?
- does it prioritise the conservation, enhancement or creation of habitats in accordance with the LBAP?
- does it identify habitat opportunities associated with greenspace and access networks, or with SUDS or transport infrastructure?
- does the proposal conserve, enhance or create habitats within the context of wider habitat networks across the site and



linking into neighbouring urban areas and the countryside?

- does the proposal provide information on future monitoring and management of habitat measures?
- is there a long-term management strategy?
- how can these issues be addressed through planning conditions or agreements?

### **Access and recreation**

Objectives should include:

- the maintenance of any existing formal or informal access routes through the site, linking the existing village with the open countryside;
- the creation of additional paths linking into existing networks with the aim of meeting the needs of new residents and the existing population and to facilitate safe access to facilities and recreational opportunities;
- where appropriate, the creation of high quality and functional open space linked to habitat creation and the path network.

This requires the following actions:

- establish baseline conditions of existing elements of the path network that connect with, or pass through the development site;
- establish existing and likely residential needs for access and recreation;
- identify potential connections.
- preparation of supplementary planning guidance for the development site, which identifies:
- the requirement to maintain access through the site, retaining links between the existing village and the countryside
- the requirement to provide safe access on foot or by bike to schools, shops, open spaces and village centre facilities;
- the potential requirement for new high quality open space within the development.
- pre-application discussions and the review of the planning application should consider the extent to which access and open space objectives set in the development brief have been met.

- this should include consideration of the way in which and open space facilities will be managed and maintained in the future and the potential role of planning conditions and agreements in ensuring these objectives are realised.

### **Housing in the countryside**

There is considerable pressure for housing in the countryside, with prices rising and, in areas close to larger settlements, there is a growing trend for existing dwellings to be extended or even replaced by larger buildings. There has been some interest in promoting more flexible live/work schemes to provide housing that supports rural economic activity and the newly published SPP15 Planning for Rural Development (Scottish Executive 2005 c) actively supports the continuing growth of households in rural areas stating that:

“rural Scotland needs to become more confident and forward looking both accepting change and benefiting from it, providing for people who want to continue to live and work there and welcoming newcomers”.

SPP15 notes support for the development of small scale rural housing developments, such as clusters and groups in close proximity to settlements. In West Lothian the concept of lowland crofting was introduced as means of regenerating an environmentally despoiled landscape, similarly the Loch Tummel national scenic area study highlighted the demand for small holding type development, which allowed people to remain within the community and combine some level of farming with other sources of employment.

Natural heritage issues typically associated with these types of schemes include:

- the landscape impact of sporadic or incremental housing development;
- potential habitat loss and disturbance from unplanned development;
- high reliance on the private car;
- landscape degradation, in particular where one off housing proliferates across an otherwise rural area.



Opportunities on the other hand can, where managed through local plan policies and supplementary planning guidance, include:

- supporting people to live and work in rural areas, maintaining traditional land management practices and their benefits for biodiversity;
- promotion of high quality design in rural locations;
- landscape integration; and
- enhancement/maintenance of biodiversity through agricultural diversification in place of intensification.

### **Housing in the countryside guidance**

Aim: The aim should be to ensure that individual houses in the countryside do not result in unacceptable landscape or biodiversity impacts.

#### **Landscape**

Objective:

- creation of informed policies that identify where housing in the countryside is acceptable, supplemented by planning guidance;
- that development proposals reflect, enhance and integrate with their surrounding landscape.

This requires the following:

- that proposals are guided by local plan policies and informed by supplementary planning guidance;
- pre-application discussions and the review of planning applications should include consideration of the extent to which the proposal reflects local plan policies and the principles set out in supplementary planning guidance.

Points to consider at this stage include:

- does the proposed layout and building form respond to the local landform, patterns of woodland cover and other key landscape features in the surrounding area?
- will the development contribute to local distinctiveness?
- does the building type, reflect the local

building traditions?

- does the scheme include proposals for boundaries within and around the site that will make a positive contribution to local distinctiveness?
- how visible will the development appear in the wider landscape?
- will it be prominent as a consequence of its location or the design, materials or colours of the buildings?
- will the development affect the visual setting of key landmarks, or the outlook from key viewpoints?
- what mitigation measures, including boundary treatment are proposed?
- how can these issues be addressed through planning conditions or agreements?

#### **Biodiversity**

Objectives should include:

- identification of existing habitats and species present on the site or in the surrounding area;
- habitat proposals that achieve a net biodiversity gain by conserving and enhancing existing habitats and creating new habitats as appropriate.

This requires the following:

- local plan policies and supplementary planning guidance should identify opportunities for on-site habitat conservation, enhancement or creation, and the potential to establish habitat corridors or networks through any one off proposed housing sites;
- pre-application discussions and the review of planning applications should include consideration of the extent to which a proposal reflects the policy and guidance.

Points to consider at this stage include:

- does the planning application identify habitats present on or near the development site?
- does it prioritise the conservation, enhancement or creation of habitats in accordance with the LBAP?
- does the proposal conserve, enhance or

create habitats within the context of wider habitat networks across the site?

- how can these issues be addressed through planning conditions or agreements?

### **Access and recreation**

Objective:

- the maintenance of any existing formal or informal access routes through the site, linking the existing village with the open countryside;

This requires the following:

- preparation of supplementary planning guidance by the local planning authority for the development of one off dwellings;
- the requirement to provide safe access on foot or by bike to schools, shops, open spaces and village centre facilities.

Application Stage

- establish baseline conditions of existing elements of the path network that connect with, or pass through the development site;
- identify potential connections;
- this should include consideration of the potential role of planning conditions and agreements in ensuring supplementary planning guidance objectives are realised.

### **Urban design and new housing**

When creating a design for a new settlement development, a developer is faced with a requirement to establish the architectural building blocks that create the dwelling units. However, in order to create a successful place, it is necessary to achieve a level of integration of that scheme with its site and its surrounding landscape. This consideration of a site, its layout and its landscape is commonly referred to as urban design.

According to the Commission for Architecture and Built Environment urban design is about “creating the right conditions to make places work”. Good urban design can be achieved

through the planning system, and is widely recognised as a powerful tool to achieve high quality developments. In Scotland, the Scottish Executive’s policy statement ‘Designing Places’ (Scottish Executive 2001) provides policy support for urban design, supplemented by this statement in SPP1 (Scottish Executive 2002).

“The architectural design, siting and setting of development in its surroundings are valid concerns of the planning system. The drive for quality should not focus solely on buildings. It should also be concerned with the way that buildings, old and new, work together and create the spaces and sense of place that have such an influence on the quality of life for communities”.

Design is a material consideration, and an application for planning permission can be refused on design grounds. To support this however, it is critical that development plans set out clear design principles and guidance frameworks, either directly through policy or using supplementary planning guidance (Chapter 4). This should be based on the local characteristics of an area.

The key aims of urban design in achieving a quality development, as set out in Designing Places, relate to the creation of:

- identity;
- safe and pleasant spaces;
- ease of movement;
- sense of welcome;
- adaptability; and
- good use of resources.

Each principle has a value in terms of how to integrate natural heritage into a housing scheme. For example, in creating identity, or a sense of place, the characteristics of the landscape context and natural features are central to retaining and improving this quality. Similarly the use of existing topography and tree planting can be used effectively to provide shelter for new buildings from the elements.

**Table 4.1 Urban design and natural heritage**

Principle	Natural Heritage Opportunities
Identity and Sense of Place	Integration with natural landscape Retention of natural features on site Provision of high quality open space
Safe and Pleasant Place	Development of on site landscaping Provision of safe access to the countryside Protection of residential amenity Protection of wildlife from predation
Ease of Movement	Creation of safe pedestrian corridors through a site Opportunities to influence the impact of roads
Sense of Welcome	Protection of views to the wider landscape Provision of high quality site landscaping
Adaptability	Provision for biodiversity on the site to adapt and thrive Provision of a robust landscape that can develop and strengthen over time
Good Use of Resources	Minimising building energy use to secure long term sustainability Provision of SUDS Protection of existing waterways, access routes etc. Provision for habitat protection and creation

Designing Places (Scottish Executive 2001)  
provides a useful introduction to the full meaning  
of these principles at page 30.

**Additional Guidance:  
Sustainable Settlements: A guide for  
planners, designers and developers**

The document sets out environmental principles relating to; energy in transport, energy in buildings, carbon fixing, biodiversity, air and water, land and minerals and the local human environment.

In relation to travel and transport this includes supporting walking and cycling opportunities, and locating services so that they are accessible. In biodiversity terms the document sets out guidance on protecting habitats and incorporating features for biodiversity into

developments such as refuges, corridors, hedgerows, stepping stones, green buildings and water habitats. The guidance highlights the importance of landscape considerations through local identity and sets out a summary checklist for the appraisal of development projects in relation to the initial topic areas. The document also includes more detailed sections on planning for open space, and the needs of pedestrians and cyclists.

*Barton, Hugh; Davis, Geoff; Guise, Richard, (1995)*



## **5. CONCLUSION**

The development planning system provides an effective framework to influence land use planning and manage the location and quality of new housing developments through development plan policies, including the protection of nationally and internationally important sites such as SSSIs and National Scenic Areas as well as the protection and enhancement of the wider countryside and natural heritage of Scotland identified by landscape character assessments, LBAPs, Access Strategies and Open Space Strategies.

Historically planning policies focused on the natural heritage as a constraint to development, focussing on sites designated for their importance. This approach however missed considerable opportunities to enhance local environments and overcome problems of fragmentation and isolation of valuable environmental resources, often resulting in housing developments sitting uncomfortably in the local landscape and environment, to the detriment of the landscape, biodiversity and the community.

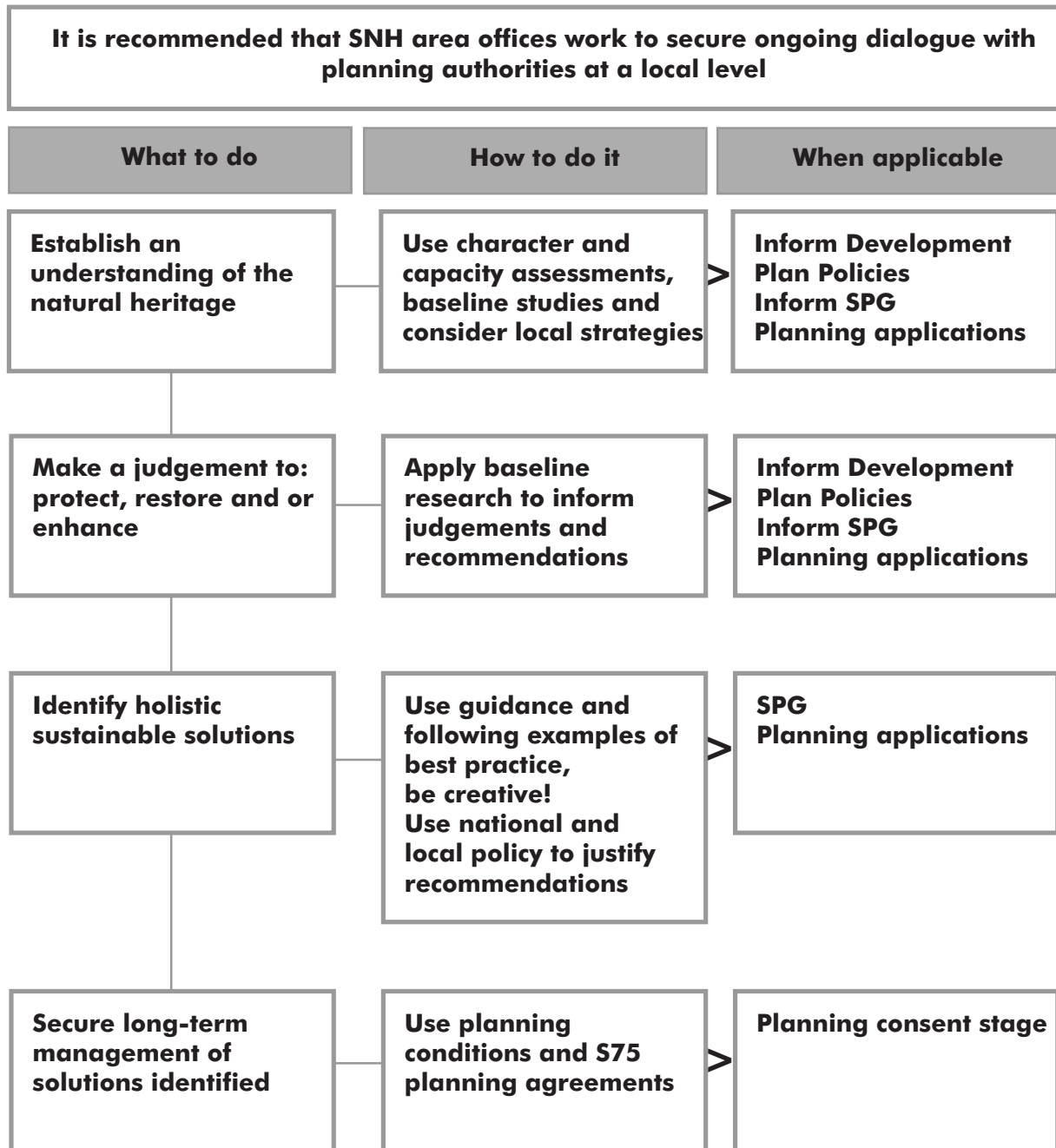
However, as the planning system evolves, the value of the wider natural environment is being recognised and integrated into planning policy. Nonetheless, in residential developments, the opportunities for achieving better integration with the landscape, achieving biodiversity gains and improving sustainable access and open space provision, are not always maximised. While there has been considerable research into the principles for natural heritage management, and a wide variety of tools are available for integrating the natural heritage with housing development, the focus of sustainable planning tends to be on sustainable building design. While this guidance is important, particularly in the light of climate change, there is considerable scope to extend knowledge and to promote a more integrated approach to housing development and the natural environment.

This guidance document has identified which natural heritage issues are relevant to housing developments and has discussed how these can be addressed through the planning system

to secure a more holistic and sustainable approach to development. The guidance has demonstrated the policy context that supports requirements for natural heritage policies and improvements to schemes and sets out the relevant tools that will help secure the best outcomes for the natural heritage.

To summarise, the central lessons from this guidance are presented in Figure 5.1:

**Figure 5.1 Summary of central lessons**



## **Landscape**

The primary aim for landscape in relation to sustainable new housing developments is to ensure that the key principles of national planning policy and advice are taken on board to support local landscape character and environmental quality. In relation to new housing developments, proposals tend to fall outwith existing landscape considerations such as NSAs and green belt allocations, meaning that assessments are rare and resulting housing schemes can be poorly integrated into the landscape and historical urban contexts.

A more integrated approach to the consideration of landscape issues through the planning process is required and importantly is supported through national planning policy.

## **Biodiversity**

The primary aim for biodiversity in terms of new housing should be to identify the key biodiversity characteristics of a local authority area and or a site and identify a sustainable approach to the implementation of the housing proposals. Through national planning policy and the new Nature Conservation (Scotland) Act, there is a strong national commitment to maintaining biological biodiversity and further its conservation and this can be taken forward through housing development at all scales and in all locations.

The role of Local Biodiversity Action Plans and local initiatives to protect biodiversity should not be overlooked as a tool to achieving gains for biodiversity as they provide an invaluable structure to implement national and local commitments to biodiversity, with a long-term outlook.

With regard to the incorporation of biodiversity into the sustainable development of new housing, the primary aims should be to:

- identify what key aspects characterise the local natural heritage features;
- to understand the ways in which the relevant ecological receptors function within that site and its surrounding environment; and

- identify how to achieve benefits, at policy, guidance and development level.

## **Access and recreation**

Access and recreation are important considerations in the development of new housing schemes, potentially offering health, social, economic and transport benefits for residents and adjoining communities.

Since every development will have different ground conditions, impacts and influences, it is important that access and recreation planning are undertaken on a site by site basis, with the overall strategic principles providing a clear framework to secure consistent benefits across Scotland.

Awareness of local strategies for access, recreation and open space and how to achieve objectives of these using the planning system is central to achieving benefits for natural heritage in housing developments. Partnership working will help to achieve an understanding of the associated issues of transport requirements, maintenance issues and anti-social behaviour, and consequently contribute to achieving the most effective solution at policy and application levels.



## **Overview**

The most effective long-term opportunity for SNH to achieve sustainable new housing developments in terms of natural heritage is to influence development plan policy to secure the protection, restoration and enhancement not only of designated sites but for all areas of value, or potential value, for natural heritage.

In particular, the use of supplementary planning guidance will become a more effective tool to achieve the level of detail and influence not possible at development plan level. The move towards an increase in the use of such guidance is an opportunity that should be embraced by SNH, and through effective partnership working with local authorities, used to raise the profile of the natural heritage and its associated vulnerabilities and opportunities in housing developments.

## APPENDIX 1

### Sustainable new housing and settlement expansion and the natural heritage

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Northern Isles	Gail Churchill
West Highland	Mary Gibson
Forth and Borders	Niall Corbet
Dumfries and Galloway	Tim Dawson
Strathclyde and Ayrshire	Maggie Botham
Argyll and Strirling	Zoe Kemp
Western Isles	Mary Harman
<b>Other Key Stakeholder Organisations</b>	<b>Name</b>
Scottish Executive, Development Department Planning Unit	Steve Dowel
Communities Scotland	David Nicol
Homes for Scotland	Alan Lundmark
SEPA	Neil Deasley
RSPB	Catherine Quigley

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